## Application 19-08-

Application of<br>Southwest Gas Corporation<br>(U 905 G)

For Authority to Increase Rates and Charges for Natural Gas Service in California, Effective January 1, 2021

## Volume II-B

NORTHERN CALIFORNIA RATE JURISDICTION RESULTS OF OPERATIONS

Test Year 2021
Post-Test Years 2022 through 2025

VOLUME II-B

# NORTHERN CALIFORNIA RATE JURISDICTION RESULTS OF OPERATIONS 

Recorded Years 2012 through 2018 Estimated Years 2019 and 2020

Test Year 2021
Post-Test Years 2022 through 2025

| Description | Chapter | Witness |
| :--- | :---: | :--- |
|  | - |  |
| Application | -- |  |
| Table of Contents | 1 | Ontiveroz |
| Introduction and Description of Company Operations | 2 | Wood |
| Consolidated Balance Sheets | 3 | Wood |
| Consolidated Statements of Income | 4 | Wood |
| Consolidated Statements of Cash Flows | 5 | Wood |
| Notes to Consolidated Financial Statements | 6 | Lyons |
| Summary of Earnings (including Cost of Capital) | 7 | Lyons |
| Escalation | 8 | Lyons |
| System Allocable |  | Lyons |
| A Expenses |  | Lyons |
| B Rate Base | 9 | Little |
| C Allocation Factors | 10 | Lyons |
| Billing Determinants | 11 | Lyons |
| Operating Revenues |  | Lyons |
| Gas Supply, Transmission and Distribution Expenses | 12 | Lyons |
| A Cost of Purchased Gas and Upstream Transportation |  | Lyons |
| B Other Gas Supply, Transmission and Distribution | 13 | Lyons |
| Customer Accounts Expenses | 14 | Lyons/Williams |
| Customer Service and Informational Expenses | 15 | Williams/Lyons |
| Sales Expenses | 16 | Lyons |
| Administrative and General Expenses | 17 | Lyons |
| Taxes | 18 | Lyons |
| Rate Base and Depreciation Expenses | 19 | Lyons |
| Pensions and Benefits | 20 | Ontiveroz |
| Class Cost of Service | 21 | Lyons |
| Present and Proposed Rates | 22 | Wood |
| Proposed Tariff Sheets | 23 | Wood |
| Post Test Year Ratemaking Mechanism | 24 | Hevert |
| Proxy Statement |  |  |
| Cost of Capital |  |  |
| A Cost of Debt/Proposed Capital Structure |  |  |
| B Cost of Equity |  |  |
|  |  |  |

# CHAPTER 1 <br> Introduction and <br> Description of Company Operations 

## Company Witness: <br> Valerie J. Ontiveroz

## SOUTHWEST GAS CORPORATION

(U 905 G)
NORTHERN CALIFORNIA
INTRODUCTION

## A. Purpose of Report

This report provides the California Public Utilities Commission information regarding the operations and earnings of Southwest Gas Corporation (Southwest Gas or the Company). This report is presented with and in support of Southwest Gas' application for authority to change rates.

## B. Scope of Report

This report includes operating and financial data for the recorded period January 1, 2012 through December 31, 2018, estimated data through yearend 2019 and 2020, and the test year 2021.

## C. General Information Regarding the Company

Southwest Gas is a natural gas company (as defined in the Natural Gas Act) engaged in the transmission and sale of natural gas at wholesale, and is a public utility engaged in the transmission, distribution, and sale of natural gas to retail customers for domestic, commercial, agricultural, and industrial uses in California, Arizona, and Nevada.

Southwest Gas currently serves over 2 million customers in the states of California, Arizona and Nevada. Southwest Gas has three service territories in California. The Southern California jurisdiction is located in San Bernardino County. The Northern California jurisdiction serves communities in Placer, El Dorado, and Nevada counties. The South Lake Tahoe jurisdiction serves a portion of El Dorado County. In total the Company serves approximately 200,000 California customers.

A map is attached showing the communities served in each respective service territory.


# CHAPTER 2 <br> Consolidated Balance Sheets 

## Company Witness: <br> Theodore K. Wood

# SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS 

(Thousands of dollars, except par value)

| December 31, | 2018 | 2017 |
| :---: | :---: | :---: |
| ASSETS |  |  |
| Utility plant: |  |  |
| Gas plant | \$ 7,134,239 | \$ 6,629,644 |
| Less: accumulated depreciation | (2,234,029) | $(2,231,242)$ |
| Construction work in progress | 193,028 | 125,248 |
| Net utility plant | 5,093,238 | 4,523,650 |
| Other property and investments | 623,551 | 428,180 |
| Current assets: |  |  |
| Cash and cash equivalents | 85,361 | 43,622 |
| Accounts receivable, net of allowances | 413,926 | 347,375 |
| Accrued utility revenue | 77,200 | 78,200 |
| Income taxes receivable, net | 14,653 | 7,960 |
| Deferred purchased gas costs | 4,928 | 14,581 |
| Prepaid and other current assets | 243,701 | 165,294 |
| Total current assets | 839,769 | 657,032 |
| Noncurrent assets: |  |  |
| Goodwill | 359,045 | 179,314 |
| Deferred income taxes | 1,264 | 1,480 |
| Deferred charges and other assets | 440,862 | 447,410 |
| Total noncurrent assets | 801,171 | 628,204 |
| Total assets | \$ 7,357,729 | \$ 6,237,066 |


| December 31, | 2018 | 2017 |
| :---: | :---: | :---: |
| CAPITALIZATION AND LIABILITIES |  |  |
| Capitalization: |  |  |
| Common stock, \$1 par (authorized - 60,000,000 shares; issued and outstanding - 53,026,848 and |  |  |
| Additional paid-in capital | 1,305,769 | 955,332 |
| Accumulated other comprehensive income (loss), net | $(52,668)$ | $(47,682)$ |
| Retained earnings | 944,285 | 857,398 |
| Total Southwest Gas Holdings, Inc. equity | 2,252,042 | 1,814,768 |
| Noncontrolling interest | (452) | $(2,365)$ |
| Total equity | 2,251,590 | 1,812,403 |
| Redeemable noncontrolling interest | 81,831 | - |
| Long-term debt, less current maturities | 2,107,258 | 1,798,576 |
| Total capitalization | 4,440,679 | 3,610,979 |
| Commitments and contingencies (Note 10) |  |  |
| Current liabilities: |  |  |
| Current maturities of long-term debt | 33,060 | 25,346 |
| Short-term debt | 152,000 | 214,500 |
| Accounts payable | 248,993 | 228,315 |
| Customer deposits | 67,940 | 69,781 |
| Income taxes payable, net | 1,083 | 5,946 |
| Accrued general taxes | 43,560 | 43,879 |
| Accrued interest | 21,369 | 17,870 |
| Deferred purchased gas costs | 79,762 | 6,841 |
| Other current liabilities | 290,878 | 203,403 |
| Total current liabilities | 938,645 | 815,881 |
| Deferred income taxes and other credits: |  |  |
| Deferred income taxes and investment tax credits, net | 529,201 | 476,960 |
| Accumulated removal costs | 383,000 | 315,000 |
| Other deferred credits and other long-term liabilities | 1,066,204 | 1,018,246 |
| Total deferred income taxes and other credits | 1,978,405 | 1,810,206 |
| Total capitalization and liabilities | \$7,357,729 | \$6,237,066 |

The accompanying notes are an integral part of these statements.

## CHAPTER 3

# Consolidated Statements of Income 

## Company Witness: <br> Theodore K. Wood

## SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF INCOME

(In thousands, except per share amounts)

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Operating revenues: |  |  |  |
| Gas operating revenues | \$1,357,728 | \$1,302,308 | \$1,321,412 |
| Utility infrastructure services revenues | 1,522,285 | 1,246,484 | 1,139,078 |
| Total operating revenues | 2,880,013 | 2,548,792 | 2,460,490 |
| Operating expenses: |  |  |  |
| Net cost of gas sold | 419,388 | 355,045 | 397,121 |
| Operations and maintenance | 406,393 | 392,763 | 381,964 |
| Depreciation and amortization | 249,212 | 250,951 | 289,132 |
| Taxes other than income taxes | 59,898 | 57,946 | 52,376 |
| Utility infrastructure services expenses | 1,387,689 | 1,148,963 | 1,024,423 |
| Total operating expenses | 2,522,580 | 2,205,668 | 2,145,016 |
| Operating income | 357,433 | 343,124 | 315,474 |
| Other income and (expenses): |  |  |  |
| Net interest deductions | $(96,671)$ | $(78,064)$ | $(73,660)$ |
| Other income (deductions) | $(17,426)$ | $(6,030)$ | $(10,291)$ |
| Total other income and (expenses) | $(114,097)$ | $(84,094)$ | $(83,951)$ |
| Income before income taxes | 243,336 | 259,030 | 231,523 |
| Income tax expense | 61,684 | 65,088 | 78,468 |
| Net income | 181,652 | 193,942 | 153,055 |
| Net income (loss) attributable to noncontrolling interests | (625) | 101 | 1,014 |
| Net income attributable to Southwest Gas Holdings, Inc. | \$ 182,277 | \$ 193,841 | \$ 152,041 |
| Basic earnings per share | \$ 3.69 | \$ 4.04 | \$ 3.20 |
| Diluted earnings per share | \$ 3.68 | \$ 4.04 | \$ 3.18 |
| Average number of common shares | 49,419 | 47,965 | 47,469 |
| Average shares (assuming dilution) | 49,476 | 47,991 | 47,814 |

The accompanying notes are an integral part of these statements.

# SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME 

(Thousands of dollars)

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Net Income | \$181,652 | \$193,942 | \$153,055 |
| Other comprehensive income (loss), net of tax |  |  |  |
| Defined benefit pension plans: |  |  |  |
| Net actuarial gain (loss) | $(15,524)$ | $(32,701)$ | $(14,118)$ |
| Amortization of prior service cost | 1,015 | 828 | 828 |
| Amortization of net actuarial loss | 25,549 | 15,776 | 16,781 |
| Regulatory adjustment | $(6,257)$ | 12,590 | $(3,462)$ |
| Net defined benefit pension plans | 4,783 | $(3,507)$ | 29 |
| Forward-starting interest rate swaps ("FSIRS"): |  |  |  |
| Amounts reclassified into net income | 2,541 | 2,073 | 2,075 |
| Net forward-starting interest rate swaps | 2,541 | 2,073 | 2,075 |
| Foreign currency translation adjustments | $(3,010)$ | 1,771 | 161 |
| Total other comprehensive income, net of tax | 4,314 | 337 | 2,265 |
| Comprehensive income | 185,966 | 194,279 | 155,320 |
| Comprehensive income (loss) attributable to noncontrolling interests | (625) | 112 | 1,019 |
| Comprehensive income attributable to Southwest Gas Holdings, Inc. | \$186,591 | \$194,167 | \$154,301 |

The accompanying notes are an integral part of these statements.

# CHAPTER 4 <br> Consolidated Statements of Cash Flows 

## Company Witness: <br> Theodore K. Wood

## SOUTHWEST GAS HOLDINGS, INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS

(Thousands of dollars)

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: |
| CASH FLOW FROM OPERATING ACTIVITIES: |  |  |  |
| Net Income | $\$ 181,652$ | $\$ 193,942$ | $\$ 153,055$ |
| Adjustments to reconcile net income to net cash provided by operating |  |  |  |
| activities: | 249,212 | 250,951 | 289,132 |
| Depreciation and amortization | 51,041 | 63,389 | 68,732 |
| Deferred income taxes |  |  |  |
| Changes in current assets and liabilities: | $(15,862)$ | $(40,947)$ | 30,096 |
| Accounts receivable, net of allowances | 1,000 | $(2,000)$ | $(1,500)$ |
| Accrued utility revenue | 82,574 | $(95,608)$ | 45,858 |
| Deferred purchased gas costs | 11,778 | 19,961 | 21,695 |
| Accounts payable | $(11,955)$ | 2,112 | 26,340 |
| Accrued taxes | $(54,073)$ | $(8,203)$ | $(27,432)$ |
| Other current assets and liabilities | $(1,703)$ | $(4,196)$ | $(7,148)$ |
| Gains on sale | 6,111 | 10,888 | 5,456 |
| Changes in undistributed stock compensation | $(3,627)$ | $(2,296)$ | $(2,289)$ |
| AFUDC | $(5,738)$ | $(22,269)$ | 16,960 |
| Changes in other assets and deferred charges | 38,446 | 4,231 | $(18,447)$ |
| Changes in other liabilities and deferred credits | 528,856 | 369,955 | 600,508 |
| Net cash provided by operating activities | $\underline{l}$ |  |  |


| Year Ended December 31, | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| CASH FLOW FROM INVESTING ACTIVITIES: |  |  |  |
| Construction expenditures and property additions | $(765,914)$ | $(623,649)$ | $(529,531)$ |
| Acquisition of businesses, net of cash acquired | $(251,373)$ | $(94,204)$ | $(17,000)$ |
| Changes in customer advances | 13,463 | 323 | 7,900 |
| Miscellaneous inflows | 4,341 | 16,645 | 13,039 |
| Net cash used in investing activities | $(999,483)$ | $(700,885)$ | (525,592) |
| CASH FLOW FROM FINANCING ACTIVITIES: |  |  |  |
| Issuance of common stock, net | 354,402 | 41,155 | 472 |
| Dividends paid | $(100,240)$ | $(92,130)$ | $(83,317)$ |
| Centuri distribution to redeemable noncontrolling interest | - | (204) | (439) |
| Issuance of long-term debt, net | 565,172 | 407,063 | 423,946 |
| Retirement of long-term debt | $(237,758)$ | $(338,969)$ | $(255,273)$ |
| Change in credit facility and commercial paper | - | 145,000 | $(145,000)$ |
| Change in short-term debt | $(62,500)$ | 214,500 | $(18,000)$ |
| Principal payments on capital lease obligations | (648) | (980) | $(1,354)$ |
| Redemption of Centuri shares from noncontrolling parties | - | $(23,000)$ | - |
| Withholding remittance - share-based compensation | $(3,110)$ | $(3,176)$ | $(2,119)$ |
| Other | $(2,744)$ | $(3,074)$ | $(1,569)$ |
| Net cash provided by (used in) financing activities | 512,574 | 346,185 | $(82,653)$ |
| Effects of currency translation on cash and cash equivalents | (208) | 301 | (194) |
| Change in cash and cash equivalents | 41,739 | 15,556 | $(7,931)$ |
| Cash and cash equivalents at beginning of period | 43,622 | 28,066 | 35,997 |
| Cash and cash equivalents at end of period | \$ 85,361 | \$ 43,622 | \$ 28,066 |
| Supplemental information: |  |  |  |
| Interest paid, net of amounts capitalized | \$ 86,562 | \$ 71,943 | \$ 67,440 |
| Income taxes paid (received) | \$ 1,221 | \$ 5,673 | \$ (19,032) |

The accompanying notes are an integral part of these statements.

## CHAPTER 5

Notes to Consolidated Financial Statements

## Company Witness: <br> Theodore K. Wood

## Notes to Consolidated Financial Statements

## Note 1 - Background, Organization, and Summary of Significant Accounting Policies

Nature of Operations. This is a combined annual report of Southwest Gas Holdings, Inc. and subsidiaries (the "Company") and Southwest Gas Corporation and its subsidiaries ("Southwest" or the "natural gas operations segment"). The Notes to the Consolidated Financial Statements apply to both entities. Southwest Gas Holdings, Inc. is a holding company, owning all of the shares of common stock of Southwest and all of the shares of common stock of Centuri Construction Group, Inc. ("Centuri" or the "utility infrastructure services" segment). Prior to August 2017, $96.6 \%$ of Centuri's shares were owned by the Company. During August 2017, the Company acquired the remaining $3.4 \%$ equity interest in Centuri that was held by the previous owners. Refer to Note 17 - Utility Infrastructure Services Noncontrolling Interests for additional information.

Southwest is engaged in the business of purchasing, distributing, and transporting natural gas for customers in portions of Arizona, Nevada, and California. Public utility rates, practices, facilities, and service territories of Southwest are subject to regulatory oversight. The timing and amount of rate relief can materially impact results of operations. Natural gas purchases and the timing of related recoveries can materially impact liquidity. Results for the natural gas operations segment are higher during winter periods due to the seasonality incorporated in its regulatory rate structures.

Centuri is a comprehensive utility infrastructure services enterprise dedicated to delivering a diverse array of solutions to North America's gas and electric providers. Centuri derives revenue from installation, replacement, repair, and maintenance of energy distribution systems, and developing industrial construction solutions. Centuri operations are generally conducted under the business names of NPL Construction Co. ("NPL"), Canyon Pipeline Construction, Inc. ("Canyon"), NPL Canada Ltd. ("NPL Canada"), W.S. Nicholls Construction, Inc. ("W.S. Nicholls"), and Canyon Special Projects, Inc. ("Special Projects," formerly Brigadier Pipelines Inc.). Utility infrastructure services activity is seasonal in most of Centuri's operating areas. Peak periods are the summer and fall months in colder climate areas, such as the northeastern and midwestern United States ("U.S.") and in Canada. In warmer climate areas, such as the southwestern and southeastern U.S., utility infrastructure services activity continues year round. Centuri acquired New England Utility Constructors, Inc. ("Neuco") in November 2017, thereby expanding its core services in the northeast region of the U.S. Additionally, in November 2018, Centuri expanded its operations in the southeast region of the U.S. through the acquisition of an $80 \%$ interest in a privately held utility infrastructure services business, Linetec Services, LLC ("Linetec"). See Note 19 Business Acquisitions for more information.

Basis of Presentation. The Company follows accounting principles generally accepted in the United States ("U.S. GAAP") in accounting for all of its businesses. Unless specified otherwise, all amounts are in U.S. dollars. Accounting for natural gas utility operations conforms with U.S. GAAP as applied to rate-regulated companies and as prescribed by federal agencies and commissions of the various states in which the utility operates. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates. In connection with a holding company reorganization in January 2017, Centuri ceased to be a subsidiary of Southwest and became a subsidiary of the Company. To give effect to this change, the separate consolidated financial statements related to Southwest, which are included in this annual report, depict Centuri-related amounts for periods prior to January 2017 as discontinued operations which are detailed in Note 18 - Reorganization Impacts - Discontinued Operations Solely Related to Southwest Gas Corporation.

Consolidation. The accompanying financial statements are presented on a consolidated basis for Southwest Gas Holdings, Inc. and all subsidiaries and Southwest Gas Corporation and all subsidiaries as of December 31, 2018 (except those accounted for using the
equity method as discussed further below). All significant intercompany balances and transactions have been eliminated with the exception of transactions between Southwest and Centuri in accordance with accounting treatment for rate-regulated entities.

Centuri, through its subsidiaries, historically held a $65 \%$ interest in a venture to market natural gas engine-driven heating, ventilating, and air conditioning technology and products. During the second quarter of 2018, an additional $\$ 1$ million of capital was contributed, thereby increasing Centuri's ownership to $95 \%$. The carrying amount of the noncontrolling interest has been adjusted with a corresponding charge to Additional paid-in capital on the Company's Consolidated Balance Sheet.

Centuri, through its subsidiaries, holds a $50 \%$ interest in W.S. Nicholls Western Construction LTD. ("Western"), a Canadian infrastructure services company that is a variable interest entity. Centuri determined that it is not the primary beneficiary of the entity due to a shared-power structure; therefore, Centuri does not consolidate the entity and has recorded its investment, and results related thereto, using the equity method. The investment in Western totaled $\$ 11.2$ million and $\$ 12.7$ million at December 31, 2018 and 2017, respectively. Both periods include the impacts of foreign currency exchange translation adjustments. Centuri received $\$ 1$ million in dividends from Western for the year ended December 31, 2018 and no dividends for the year ended December 31, 2017.

The equity method investment in Western is included in Other property and investments in the Consolidated Balance Sheets of the Company. Centuri's maximum exposure to loss as a result of its involvement with Western was estimated at $\$ 44.9$ million as of December 31, 2018. The estimated maximum exposure to loss represents the maximum loss that would be absorbed by Centuri in the event that all of the assets of Western were deemed to be worthless. Centuri recorded earnings of approximately $\$ 500,000$ from this investment in 2018, which is included in Other income (deductions) in the Consolidated Statements of Income.

Fair Value Measurements. Certain assets and liabilities are reported at fair value, which is defined as the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.
U.S. GAAP states that a fair value measurement should be based on the assumptions that market participants would use in pricing the asset or liability and establishes a fair value hierarchy that ranks the inputs used to measure fair value by their reliability. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to fair values derived from unobservable inputs (Level 3 measurements). Financial assets and liabilities are categorized in their entirety based on the lowest level of input that is significant to the fair value measurement. The three levels of the fair value hierarchy are as follows:

Level 1 - quoted prices (unadjusted) in active markets for identical assets or liabilities that a company has the ability to access at the measurement date.

Level 2 - inputs other than quoted prices included within Level 1 that are observable for similar assets or liabilities, either directly or indirectly.

Level 3 - unobservable inputs for the asset or liability. Unobservable inputs are used to measure fair value to the extent that observable inputs are not available, thereby allowing for situations in which there is little, if any, market activity for the asset or liability at the measurement date.

The Company primarily used quoted market prices and other observable market pricing information in valuing cash and cash equivalents, derivatives, long-term debt outstanding, and assets of the qualified pension plan and the PBOP required to be disclosed at fair value.

Net Utility Plant. Net utility plant includes gas plant at original cost, less the accumulated provision for depreciation and amortization, plus the unamortized balance of acquisition adjustments. Original cost includes contracted services, material, payroll,
and related costs such as taxes and certain benefits, general and administrative expenses, and an allowance for funds used during construction, less contributions in aid of construction.

Other Property and Investments. Other property and investments on Southwest's and the Company's Consolidated Balance Sheets includes (thousands of dollars):

|  | 2018 | 2017 |
| :--- | ---: | ---: |
| Net cash surrender value of COLI policies | $\$ 114,405$ | $\$ 117,341$ |
| Other property | 1,741 | 1,773 |
| $\quad$ Total Southwest Gas Corporation | 116,146 | 119,114 |
| Centuri property, equipment, and intangibles | 792,191 | 554,730 |
| Centuri accumulated provision for depreciation and amortization | $(298,939)$ | $(258,906)$ |
| Other property | $\underline{14,153}$ | 13,242 |
| $\quad$ Total Southwest Gas Holdings, Inc. | $\underline{\$ 623,551}$ | $\$ 428,180$ |

Intangible Assets. Intangible assets (other than goodwill) are amortized using the straight-line method to reflect the pattern of economic benefits consumed over the estimated periods benefited. The recoverability of intangible assets is evaluated when events or circumstances indicate that a revision of estimated useful lives is warranted or that an intangible asset may be impaired. Non-utility intangible assets are associated with utility infrastructure services businesses acquired through 2018, including the Linetec acquisition. All have finite lives. These intangible assets are included in Other property and investments on the Company's Consolidated Balance Sheets. Centuri has $\$ 159.8$ million and $\$ 80.7$ million of intangible assets at December 31, 2018 and 2017, respectively, as detailed in the following table (thousands of dollars):

| December 31, 2018 | Gross Carrying Amount | Accumulated Amortization | Net Carrying Amount |
| :---: | :---: | :---: | :---: |
| Customer relationships | \$152,533 | \$ $(11,716)$ | \$140,817 |
| Trade names and trademarks | 23,013 | $(5,234)$ | 17,779 |
| Customer contracts backlog | 270 | (3) | 267 |
| Noncompete agreements | 2,022 | (1,064) | 958 |
| Total | \$177,838 | \$(18,017) | \$159,821 |
| December 31, 2017 |  |  |  |
| Customer relationships | \$ 76,254 | \$ (6,743) | \$ 69,511 |
| Trade names and trademarks | 13,754 | $(4,080)$ | 9,674 |
| Noncompete agreements | 2,060 | (543) | 1,517 |
| Total | \$ 92,068 | \$(11,366) | \$ 80,702 |

Amortization expense for the acquired intangible assets listed above for the years ended December 31, 2018, 2017, and 2016 was $\$ 7.6$ million, $\$ 4.1$ million, and $\$ 3.2$ million, respectively.

The estimated future amortization of the intangible assets for the next five years and thereafter is as follows (in thousands):

2019
2020
2021
2022
2023
Thereafter
Total
\$ 10,622
10,634
10,214
10,127
10,127
108,097
\$159,821

See Note 2 - Utility Plant and Leases for additional information regarding natural gas operations intangible assets. Note 19 Business Acquisitions includes detailed information about intangible assets purchased in the Linetec acquisition.

Cash and Cash Equivalents. For purposes of reporting consolidated cash flows, cash and cash equivalents include cash on hand and financial instruments with maturities of three months or less. Such investments are carried at cost, which approximates market value. Cash and cash equivalents for Southwest and the Company also include money market fund investments totaling approximately $\$ 18$ million and $\$ 59.9$ million, respectively at December 31, 2018, and $\$ 20.8$ million and $\$ 22.2$ million, respectively, at December 31, 2017, which fall within Level 2 of the fair value hierarchy, due to the asset valuation methods used by money market funds.

Typical non-cash investing activities for Southwest include customer advances applied as contributions toward utility construction activity and capital expenditures that were not paid as of year end that are included in accounts payable. Amounts related to such activities were immaterial for the periods presented herein. Non-cash investing activities for Centuri included $\$ 75.6$ million of purchase consideration related to the Linetec acquisition in the form of liabilities incurred that remained unpaid as of December 31, 2018; such amounts are included in Other current liabilities on the Consolidated Balance Sheets of the Company. See Note 19 Business Acquisitions.

Income Taxes. The asset and liability method of accounting is utilized for the recognition of income taxes. Under the asset and liability method, deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in the period that includes the enactment date. For regulatory and financial reporting purposes, investment tax credits ("ITC") related to gas utility operations are deferred and amortized over the life of related fixed assets. As of December 31, 2018, the Company had cumulative book earnings of approximately $\$ 25$ million in its foreign jurisdiction. Management previously asserted and continues to assert that all the earnings of Centuri's Canadian subsidiaries will be permanently reinvested in Canada. As a result, no U.S. deferred income taxes have been recorded related to cumulative foreign earnings.

In 2017, the Tax Cuts and Jobs Act (the "TCJA") was enacted. The TCJA had significant impacts on the taxation of business entities, including specific provisions related to regulated public utilities. The more significant changes that impacted the Company include the reduction in the corporate federal income tax rate from $35 \%$ to $21 \%$, and limiting the utilization of net operating losses ("NOLs") to $80 \%$ of taxable income, with the ability to indefinitely carryforward unutilized NOLs to reduce future taxable income.

The Financial Accounting Standards Board (the "FASB") issued guidance to allow an accounting policy election of either (i) treating taxes attributable to future taxable income related to Global Intangible Low-Taxed Income ("GILTI") as a current period expense when incurred or (ii) recognizing deferred taxes for temporary differences expected to reverse as GILTI in future years. The Company
has elected to treat GILTI as a current period cost when incurred and has considered the estimated 2018 GILTI impact in its 2018 tax expense.

Deferred Purchased Gas Costs. The various regulatory commissions have established procedures to enable Southwest to adjust its billing rates for changes in the cost of natural gas purchased. The difference between the current cost of gas purchased and the cost of gas recovered in billed rates is deferred. Generally, these deferred amounts are recovered or refunded within one year.

Prepaid and other current assets. Prepaid and other current assets for Southwest and the Company include gas pipe materials and operating supplies of $\$ 56$ million in 2018 and $\$ 33$ million in 2017 (carried at weighted average cost), and also include $\$ 74$ million in 2018 and $\$ 40$ million in 2017 related to a regulatory asset associated with the Arizona decoupling mechanism (an alternative revenue program). In the 2017 Arizona general rate case decision, the decoupled rate design was approved to continue, excluding a winterperiod adjustment to rates, making the mechanism fundamentally similar to that which exists in Nevada. This change from a combination of monthly winter-period adjustments to bills (coupled with an annual rate adjustment) to an annual rate adjustment resulted in an increase in the associated regulatory asset noted above.

Goodwill. As required by U.S. GAAP, goodwill is assessed for impairment annually, or more frequently, if circumstances indicate impairment to the carrying value of goodwill may have occurred. The goodwill impairment analysis is conducted as of October 1st each year and may start with an assessment of qualitative factors (commonly referred to as Step 0) to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying amount. If, after assessing the qualitative factors, management determines that it is more likely than not that the fair value of a reporting unit is less than its carrying amount, or if management does not perform a qualitative assessment, a Step 1 impairment test will be performed. Management considered the qualitative factors and the evidence obtained and determined that it is not more likely than not that the fair value of the reporting units are less than their carrying amounts in either 2017 or 2018. Thus, no impairment was recorded in either year. The Linetec acquisition in 2018 (see further discussion in Note 19 - Business Acquisitions) was considered an asset purchase for tax purposes. As a result, goodwill associated with Linetec is expected to be deductible for those same purposes.

|  | Natural Gas <br> Operations | Infrastructure <br> Services | Total <br> Company |
| :--- | ---: | ---: | ---: | ---: |
| (In thousands of dollars) | $\$ 10,095$ | $\$ 129,888$ | $\$ 139,983$ |
| Balance, December 31, 2016 | - | 32,028 | 32,028 |
| Goodwill from Neuco acquisition | - | 7,303 | 7,303 |
| Foreign currency translation adjustment | $\boxed{10,095}$ | 169,219 | 179,314 |
| Balance, December 31, 2017 | - | 182 | 182 |
| Additional goodwill from Neuco acquisition | - | 188,494 | 188,494 |
| Goodwill from Linetec acquisition | $\underline{-}$ | $\underline{(8,945)}$ | $\underline{(8,945)}$ |
| Foreign currency translation adjustment | $\underline{\$ 10,095}$ | $\underline{\$ 348,950}$ | $\underline{\underline{\$ 359,045}}$ |
| Balance, December 31, 2018 |  |  |  |

Other Current Liabilities. Management recognizes in its balance sheets various liabilities that are expected to be settled through future cash payment within the next twelve months, including certain regulatory liabilities (refer to Note $\mathbf{5}$ - Regulatory Assets and Liabilities), customary accrued expenses for employee compensation and benefits, and declared but unpaid dividends. As of December 31, 2018, this caption on the Company's Consolidated Balance Sheet also included $\$ 75.6$ million in unremitted amounts associated with the Linetec acquisition note above.

Accumulated Removal Costs. Approved regulatory practices allow Southwest to include in depreciation expense a component intended to recover removal costs associated with utility plant retirements. In accordance with the Securities and Exchange Commission ("SEC") position on presentation of these amounts, management reclassifies estimated removal costs from accumulated depreciation to accumulated removal costs within the liabilities section of the Consolidated Balance Sheets. Management regularly updates the estimated accumulated removal costs as amounts fluctuate between periods depending on the level of replacement work performed, the estimated cost of removal in rates, and the actual cost of removal experienced.

Gas Operating Revenues. Southwest recognizes revenue when it satisfies its performance by transferring gas to the customer. Natural gas is delivered and "consumed" by the customer simultaneously. Revenues are recorded when customers are billed. Customer billings are substantially based on monthly meter reads and include certain other charges assessed monthly, and are calculated in accordance with applicable tariffs and state and local laws, regulations, and related agreements. An estimate of the margin associated with natural gas service provided, but not yet billed, to residential and commercial customers from the latest meter read date to the end of the reporting period is also recognized as accrued utility revenue. Revenues also include the net impacts of margin tracker/ decoupling accruals based on criteria in U.S. GAAP for rate-regulated entities associated with alternative revenue programs. All of Southwest's service territories have decoupled rate structures, which are designed to eliminate the direct link between volumetric sales and revenue, thereby mitigating the impacts of unusual weather variability and conservation on margin. See Note 3 - Revenue for additional information regarding Gas operating revenues.

Utility Infrastructure Services Revenues. The majority of Centuri contracts are performed under unit-price contracts. Generally, these contracts state prices per unit of installation. Typical installations are accomplished in a few weeks or less. Revenues are recorded as installations are completed. Revenues are recorded for long-term fixed-price contracts in a pattern that reflects the transfer of control of promised goods and services to the customer over time. The amount of revenue recognized on fixed-price contracts is based on costs expended to date relative to anticipated final contract costs. Changes in job performance, job conditions, and final contract settlements are factors that influence management's assessment of total contract value and the total estimated costs to complete those contracts. Revisions in estimates of costs and earnings during the course of work are reflected in the accounting period in which the facts requiring revision become known. If a loss on a contract becomes known or is anticipated, the entire amount of the estimated ultimate loss is recognized at that time in the financial statements. Some unit-price contracts contain caps that if encroached, trigger revenue and loss recognition similar to a fixed-price contract model. See Note 3 - Revenue for additional information regarding Utility infrastructure services revenues.

Utility Infrastructure Services Expenses. Utility infrastructure services expenses in the Statements of Income includes payroll expenses, office and equipment rental costs, subcontractor expenses, training, job-related materials, gains and losses on equipment sales, and professional fees of Centuri.

Net Cost of Gas Sold. Components of net cost of gas sold include natural gas commodity costs (fixed-price and variable-rate), pipeline capacity/transportation costs, and actual settled costs of natural gas derivative instruments. Also included are the net impacts of purchased gas adjustment ("PGA") deferrals and recoveries, which by their inclusion, result in net cost of gas sold overall that is comparable to amounts included in billed gas operating revenues. Differences between amounts incurred with suppliers, transmission pipelines, etc. and those already included in customer rates, are temporarily deferred in PGA accounts pending inclusion in customer rates.

Operations and Maintenance Expense. Operations and maintenance expense includes Southwest's operating and maintenance costs associated with serving utility customers and maintaining its distribution and transmission systems, uncollectible expense, administrative and general salaries and expense, employee benefits expense excluding relevant non-service cost components (see Note 11 - Pension and Other Postretirement Benefits), and legal expense (including injuries and damages).

Depreciation and Amortization. Utility plant depreciation is computed on the straight-line remaining life method at composite rates considered sufficient to amortize costs over estimated service lives, including components which compensate for removal costs (net of salvage value), and retirements, as approved by the appropriate regulatory agency. When plant is retired from service, the original cost of plant, including cost of removal, less salvage, is charged to the accumulated provision for depreciation. Other regulatory assets, including acquisition adjustments, are amortized when appropriate, over time periods authorized by regulators. See also discussion regarding Accumulated Removal Costs above. Non-utility and utility infrastructure services-related property and equipment are depreciated on a straight-line method based on the estimated useful lives of the related assets. Costs and gains related to refunding utility debt and debt issuance expenses are deferred and amortized over the weighted-average lives of the new issues and become a component of interest expense.

Allowance for Funds Used During Construction ("AFUDC"). AFUDC represents the cost of both debt and equity funds used to finance utility construction. AFUDC is capitalized as part of the cost of utility plant. The debt portion of AFUDC is reported in the Company's and Southwest's Consolidated Statements of Income as an offset to Net interest deductions and the equity portion is reported as Other income. Utility plant construction costs, including AFUDC, are recovered in authorized rates through depreciation when completed projects are placed into operation, and general rate relief is requested and granted.

|  | 2018 | 2017 |
| :--- | ---: | ---: |
| (In thousands) |  |  |
| AFUDC: | $\$ 3,264$ | $\$ 1,666$ |
| Debt portion | $\underline{\$, 627}$ | 2,296 |
| Equity portion | $\underline{\$ 6,891}$ | $\xlongequal{\$ 3,962}$ |
| AFUDC capitalized as part of utility plant | 53,464 |  |
| AFUDC rate | $5.85 \%$ | $5.95 \%$ |

Other Income (Deductions). The following table provides the composition of significant items included in Other income (deductions) on the Consolidated Statements of Income (thousands of dollars):

|  | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Southwest Gas Corporation - natural gas operations segment: |  |  |  |
| Increase (decrease) in COLI policies | \$ $(3,200)$ | \$ 10,300 | \$ 7,400 |
| Interest income | 6,020 | 2,784 | 1,848 |
| Equity AFUDC | 3,627 | 2,296 | 2,289 |
| Non-service post-retirement benefit cost | $(21,059)$ | $(19,424)$ | $(19,760)$ |
| Miscellaneous income and (expense) | $(2,628)$ | $(2,344)$ | $(3,261)$ |
| Southwest Gas Corporation - total other income (deductions) | $(17,240)$ | $(6,388)$ | $(11,484)$ |
| Utility infrastructure services segment: |  |  |  |
| Interest income | 88 | 3 | 1 |
| Foreign transaction gain (loss) | (222) | (754) | (22) |
| Equity in earnings of unconsolidated investment - Western | 531 | 1,052 | 69 |
| Miscellaneous income and (expense) | (635) | 44 | 1,145 |
| Centuri - total other income (deductions) | (238) | 345 | 1,193 |
| Corporate and administrative | 52 | 13 | - |
| Consolidated Southwest Gas Holdings, Inc. - total other income (deductions) | \$(17,426) | \$ $(6,030)$ | \$(10,291) |

Included in the table above is the change in cash surrender values of company-owned life insurance ("COLI") policies (including net death benefits recognized). These life insurance policies on members of management and other key employees are used by the Company and Southwest to indemnify against the loss of talent, expertise, and knowledge, as well as to provide indirect funding for certain nonqualified benefit plans. Current tax regulations provide for tax-free treatment of life insurance (death benefit) proceeds. Therefore, changes in the cash surrender value components of COLI policies, as they progress towards the ultimate death benefits, are also recorded without tax consequences.

Foreign Currency Translation. Foreign currency-denominated assets and liabilities of consolidated subsidiaries are translated into U.S. dollars at exchange rates existing at the respective balance sheet dates. Translation adjustments resulting from fluctuations in exchange rates are recorded as a separate component of accumulated other comprehensive income within stockholders' equity. Results of operations of foreign subsidiaries are translated using the monthly weighted-average exchange rates during the respective periods. Gains and losses resulting from foreign currency transactions are included in Other income (expense) of the Company. Gains and losses resulting from intercompany foreign currency transactions that are of a long-term investment nature are reported in Other comprehensive income, if applicable.

Earnings Per Share. Basic earnings per share ("EPS") in each period of this report were calculated by dividing net income attributable to Southwest Gas Holdings, Inc. by the weighted-average number of shares during those periods. Diluted EPS includes additional weighted-average common stock equivalents (stock options, performance shares, and restricted stock units). Unless otherwise noted, the term "Earnings Per Share" refers to Basic EPS. A reconciliation of the denominator used in the Basic and Diluted EPS calculations is shown in the following table.

201820172016
(In thousands)
$\begin{array}{llll}\text { Average basic shares } & 49,419 & 47,965 & 47,469\end{array}$
Effect of dilutive securities:

| Stock options | - | - | 1 |
| :--- | ---: | ---: | ---: |
| Management Incentive Plan shares | 25 | 8 | 124 |
| Restricted stock units (1) | 32 | 18 | 220 |
| Average diluted shares | $\underline{49,476}$ | $\underline{47,991}$ | $\underline{47,814}$ |

(1) The number of securities granted for 2018 and 2017 includes 23,000 and 7,000 performance shares, respectively, the total of which was derived by assuming that target performance will be achieved during the relevant performance period.

## Recent Accounting Standards Updates.

Accounting pronouncements adopted in 2018:
Effective January 2018, the Company and Southwest adopted the FASB update, Accounting Standards Codification ("ASC") Topic 606 "Revenue from Contracts with Customers." The update replaced much of the prior guidance regarding revenue recognition including most industry-specific guidance. See Note 3 - Revenue for more information regarding the adoption of the update.

In January 2018, the FASB issued Accounting Standards Update ("ASU") No. 2018-02 "Income Statement - Reporting Comprehensive Income (Topic 220) - Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income." The update addressed issues resulting from the enactment of the TCJA. Stakeholders raised a narrow-scope financial reporting issue that arose as a consequence of the TCJA related to the fact that when deferred tax balances were remeasured in

December 2017, those deferred tax balances were to be reduced, but related amounts historically accumulated in Accumulated Other Comprehensive Income ("AOCI") prior to the enactment of the TCJA, were required to be recognized as income tax expense rather than being relieved from AOCI. The amendments in this update allowed a reclassification from AOCI to retained earnings for those otherwise "stranded" tax effects in AOCI following enactment of the TCJA. The Company and Southwest adopted this update effective January 2018. Accordingly, approximately $\$ 9.3$ million of previously stranded tax effects resulting from the TCJA were reclassified to retained earnings from AOCI on the Consolidated Balance Sheets of Southwest and the Company during the first quarter of 2018.

In March 2017, the FASB issued ASU 2017-07 "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." The new guidance related to the income statement presentation of net periodic benefit cost for an entity's sponsored defined benefit pension and other postretirement plans. The Company and Southwest adopted this update effective January 2018. See Note 11 - Pension and Other Postretirement Benefits for additional information.

Accounting pronouncements that will be effective in 2019:

In February 2016, the FASB issued the update "Leases (Topic 842)." Under the update, lessees will be required to recognize the following for all leases (with the exception of short-term leases) at the commencement date:

- A lease liability for the obligation to make lease payments, measured on a discounted basis; and
- A right-of-use asset for the right to use, or control the use of, a specified asset for the lease term.

Under the new guidance, lessor accounting is largely unchanged. Certain targeted improvements were made to align, where necessary, lessor accounting with the lessee accounting model and Topic 606, "Revenue from Contracts with Customers." Though companies have historically been required to make disclosures regarding leases and associated contractual obligations, leases with terms longer than a year will no longer exist off-balance sheet. In July 2018, the FASB issued narrow-scope improvements to the standard, which include, among other things, guidance on lease classification reassessment and certain circumstances surrounding remeasurement. Also included was clarification that lessor-controlled options to terminate a lease are considered in the lease term.

Management expects to elect various practical expedients and accounting policies regarding the transition method used to implement Topic 842. The Company and Southwest plan to elect the new optional transition method included within the recent FASB update "Leases - Targeted Improvements", also issued in July 2018, which allows for comparative periods not to be restated. In conjunction with this decision, management currently expects that no retained earnings adjustment will be necessary due to the adoption of Topic 842. At a minimum, management expects the following regarding Topic 842 practical expedients and accounting policy elections:

- To elect to use the "package", which is a set of three practical expedients that must be elected as a package and applied consistently to all of the Company's and Southwest's leases. These include: not reassessing whether any expired or existing contracts are or contain leases; not reassessing the lease classification for expired or existing leases (that is, existing operating and capital leases in accordance with current lease guidance will in each case be classified as operating and finance leases, respectively, under the updated guidance); and not reassessing initial direct costs for any existing leases.
- To elect to adopt the practical expedient to exclude all easements in place prior to January 1, 2019 from treatment under Topic 842. However, the Company and Southwest will evaluate any new easements entered into after the effective date of the standard to determine if the arrangements should be accounted for as leases.
- To make an accounting policy election by asset class to include both the lease and non-lease components (as defined in the guidance) as a single component.
- To make an accounting policy election to not apply Topic 842 to short-term leases, as permitted.
- To not elect to use hindsight in determining the lease term and in assessing impairment of right-of-use assets.

Southwest's leases are comprised primarily of operating leases of buildings, land, and equipment. At this time, Southwest has no finance leases. Centuri leases buildings, land, fleet equipment, and other equipment. The majority of Centuri's leases are operating leases. The Company and Southwest are currently not the lessor in any significant lease arrangements.

Management has implemented new software systems (one for Southwest and one for Centuri) to facilitate compliance with Topic 842. Management will adopt the update in the first quarter of 2019, as required. Management is finalizing its evaluation of the impact of the adoption on the consolidated financial statements and related disclosures.

Recently issued accounting pronouncements that will be effective after 2019:

In June 2016, the FASB issued ASU 2016-13 update "Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments." The update requires the measurement of all expected credit losses for financial assets held at the reporting date based on historical experience, current conditions, and reasonable and supportable forecasts. The inputs currently used to estimate credit losses will still be used, however they may be adapted to reflect the full amount of expected losses. The update is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. All entities may adopt the amendments in this update earlier as of fiscal years beginning after December 15, 2018, including interim periods within those fiscal years. Management is evaluating what impact, if any, this update might have on the Company's and Southwest's consolidated financial statements and disclosures.

In January 2017, the FASB issued ASU 2017-04 "Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment." Currently, unless meeting the criteria for qualitative assessment only, an entity is required to perform a two-step test to determine the amount, if any, of goodwill impairment. In Step 1, an entity compares the fair value of a reporting unit with its carrying amount, including goodwill. If the carrying amount of the reporting unit exceeds its fair value, the entity performs Step 2 and compares the implied fair value of goodwill with the carrying amount of that goodwill for that reporting unit. An impairment charge equal to the amount by which the carrying amount of goodwill for the reporting unit exceeds the implied fair value of that goodwill is recorded, limited to the amount of goodwill allocated to that reporting unit. Under the update, an entity will apply a one-step quantitative test and record the amount of goodwill impairment as the excess of a reporting unit's carrying amount over its fair value, not to exceed the total amount of goodwill allocated to the reporting unit. The new guidance does not amend the optional qualitative assessment of goodwill impairment. The amount of any goodwill impairment calculated under the update could vary from the calculation under the existing guidance. The amendments should be applied on a prospective basis. The update is effective for fiscal and interim periods beginning after December 15, 2019. Early adoption is permitted for interim or annual goodwill impairment tests performed on testing dates after January 1, 2017. Management is evaluating the impacts this update might have on the Company's and Southwest's consolidated financial statements and disclosures.

In August 2018, the FASB issued ASU 2018-15 "Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract." The update generally aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement (that is a service contract) with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update also requires the entity to expense the capitalized implementation costs of such hosting arrangements over the term of the hosting arrangement, including reasonably certain renewal periods. The update is effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years. Early adoption of the amendments in this update is permitted for interim and related annual fiscal periods after December 15, 2018. Management is evaluating the impacts this update might have on the Company's and Southwest's consolidated financial statements and disclosures.

In August 2018, the FASB issued ASU 2018-14 "Compensation - Retirement Benefits - Defined Benefit Plans - General (Subtopic 715-20): Disclosure Framework - Changes to the Disclosure Requirements for Defined Benefit Plans." This update removes disclosures that are no longer considered cost-beneficial, clarifies the specific requirements of disclosures, and adds disclosure requirements identified as relevant. The update applies to all employers that sponsor defined benefit pension or other post-retirement plans. The update is effective for fiscal years ending after December 15, 2020. Early adoption is permitted. Management is evaluating the impacts this update might have on its disclosures.

In August 2018, the FASB issued ASU 2018-13 "Fair Value Measurement: Disclosure Framework - Changes to the Disclosure Requirements for Fair Value Measurement." The update is intended to improve the effectiveness of fair value measurement disclosures and removes the following disclosure requirements: the amount of and reasons for transfers between Level 1 and Level 2 of the fair value hierarchy; the policy for timing of transfers between levels; and the valuation processes for Level 3 fair value measurements. The update also modifies or clarifies for investments in certain entities that calculate net asset value, a requirement to disclose the timing of liquidation of an investee's assets and the date when restrictions from redemption might lapse (in cases when the timing has been communicated or announced publicly). It also clarifies communication requirements about measurement uncertainty as of the reporting date. For certain unobservable inputs, an entity may disclose other quantitative information in lieu of the weighted average if it would be a more reasonable and rational method to reflect the distribution of inputs to the measurements. Management is evaluating the impacts this update might have on its disclosures.

Subsequent Events. Management monitors events occurring after the balance sheet date and prior to the issuance of the financial statements to determine the impacts, if any, of events on the financial statements to be issued or disclosures to be made, and has reflected them where appropriate.

## Note 2 - Utility Plant and Leases

Net utility plant as of December 31, 2018 and 2017 was as follows (thousands of dollars):

| December 31, | 2018 | 2017 |
| :--- | ---: | ---: | ---: |
| Gas plant: | 26,825 | $\$ 25,019$ |
| Storage | 386,159 | 363,396 |
| Transmission | $6,049,380$ | $5,600,769$ |
| Distribution | 416,643 | 396,252 |
| General | 241,158 | 230,030 |
| Software and software-related intangibles | 14,074 | 14,178 |
| Other | $7,134,239$ | $6,629,644$ |
|  | $(2,234,029)$ | $(2,231,242)$ |
| Less: accumulated depreciation and amortization | $\underline{193,028}$ | 125,248 |
| Construction work in progress | $\underline{\$ 5,093,238}$ | $\$ 4,523,650$ |

Utility plant depreciation is computed on the straight-line remaining life method at composite rates considered sufficient to amortize costs over estimated service lives, including components which are intended to compensate for removal costs (net of salvage value), and retirements, based on the processes of regulatory proceedings and related regulatory commission approvals and/or mandates. In 2018, annual utility depreciation and amortization expense averaged $2.7 \%$ of the original cost of depreciable and amortizable property. Average rates in 2017 and 2016 approximated 3.0\%. Transmission and Distribution plant (combined), associated with core natural gas delivery infrastructure, constitute the majority of gas plant. Annual utility depreciation expense averaged approximately $3.0 \%$ of original cost of depreciable transmission and distribution plant during the period 2016 through 2018.

Depreciation and amortization expense on gas plant, including intangibles, was as follows (thousands of dollars):

|  | 2018 | 2017 | 2016 |
| :--- | :---: | :---: | :---: |
| Depreciation and amortization expense | $\$ 185,719$ | $\$ 187,075$ | $\$ 214,037$ |

Included in the figures above is amortization of utility intangibles of $\$ 13.6$ million in 2018, $\$ 14.3$ million in 2017, and $\$ 14.8$ million in 2016. Additionally, the amounts above exclude regulatory asset and liability amortization.

Operating Leases and Rentals. Certain land, buildings, and construction equipment is leased. The majority of these leases are shortterm and accounted for as operating leases. For the natural gas operations segment, these leases are also treated as operating leases for regulatory purposes. Centuri has various short-term operating leases of equipment and temporary office sites. The table below presents Southwest's and Centuri's rental and lease payments that are included in operating expenses (in thousands):

|  | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: |
| Southwest Gas Corporation | $\$ 4,556$ | $\$ 4,926$ | $\$ 4,357$ |
| Centuri | $\underline{59,491}$ | $\underline{62,310}$ | $\underline{53,956}$ |
| Consolidated rental payments/lease expense | $\underline{\$ 64,047}$ | $\underline{\$ 67,236}$ | $\underline{\$ 58,313}$ |

The following is a schedule of future minimum lease payments for operating leases (with initial or remaining terms in excess of one year) as of December 31, 2018 (thousands of dollars):

|  | Southwest | Centuri | Consolidated Total |  |
| :---: | :---: | :---: | :---: | :---: |
| 2019 | \$ 898 | \$10,053 | \$ | 10,951 |
| 2020 | 363 | 7,656 |  | 8,019 |
| 2021 | 299 | 5,760 |  | 6,059 |
| 2022 | 163 | 5,163 |  | 5,326 |
| 2023 | 79 | 3,681 |  | 3,760 |
| Thereafter | 177 | 10,511 |  | 10,688 |
| Total minimum lease payments | \$1,979 | \$42,824 | \$ | 44,803 |

Capital Leases. Centuri leases certain construction equipment under capital leases arrangements which are not significant.

## Note 3 - Revenue

Effective January 2018, the Company and Southwest adopted the FASB's Topic 606, "Revenue from Contracts with Customers", using the modified retrospective transition method. Under the modified retrospective approach, the information for periods prior to the adoption date has not been restated and continues to be reported under the accounting standards in effect for those periods (Topic 605, "Revenue Recognition"). As permitted under the standard, the Company and Southwest have elected to apply the guidance retrospectively only to those contracts that were not completed at January 1, 2018. Management assessed the effects the new guidance has on the Company's (and Southwest's, in the case of natural gas operations) financial position, results of operations, and cash flows. Based on these assessments, the adoption of Topic 606 had no material impact on any of the financial statements of Southwest or the Company. Certain disclosures included within this note reflect information for 2017 and 2016, during which periods the Company and Southwest followed the guidance in Topic 605. As there were no material changes to the consolidated financial statements as a result of the adoption of Topic 606, as noted above, management elected to disclose information for 2017
and 2016, as the manner in which revenue is recorded has not changed and believes that including such disclosure provides useful information.

The following information about the Company's revenues is presented by segment. Southwest encompasses one segment - natural gas operations.

## Natural Gas Operations Segment:

Southwest is engaged in the business of purchasing, distributing, and transporting natural gas for customers in portions of Arizona, Nevada, and California. Public utility rates, practices, facilities, and service territories of Southwest are subject to regulatory oversight. Southwest recognizes revenue when it satisfies its performance by transferring gas to the customer. Revenues also include the net impacts of margin tracker/decoupling accruals based on criteria in U.S. GAAP for rate-regulated entities associated with alternative revenue programs. Revenues from customer arrangements and from alternative revenue programs are described below.

Southwest acts as an agent for state and local taxing authorities in the collection and remittance of a variety of taxes, including sales and use taxes and surcharges. These taxes are not included in Gas operating revenues. Management uses the net classification method to report taxes collected from customers to be remitted to governmental authorities.

Southwest generally offers two types of services to its customers: tariff sales and transportation-only service. Tariff sales encompass sales to many types of customers (primarily residential) under various rate schedules, subject to cost-of-service ratemaking, which is based on the rate-regulation of state commissions and the Federal Energy Regulatory Commission (the "FERC"). Southwest provides both the commodity and the related distribution service to nearly all of its approximate 2 million customers, and only several hundred customers (who are eligible to secure their own gas) subscribe to transportation-only service. Also, only a few hundred customers have contracts with stated periods. Southwest recognizes revenue when it satisfies its performance requirement by transferring volumes of gas to the customer. Natural gas is delivered and consumed by the customer simultaneously. The provision of service is represented by the turn of the meter dial and is the primary representation of the satisfaction of performance obligations of Southwest. The amount billable via regulated rates (both volumetric and fixed monthly rates as part of rate design) corresponds to the value to the customer, and management believes that the amount billable under the "invoice practical expedient" (amount Southwest has the right to invoice) is appropriate to utilize for purposes of recognizing revenue. Estimated amounts remaining unbilled since the last meter read date are restricted from being billed due only to the passage of time and therefore are also recognized for service provided through the balance sheet date. While natural gas service is typically recurring, there is generally not a contract term for utility service. Therefore, the contract term is not generally viewed to extend beyond the service provided to date, and customers can generally terminate service at will.

Transportation-only service is also governed by tariff rate provisions. Transportation-only service is generally only available to very large customers under requirements of Southwest's various tariffs. With this service, customers secure their own gas supply and Southwest provides transportation services to move the customer-supplied gas to the intended location. Southwest concluded that transportation/transmission service is suitable to an "over time" model. Rate structures under Southwest's regulation for transportation customers include a combination of volumetric charges and monthly "fixed" charges (including charges commonly referred to as capacity charges, demand charges, or reservation charges) as part of the rate design of regulated jurisdictions. These types of fixed charges represent a separate performance obligation associated with standing ready over the period of the month to deliver quantities of gas, regardless of whether the customer takes delivery of any quantity of gas. The performance obligations under these circumstances are satisfied over the course of the month under an output measure of progress based on time, which correlates to the period for which the charges are eligible to be invoiced.

Under its regulation, Southwest enters into negotiated rate contracts for those customers located in proximity to another pipeline, which pose a threat of bypassing its distribution system. Southwest may also enter into similar contracts for customers otherwise able to satisfy their energy needs by means of alternative fuel to natural gas. Less than two dozen customers are party to contracts with rate components subject to negotiation. Many rate provisions and terms of service for these less common types of contracts are also subject to regulatory oversight and tariff provisions. The performance obligations for these customers are satisfied similarly to those for other customers by means of transporting/delivering natural gas to the customer. Many or most of the rate components, and structures, for these types of customers are the same as those for similar customers without negotiated rate components; and the negotiated rates are within the parameters of the tariff guidelines. Management determined that these arrangements qualify for the invoice practical expedient for recognizing revenue. Furthermore, while some of these contracts include contract periods extending over time, including multiple years, as amounts billable under the contract are based on rates in effect for the customer for service provided to date, no significant financing component is deemed to exist.

As indicated above, revenues also include the net impacts of margin tracker/decoupling accruals. All of Southwest's service territories have decoupled rate structures (also referred to as alternative revenue programs) that are designed to eliminate the direct link between volumetric sales and revenue, thereby mitigating the impacts of unusual weather variability and conservation on margin. The primary alternative revenue programs involve permissible adjustments for differences between stated tariff benchmarks and amounts billable through revenue from contracts with customers via existing rates. Such adjustments are recognized monthly in revenue and in the associated regulatory asset/liability accounts in advance of rate adjustments intended to collect or return amounts recognized. Revenues recognized for the adjustment to the benchmarks noted are required to be presented separately from revenues from contracts with customers, and as such, are provided below and identified as alternative revenue program revenue (which excludes recoveries from customers).

Gas operating revenues on the Consolidated Statements of Income of both the Company and Southwest include revenue from contracts with customers, which is shown below disaggregated by customer type, and various categories of revenue:

| (Thousands of dollars) | December 31, |  |  |
| :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2016 |
| Residential | \$ 887,220 | \$ 857,204 | \$ 895,330 |
| Small commercial | 255,083 | 243,513 | 251,092 |
| Large commercial | 53,192 | 52,379 | 53,582 |
| Industrial/other | 23,489 | 22,026 | 19,753 |
| Transportation | 86,990 | 87,759 | 87,106 |
| Revenue from contracts with customers | 1,305,974 | 1,262,881 | 1,306,863 |
| Alternative revenue program revenues (deferrals) | 45,979 | 35,347 | 12,530 |
| Other revenues (a) | 5,775 | 4,080 | 2,019 |
| Total Gas operating revenues | \$1,357,728 | \$1,302,308 | \$1,321,412 |

(a) Includes various other revenues, and during the first six months of 2018 , included $\$ 12.5$ million as a reserve against revenue associated with a tax reform savings adjustment. During the third quarter of 2018, amounts previously recognized were reclassified to the various categories of revenue from contracts with customers when incorporated in tariff rates.

Utility Infrastructure Services Segment:

The majority of Centuri contracts are performed under unit-price contracts. Generally, these contracts state prices per unit of installation. Typical installations are accomplished in a few weeks or less. Revenues are recorded as installations are completed.

Revenues are recorded for long-term fixed-price contracts in a pattern that reflects the transfer of control of promised goods and services to the customer over time. The amount of revenue recognized on fixed-price contracts is based on costs expended to date relative to anticipated final contract costs (a method of recognition based on inputs). Some unit-price contracts contain caps that if encroached, trigger revenue and loss recognition similar to a fixed-price contract model.

Centuri is required to collect taxes imposed by various governmental agencies on the work performed for its customers. These taxes are not included in Utility infrastructure services revenues. Management uses the net classification method to report taxes collected from customers to be remitted to governmental authorities.

Centuri derives revenue from the installation, replacement, repair, and maintenance of energy distribution systems, and in developing industrial construction solutions. Centuri has operations in the U.S. and Canada. The majority of Centuri's revenues are related to contracts for natural gas pipeline replacement and installation work for natural gas utilities. In addition, Centuri performs certain industrial construction activities for various customers and industries. Centuri has two types of agreements with its customers: master services agreements ("MSAs") and bid contracts. Most of Centuri's customers supply many of their own materials in order for Centuri to complete its work under the contracts.

An MSA identifies most of the terms describing each party's rights and obligations that will govern future work authorizations. An MSA is often effective for multiple years. A work authorization is issued by the customer to describe the location, timing, and any additional information necessary to complete the work for the customer. The combination of the MSA and the work authorization determines when a contract exists and revenue recognition may begin. Each work authorization is generally a single performance obligation as Centuri is performing a significant integration service. Centuri has elected to use the portfolio method practical expedient at the customer level as the terms and conditions of the work performed under MSAs are similar in nature with each customer but vary significantly between customers.

A bid contract is typically a one-time agreement for a specific project that has all necessary terms defining each party's rights and obligations. Each bid contract is evaluated for revenue recognition individually. Control of assets created under bid contracts generally passes to the customer over time. Bid contracts often have a single performance obligation as Centuri is providing a significant integration service.

Centuri's MSA and bid contracts are characterized as either fixed-price contracts or unit-price contracts for revenue recognition purposes. The cost-to-cost input method is used to measure progress towards the satisfaction of a performance obligation for fixedprice contracts. Input methods result in the recognition of revenue based on the entity's expended effort to satisfy the performance obligation relative to the total expected effort to satisfy the performance obligation. For unit-price contracts, an output method is used to measure progress towards satisfaction of a performance obligation. Also with regard to unit-price contracts, the output measurement will be the completion of each unit that is required under the contract.

Actual revenues and project costs can vary, sometimes substantially, from previous estimates due to changes in a variety of factors, including unforeseen circumstances. These factors, along with other risks inherent in performing fixed-price contracts may cause actual revenues and gross profit for a project to differ from previous estimates and could result in reduced profitability or losses on projects. Changes in these factors may result in revisions to costs and earnings, the impacts for which are recognized in the period in which the changes are identified. Once identified, these types of conditions continue to be evaluated for each project throughout the project term and ongoing revisions in management's estimates of contract value, contract cost, and contract profit are recognized as necessary in the period determined.

Centuri categorizes work performed under MSAs and bid contracts into three primary service types: gas construction, electrical construction, and other construction. Gas construction includes work involving previously existing gas pipelines and the installation
of new pipelines or service lines. Electrical construction includes work involving installation and maintenance of transmission and distribution lines and storm restoration services. Other construction includes all other work and can include industrial and water utility services.

Contracts can have compensation/consideration that is variable. For MSAs, variable consideration is evaluated at the customer level as the terms creating variability in pricing are included within the MSA and are not specific to a work authorization. For multi-year MSAs, variable consideration items are typically determined for each year of the contract and not for the full contract term. For bid contracts, variable consideration is evaluated at the individual contract level. The expected value method or most likely amount method is used based on the nature of the variable consideration. Types of variable consideration include liquidated damages, delay penalties, performance incentives, safety bonuses, payment discounts, and volume rebates. Centuri will typically estimate variable consideration and adjust financial information, as necessary.

Change orders involve the modification in scope, price, or both to the current contract, requiring approval by both parties. The existing terms of the contract continue to be accounted for under the current contract until such time as a change order is approved. Once approved, the change order is either treated as a separate contract or as part of the existing contract, as appropriate, under the circumstances. When the scope is agreed upon in the change order but not the price, Centuri estimates the change to the transaction price.

The following tables display Centuri's revenue from contracts with customers disaggregated by service type and contract type:

| (Thousands of dollars) | December 31, |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 |  | 2017 |  | 2016 |  |
| Service Types: |  |  |  |  |  |  |
| Gas infrastructure services | \$ | 1,123,682 | \$ | 891,139 | \$ | 914,970 |
| Electric power infrastructure services |  | 32,629 |  | 18,114 |  | 27,915 |
| Other |  | 365,974 |  | 337,231 |  | 196,193 |
| Total Utility infrastructure services revenues | \$ | 1,522,285 | \$ | 1,246,484 | \$ | 1,139,078 |
| (Thousands of dollars) | December 31, |  |  |  |  |  |
|  |  | 2018 |  | 2017 |  | 2016 |
| Contract Types: |  |  |  |  |  |  |
| Master services agreement | \$ | 1,102,412 | \$ | 885,513 | \$ | 852,472 |
| Bid contract |  | 419,873 |  | 360,971 |  | 286,606 |
| Total Utility infrastructure services revenues | \$ | 1,522,285 | \$ | 1,246,484 | \$ | 1,139,078 |
| Unit priced contracts | \$ | 1,258,419 | \$ | 968,856 | \$ | 886,919 |
| Fixed priced contracts |  | 117,298 |  | 127,497 |  | 95,494 |
| Time and materials contracts |  | 146,568 |  | 150,131 |  | 156,665 |
| Total Utility infrastructure services revenues | \$ | 1,522,285 | \$ | 1,246,484 | \$ | 1,139,078 |

The following table provides information about contracts receivable and revenue earned on contracts in progress in excess of billings (contract assets), both of which are included within Accounts receivable, net of allowances, and amounts billed in excess of revenue
earned on contracts (contract liabilities), which are included in Other current liabilities as of December 31, 2018 and December 31, 2017 on the Company's Consolidated Balance Sheets:
(Thousands of dollars)
December 31, 2018 December 31, 2017

| Contracts receivable, net | $\$ 186,249$ | $\$ 221,859$ |
| :--- | ---: | ---: |
| Revenue earned on contracts in progress in excess of billings | 87,520 | 5,768 |
| Amounts billed in excess of revenue earned on contracts | 4,211 | 9,602 |

The revenue earned on contracts in progress in excess of billings (contract asset) primarily relates to Centuri's rights to consideration for work completed but not billed and/or approved at the reporting date. These contract assets are transferred to contracts receivable when the rights become unconditional. Upon adoption of Topic 606, the Company reclassified $\$ 50.6$ million to revenue earned on contracts in progress in excess of billings, and during the year ended December 31, 2018, recognized an increase of $\$ 30$ million, excluding the impact from the adoption, primarily related to normal operating and billing activities. The amounts billed in excess of revenue earned (contract liability) primarily relate to the advance consideration received from customers for which work has not yet been completed. The change in this contract liability balance from January 1, 2018 to December 31, 2018 is due to revenue recognized of $\$ 9.6$ million that was included in this balance as of January 1,2018 , after which time it became earned and the balance was reduced, and to increases due to cash received, net of revenue recognized during the period related to contracts that commenced during the period.

Prior to the adoption of Topic 606, revenue earned on contracts in progress in excess of billings was only used to recognize contract assets related to fixed-price contracts under previous accounting guidance. This balance now includes any conditional contract assets for both fixed-price contracts and unit-price contracts. Centuri considers retention and unbilled amounts to be conditional contract assets, as payment is contingent on the occurrence of a future event. Contracts receivable, net, includes only amounts that are unconditional in nature, which means only the passage of time remains and Centuri has invoiced the customer. Similarly, amounts billed in excess of revenue earned on contracts was only used to recognize contract liabilities related to fixed-price contracts under previous accounting guidance. This line item now includes contract liabilities related to both fixed-price contracts and unit-price contracts. In the event a contract asset or contract liability is expected to be recognized for greater than one year from the financial statement date, Centuri classifies those amounts as long-term contract assets or contract liabilities, included in Deferred charges and other assets or Other deferred credits and other long-term liabilities on the Company's Consolidated Balance Sheets.

For contracts that have an original duration of one year or less, Centuri uses the practical expedient applicable to such contracts and does not consider/compute an interest component based on the time value of money. Further, because of the short duration of these contracts, the Company has not disclosed the transaction price for the remaining performance obligations as of the end of each reporting period or when the Company expects to recognize the revenue.

As of December 31, 2018, Centuri has fifteen contracts that had an original duration of more than one year. The aggregate amount of the transaction price allocated to the unsatisfied performance obligations of these contracts as of December 31, 2018 is $\$ 38.6$ million. Centuri expects to recognize the remaining performance obligations over the next four years; however, the timing of that recognition is largely within the control of the customer, including when the necessary equipment and materials required to complete the work will be provided by the customer.

Utility infrastructure services contracts receivable consists of the following:

| (Thousands of dollars) | December 31, 2018 | December 31, 2017 |
| :--- | :---: | :---: |
| Billed on completed contracts and contracts in progress | $\$ 184,100$ | $\$ 219,298$ |
| Other receivables | 2,588 | 2,622 |
| Contracts receivable, gross | 186,688 | 221,920 |
| Allowance for doubtful accounts | $(439)$ | $(61)$ |
| Contracts receivable, net | $\underline{\$ 186,249}$ | $\underline{\$ 221,859}$ |

## Note 4 - Receivables and Related Allowances

Business activity with respect to gas utility operations is conducted with customers located within the three-state region of Arizona, Nevada, and California. The table below contains information about the gas utility customer accounts receivable balance (net of allowance) at December 31, 2018 and 2017, and the percentage of customers in each of the three states, which was consistent with the prior year.

|  | December 31, 2018 | December 31, 2017 |
| :--- | :---: | :---: |
| Gas utility customer accounts receivable balance (in thousands) | $\$ 138,149$ | $\$ 119,444$ |

Percent of customers by state
Arizona $\quad 53 \%$

Nevada
$\begin{array}{ll}\text { California } & 10 \%\end{array}$

Although Southwest seeks to minimize its credit risk related to utility operations by requiring security deposits from new customers, imposing late fees, and actively pursuing collection on overdue accounts, some accounts are ultimately not collected. Customer accounts are subject to collection procedures that vary by jurisdiction (late fee assessment, noticing requirements for disconnection of service, and procedures for actual disconnection and/or reestablishment of service). After disconnection of service, accounts are generally written off approximately two months after inactivation. Dependent upon the jurisdiction, reestablishment of service requires both payment of previously unpaid balances and additional deposit requirements. Provisions for uncollectible accounts are recorded monthly based on experience, customer and rate composition, and write-off processes. They are included in the ratemaking process as a cost of service. The Nevada jurisdictions have a regulatory mechanism associated with the gas cost-related portion of uncollectible accounts. Such amounts are deferred and collected through a surcharge in the ratemaking process. Activity in the allowance account for uncollectibles is summarized as follows (thousands of dollars):
$\left.\begin{array}{lc} & \begin{array}{c}\text { Allowance } \\ \text { for }\end{array} \\ \text { Uncollectibles }\end{array}\right](\$ 2,270$

At December 31, 2018, the utility infrastructure services segment (Centuri) had $\$ 273.8$ million in combined customer accounts and contracts receivable. Both the allowance for uncollectibles and write-offs related to Centuri customers have been insignificant and are not reflected in the table above.

## Note 5 - Regulatory Assets and Liabilities

Southwest is subject to the regulation of the Arizona Corporation Commission ("ACC"), the Public Utilities Commission of Nevada ("PUCN"), the California Public Utilities Commission ("CPUC"), and the FERC. Accounting policies of Southwest conform to U.S. GAAP applicable to rate-regulated entities and reflect the effects of the ratemaking process. Accounting treatment for rateregulated entities allows for deferral as regulatory assets, costs that otherwise would be expensed, if it is probable that future recovery from customers will occur. If rate recovery is no longer probable, due to competition or the actions of regulators, Southwest is required to write-off the related regulatory asset. Regulatory liabilities are recorded if it is probable that revenues will be reduced for amounts that will be credited to customers through the ratemaking process.

The following table represents existing regulatory assets and liabilities (thousands of dollars):

| December 31, | 2018 | 2017 |
| :---: | :---: | :---: |
| Regulatory assets: |  |  |
| Accrued pension and other postretirement benefit costs (1) | \$ 383,170 | \$ 391,403 |
| Unrealized net loss on non-trading derivatives (Swaps) (2) | 1,862 | 5,780 |
| Deferred purchased gas costs (3) | 4,928 | 14,581 |
| Accrued purchased gas costs (4) | 29,000 | 17,000 |
| Unamortized premium on reacquired debt (5) | 19,599 | 20,913 |
| Accrued absence time (8) | 14,126 | 13,870 |
| Margin \& interest-tracking (9) | 88,290 | 42,354 |
| Other (10) | 32,616 | 25,997 |
|  | 573,591 | 531,898 |
| Regulatory liabilities: |  |  |
| Deferred purchased gas costs (3) | $(79,762)$ | $(6,841)$ |
| Accumulated removal costs | $(383,000)$ | $(315,000)$ |
| Unrealized net gain on non-trading derivatives (Swaps) (2) | (144) | - |
| Unamortized gain on reacquired debt (6) | $(8,717)$ | $(9,253)$ |
| Regulatory excess deferred taxes and gross-up (7) | $(458,834)$ | $(433,908)$ |
| Other (10) | $(19,911)$ | $(33,184)$ |
| Net regulatory liabilities | $\underline{\text { \$(376,777) }}$ | $\underline{\underline{\text { (266,288) }}}$ |

(1) Included in Deferred charges and other assets on the Consolidated Balance Sheets. Recovery period is greater than five years. (See Note 11 Pension and Other Postretirement Benefits).
(2) Asset balance is included in Deferred charges and other assets and Prepaid and other assets on the Consolidated Balance Sheets. Liability balance is included in Other current liabilities and Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets. The actual amounts, when realized at settlement, become a component of purchased gas costs under Southwest's PGA mechanisms. (For specific details, see Note 14 - Derivatives).
(3) Balance recovered or refunded on an ongoing basis with interest.
(4) Included in Prepaid and other current assets on the Consolidated Balance Sheets. Balance recovered or refunded on an ongoing basis.
(5) Included in Deferred charges and other assets on the Consolidated Balance Sheets. Recovered over life of debt instruments.
(6) Included in Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets. Amortized over life of debt instruments.
(7) The TCJA required a remeasurement and reduction of the net deferred income tax liability. The reduction (excess deferred taxes) became a regulatory liability with appropriate tax gross-up. The excess deferred taxes reduce rate base. The tax benefit will be returned to utility customers in accordance with regulatory requirements. Included in Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets. This amount also includes a $\$ 2.9$ million gross-up related to contributions in aid of construction.
(8) Regulatory recovery occurs on a one-year lag basis through the labor loading process. Included in Prepaid and other current assets on the Consolidated Balance Sheets.
(9) Margin tracking/decoupling mechanisms are alternative revenue programs and revenue associated with under-collections (for the difference between authorized margin levels and amounts billed to customers through rates currently) are recognized as revenue so long as recovery is expected to take place within 24 months. Included in Prepaid and other current assets on the Consolidated Balance Sheets.
(10) The following tables detail the components of Other regulatory assets and liabilities. Other regulatory assets are included in either Prepaid and other current assets or Deferred charges and other assets on the Consolidated Balance Sheets (as indicated). Recovery periods vary. Other
regulatory liabilities are included in either Other current liabilities or Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets (as indicated).

| Other Regulatory Assets | 2018 | 2017 |
| :--- | ---: | ---: |
| State mandated public purpose programs (including low income and conservation programs) (a) (e) | $\$ 6,253$ | $\$ 4,832$ |
| Infrastructure replacement programs and similar (b) (e) | 12,486 | 9,627 |
| Environmental compliance programs (c) (e) | 5,046 | 9,702 |
| Other (d) | $\underline{8,831}$ | 1,836 |
|  | $\underline{\$ 32,616}$ | $\underline{\$ 25,997}$ |

a) Included in Prepaid and other current assets on the Consolidated Balance Sheets. See Prepaid and other current assets in Note 1 Background, Organization, and Summary of Significant Accounting Policies.
b) Included in Deferred charges and other assets on the Consolidated Balance Sheets.
c) In 2018, approximately $\$ 4.5$ million included in Prepaid and other current assets and $\$ 596,000$ included in Deferred charges and other assets on the Consolidated Balance Sheets. In2017, $\$ 9.2$ million included in Prepaid and other current assets and $\$ 527,000$ included in Deferred charges and other assets on the Consolidated Balance Sheets.
d) In 2018, $\$ 197,000$ included in Prepaid and other current assets and $\$ 8.6$ million included in Deferred charges and other assets on the Consolidated Balance Sheets. In 2017, \$531,000 included in Prepaid and other current assets and \$1.3 million included in Deferred charges and other assets on the Consolidated Balance Sheets. The balance in 2018 includes $\$ 6$ million authorized as part of the recently concluded Nevada general rate case associated with self-insurance cost.
e) Balance recovered or refunded on an ongoing basis, generally with interest.

| Other Regulatory Liabilities | 2018 | 2017 |
| :--- | ---: | ---: |
| State mandated public purpose programs (including low income and conservation programs) (a) (e) | $\$(8,598)$ | $\$(10,213)$ |
| Margin, interest- and property tax-tracking accounts (b) (e) | $(7,273)$ | $(9,505)$ |
| Environmental compliance programs (e) (f) | $(8,574)$ |  |
| Regulatory accounts for differences related to pension funding (c) | $(3,221)$ | $(3,178)$ |
| Other (d) (e) | $(819)$ | $(1,714)$ |
|  | $\underline{\$(19,911)}$ | $\underline{\$(33,184)}$ |

a) Included in Other current liabilities on the Consolidated Balance Sheets.
b) In 2018, $\$(539,000)$ included in Other current liabilities and $\$(6.7)$ million included in Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets. In 2017, $\$(6.6)$ million included in Other current liabilities and $\$(2.9)$ million included in Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets.
c) Included in Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets.
d) In 2018, $\$(810,000)$ included in Other current liabilities and $\$(9,000)$ included in Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets. In 2017, approximately $\$(1.7)$ million included in Other current liabilities and $\$(9,000)$ included in Other deferred credits and other long-term liabilities on the Consolidated Balance Sheets.
e) Balance recovered or refunded on an ongoing basis, generally with interest.
f) In 2018, included in Prepaid and other current assets on the Consolidated Balance Sheets. In 2017, included in Other current liabilities on the Consolidated Balance Sheets.

## Note 6 - Other Comprehensive Income and Accumulated Other Comprehensive Income ("AOCI")

The following information provides insight into amounts impacting Other Comprehensive Income (Loss), both before and after-tax, within the Consolidated Statements of Comprehensive Income, which also impact Accumulated Other Comprehensive Income in the Consolidated Balance Sheets and Consolidated Statements of Equity of the Company and Southwest.

Related Tax Effects Allocated to Each Component of Other Comprehensive Income (Loss)

| (Thousands of dollars) |  | 2018 |  | 2017 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

(1) Tax amounts are calculated using a $24 \%$ rate following the December 22, 2017 enactment date of the TCJA. For periods prior to the enactment date, tax amounts were calculated using a $38 \%$ rate. At December 31, 2017, excess taxes related to pre-tax amounts which accumulated in AOCI prior to tax reform were required to remain in the account until the first quarter of 2018, when ASU 2018-02 was adopted, permitting previously stranded amounts to be released from AOCI and applied to Retained earnings (see table for Accumulated other comprehensive income (loss), including the balance, below). With regard to foreign currency translation adjustments, the Company has elected to indefinitely reinvest the earnings of Centuri's Canadian subsidiaries in Canada, thus preventing deferred taxes on such earnings. As a result of this assertion, the Company is not recognizing any tax effect or presenting a tax expense or benefit for the currency translation adjustment amount reported in Other comprehensive income (loss), as repatriation of earnings is not anticipated.

With regard to the table above and the roll-forward tables below, management recognizes tax impacts (associated with underlying before-tax amounts in AOCI) in both AOCI and in Deferred income taxes and investment tax credits, net on its balance sheets. U.S. tax reform of the TCJA was enacted on December 22, 2017. U.S. GAAP requires that deferred tax assets and liabilities be adjusted to reflect the effects of a change in tax laws and rates, and also requires that the effect be included in income from continuing operations for the period of enactment. As a result, when deferred tax balances on the balance sheet for the period ending December 31, 2017 were remeasured as a result of the TCJA to reflect the change in enacted rates, those adjustments were also reflected in income tax expense on the Consolidated Statements of Income, as required. However, excess amounts were not able to be released from AOCI until the first quarter of 2018, when upon adoption of ASU 2018-02, previously stranded amounts were released and reflected in Retained earnings on Southwest's and the Company's Consolidated Balance Sheets, as required by the ASU.

The estimated amounts that will be amortized from accumulated other comprehensive income or regulatory assets into net periodic benefit cost over the next year are summarized below (in thousands):

| Retirement plan net actuarial loss | $\$ 22,000$ |
| :--- | ---: |
| SERP net actuarial loss | 1,000 |
| PBOP prior service cost | 1,300 |

Approximately $\$ 2.5$ million of realized losses (net of tax) related to the FSIRS, included in AOCI at December 31, 2018, will be reclassified into interest expense within the next twelve months as the related interest payments on long-term debt occur. The following table represents a rollforward of AOCI, presented on the Company's Consolidated Balance Sheets and its Consolidated Statements of Equity:

## AOCI—Rollforward

(Thousands of dollars)

|  | Defined Benefit Plans |  |  |  | FSIRS | Foreign Currency Items |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before-Tax | $\begin{gathered} \text { Tax } \\ \text { (Expense) } \\ \text { Benefit (5) } \end{gathered}$ | After-Tax | BeforeTax | Tax <br> (Expense) <br> Benefit (5) | After-Tax | BeforeTax | Tax (Expense) Benefit | After-Tax | Other | AOCI |
| Beginning Balance AOCI December 31, 2017 | \$(61,520) | \$22,293 | \$ 39,227$)$ | \$(12,655) | \$4,809 | \$(7,846) | \$ (609) | \$- | \$ (609) | \$ - | \$(47,682) |
| Net actuarial gain/(loss) | $(20,426)$ | 4,902 | $(15,524)$ | - | - | - | - | - | - | - | $(15,524)$ |
| Translation adjustments | - | - | - | - | - | - | $(3,010)$ | - | $(3,010)$ | - | $(3,010)$ |
| Other comprehensive income before reclassifications | $(20,426)$ | 4,902 | $(15,524)$ | - | - | - | $(3,010)$ | - | $(3,010)$ | - | $(18,534)$ |
| FSIRS amounts reclassified from AOCI (1) | - | - | - | 3,345 | (804) | 2,541 | - | - | - | - | 2,541 |
| Amortization of prior service cost (2) | 1,335 | (320) | 1,015 | - | - | - | - | - | - | - | 1,015 |
| Amortization of net actuarial loss (2) | 33,617 | $(8,068)$ | 25,549 | - | - | - | - | - | - | - | 25,549 |
| Regulatory adjustment (3) | $(8,233)$ | 1,976 | $(6,257)$ | - | - | - | - | - | - | - | $(6,257)$ |
| Net current period other comprehensive income (loss) attributable to Southwest Gas Holdings, Inc. | 6,293 | (1,510) | 4,783 | 3,345 | (804) | 2,541 | $(3,010)$ | ) - | $(3,010)$ | - | 4,314 |
| Reclassification of excess deferred taxes (4) | - | - | - | - | - | - | - | - | - | $(9,300)$ | $(9,300)$ |
| Ending Balance AOCI December 31, 2018 | \$(55,227) | \$20,783 | \$(34,444) | \$ (9,310) | \$4,005 | \$ 5,305 ) | \$(3,619) | \$- | \$(3,619) | \$(9,300) | \$(52,668) |

(1) The FSIRS reclassification amounts are included in the Net interest deductions line item on the Consolidated Statements of Income.
(2) These AOCI components are included in the computation of net periodic benefit cost (see Note $1 \mathbf{1}$ - Pension and Other Postretirement Benefits for additional details).
(3) The regulatory adjustment represents the portion of the activity above that is expected to be recovered through rates in the future (the related regulatory asset is included in the Deferred charges and other assets line item on the Consolidated Balance Sheets).
(4) Release of excess deferred taxes accumulated prior to December 22, 2017 (date of enactment of the TCJA), as a result of the adoption of ASU 2018-02 during the first quarter of 2018, which permitted such release.
(5) Tax amounts related to the before-tax balance are calculated using a $24 \%$ effective rate after the release of previously stranded excess deferred taxes existing as a result of the TCJA; amounts prior to the December 22, 2017 enactment of the TCJA were calculated using a $38 \%$ effective rate.

The following table represents a rollforward of AOCI, presented on Southwest's Consolidated Balance Sheets:
AOCI—Rollforward
(Thousands of dollars)

|  | Defined Benefit Plans |  |  | FSIRS |  |  | Other | AOCI |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Before-Tax | Tax <br> (Expense) <br> Benefit (10) | AfterTax | $\begin{gathered} \text { Before- } \\ \text { Tax } \end{gathered}$ | Tax <br> (Expense) <br> Benefit (10) | AfterTax |  |  |
| Beginning Balance AOCI December 31, 2017 | \$(61,520) | \$22,293 | \$(39,227) | \$(12,655) | \$4,809 | \$(7,846) |  | \$(47,073) |
| Net actuarial gain/(loss) | $(20,426)$ | 4,902 | $(15,524)$ | - | - | - | - | $(15,524)$ |
| Other comprehensive income before reclassifications | $(20,426)$ | 4,902 | $(15,524)$ | 3, $\overline{45}$ | (804) | , |  | $(15,524)$ |
| FSIRS amounts reclassified from AOCI (6) | - | - | - | 3,345 | (804) | 2,541 | - | 2,541 |
| Amortization of prior service cost (7) | 1,335 | (320) | 1,015 | - | - | - | - | 1,015 |
| Amortization of net actuarial loss (7) | 33,617 | $(8,068)$ | 25,549 | - | - | - | - | 25,549 |
| Regulatory adjustment (8) | $(8,233)$ | 1,976 | $(6,257)$ | - | - | - | - | $(6,257)$ |
| Net current period other comprehensive income (loss) attributable to Southwest Gas Corporation | 6,293 | $(1,510)$ | 4,783 | 3,345 | (804) | 2,541 | - | 7,324 |
| Reclassification of excess deferred taxes (9) | - | - | - | - | - | - | (9,300) | $(9,300)$ |
| Ending Balance AOCI December 31, 2018 | \$(55,227) | \$20,783 | \$(34,444) | \$ (9,310) | \$4,005 | \$(5,305) | \$(9,300) | \$(49,049) |

(6) The FSIRS reclassification amounts are included in the Net interest deductions line item on the Consolidated Statements of Income.
(7) These AOCI components are included in the computation of net periodic benefit cost (see Note $\mathbf{1 1} \mathbf{-}$ Pension and Other Postretirement Benefits for additional details).
(8) The regulatory adjustment represents the portion of the activity above that is expected to be recovered through rates in the future (the related regulatory asset is included in the Deferred charges and other assets line item on the Consolidated Balance Sheets).
(9) Release of excess deferred taxes accumulated prior to December 22, 2017 (date of enactment of the TCJA), as a result of the adoption of ASU 2018-02 during the first quarter of 2018, which permitted such release.
(10) Tax amounts related to the before-tax balances are calculated using a $24 \%$ effective rate after the release of previously stranded excess deferred taxes existing as a result of the TCJA; amounts prior to the December 22, 2017 enactment of the TCJA were calculated using a $38 \%$ effective rate.

The following table represents amounts (before income tax impacts) included in Accumulated other comprehensive income (in the table above), that have not yet been recognized in net periodic benefit cost as of December 31, 2018 and 2017:

Amounts Recognized in AOCI (Before Tax)
(Thousands of dollars)

|  | 2018 | 2017 |
| :--- | ---: | ---: |
| Net actuarial (loss) gain | $\$(435,364)$ | $\$(448,555)$ |
| Prior service cost | $(3,033)$ | $(4,368)$ |
| Less: amount recognized in regulatory assets | 383,170 | 391,403 |
| Recognized in AOCI | $\underline{\$(55,227)}$ | $\underline{\$(61,520)}$ |

See Note 11 - Pension and Other Postretirement Benefits for more information on the defined benefit pension plans and Note 14

- Derivatives for more information on the FSIRS.


## Note 7 - Common Stock

On March 29, 2017, the Company filed with the SEC an automatic shelf registration statement on Form S-3 (File No. 333-217018), which became effective upon filing, for the offer and sale of up to $\$ 150$ million of common stock from time to time in at-the-market offerings under the prospectus included therein and in accordance with the Sales Agency Agreement, dated March 29, 2017, between
the Company and BNY Mellon Capital Markets, LLC (the "Equity Shelf Program"). The following table provides the activity in the Equity Shelf Program for the three and twelve months ended December 31, 2018:

|  | Three Months Ended |  | Twelve Months Ended |  |
| :---: | :---: | :---: | :---: | :---: |
|  | December 31, |  | December 31, |  |
|  | 2018 | 2017 | 2018 | 2017 |
| Gross proceeds | - | \$29,999,922 | \$85,149,976 | \$41,776,795 |
| Less: agent commissions | - | 299,999 | 851,500 | 417,768 |
| Net proceeds | - | \$29,699,923 | \$84,298,476 | \$41,359,027 |
| Number of shares sold | - | 358,630 | 1,145,705 | 505,707 |
| Weighted average price per share | - | \$ 83.65 | \$ 74.32 | \$ 82.61 |

As of December 31, 2018, the Company had up to $\$ 23,073,229$ of common stock available for sale under the program. Net proceeds from the sale of shares of common stock under the Equity Shelf Program are intended for general corporate purposes, including the acquisition of property for the construction, completion, extension, or improvement of pipeline systems and facilities located in and around the communities served by Southwest. Net proceeds during the twelve months ended December 31, 2018 were contributed to, and reflected in the records of, Southwest (as a capital contribution from Southwest Gas Holdings, Inc.).

Aside from the automatic shelf registration, in December 2017, the Company and Southwest jointly filed with the SEC an automatic shelf registration statement (File No. 333-222047), which became effective upon filing and includes a prospectus detailing the Company's ability to offer and sell, from time to time in amounts at prices and on terms that will be determined at the time of such offering, any combination of common stock, preferred stock, debt securities (which may or may not be guaranteed by one or more of its directly or indirectly wholly owned subsidiaries if indicated in the relevant prospectus supplement), guarantees of debt securities issued by Southwest, depository shares, warrants to purchase common stock, preferred stock or depository shares issued by the Company or debt securities issued by the Company or Southwest, units and rights (the "Universal Shelf"). Additionally as part of the Universal Shelf, Southwest may offer and sell, from time to time in amounts at prices and on terms that will be determined at the time of such offering, any combination of debt securities (which may or may not be guaranteed by one or more of its directly or indirectly wholly owned subsidiaries if indicated in the relevant prospectus supplement) and guarantees of debt securities issued by the Company or by one or more of its directly or indirectly wholly owned subsidiaries if indicated in the relevant prospectus supplement.

In November 2018, the Company sold, through a prospectus supplement under the Universal Shelf, an aggregate of 3,565,000 shares of common stock, in an underwritten public offering, at $\$ 75.50$ per share, resulting in proceeds to the Company of $\$ 260,073,524$, net of $\$ 9,083,976$ underwriters' discount. The Company used a portion of the net proceeds from the offering to facilitate, in association with Centuri, the purchase of Linetec, to pay down outstanding borrowings under the Company's credit facility, and used the remaining amounts for general corporate purposes. Refer to Note 19 - Business Acquisitions regarding the acquisition of Linetec and Note 9-Short-Term Debt for information on the Company's credit facility.

During 2018, the Company issued approximately 83,000 shares of common stock through the Restricted Stock/Unit Plan, and Management Incentive Plan.

Additionally during 2018, the Company issued 143,000 shares of common stock through the Dividend Reinvestment and Stock Purchase Plan ("DRSPP"), raising proceeds of approximately $\$ 10.6$ million.

As of December 31, 2018, there were 4.4 million common shares registered and available for issuance under the provisions of the various stock issuance plans, which does not include the amount of common stock available that is separately disclosed under the Equity Shelf Program above.

## Note 8 - Long-Term Debt

Carrying amounts of long-term debt and related estimated fair values as of December 31, 2018 and December 31, 2017 are disclosed in the following table. Southwest's revolving credit facility (including commercial paper) and the variable-rate Industrial Development Revenue Bonds ("IDRBs") approximate their carrying values, as they are repaid quickly (in the case of credit facility borrowings) and have interest rates that reset frequently. These are categorized as Level 1 due to Southwest's ability to access similar debt arrangements at measurement dates with comparable terms, including variable/market rates. The fair values of Southwest's debentures, senior notes, and fixed-rate IDRBs were determined utilizing a market-based valuation approach, where fair values are determined based on evaluated pricing data, such as broker quotes and yields for similar securities adjusted for observable differences. Significant inputs used in the valuation generally include benchmark yield curves, credit ratings, and issuer spreads. The external credit rating, coupon rate, and maturity of each security are considered in the valuation, as applicable. The fair values of debentures and fixed-rate IDRBs are categorized as Level 2. The Centuri secured revolving credit and term loan facility and Centuri other debt obligations are categorized as Level 3, based on significant unobservable inputs to their fair values. Because Centuri's debt is not publicly traded, fair values for the secured revolving credit and term loan facility and other debt obligations were based on a conventional discounted cash flow methodology and utilized current market pricing yield curves, across Centuri's debt maturity spectrum, of other industrial bonds with an assumed credit rating comparable to the Company's. The fair value hierarchy is described in Note 1 - Background, Organization, and Summary of Significant Accounting Policies.

|  | December 31, 2018 |  | December 31, 2017 |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Carrying Amount | Market Value | Carrying Amount | Market Value |
| (Thousands of dollars) |  |  |  |  |
| Southwest Gas Corporation: |  |  |  |  |
| Debentures: |  |  |  |  |
| Notes, $4.45 \%$, due 2020 | \$ 125,000 | \$126,213 | \$ 125,000 | \$129,273 |
| Notes, 6.1\%, due 2041 | 125,000 | 150,728 | 125,000 | 158,304 |
| Notes, 3.875\%, due 2022 | 250,000 | 254,195 | 250,000 | 256,163 |
| Notes, 4.875\%, due 2043 | 250,000 | 268,985 | 250,000 | 283,243 |
| Notes, 3.8\%, due 2046 | 300,000 | 267,030 | 300,000 | 302,970 |
| Notes, 3.7\%, due 2028 | 300,000 | 298,926 | - | - |
| 8\% Series, due 2026 | 75,000 | 93,827 | 75,000 | 96,063 |
| Medium-term notes, $7.78 \%$ series, due 2022 | 25,000 | 27,497 | 25,000 | 28,714 |
| Medium-term notes, $7.92 \%$ series, due 2027 | 25,000 | 30,016 | 25,000 | 31,542 |
| Medium-term notes, $6.76 \%$ series, due 2027 | 7,500 | 8,651 | 7,500 | 8,882 |
| Unamortized discount and debt issuance costs | $(11,807)$ |  | $(9,350)$ |  |
|  | 1,470,693 |  | 1,173,150 |  |
| Revolving credit facility and commercial paper | 150,000 | 150,000 | 150,000 | 150,000 |
| Industrial development revenue bonds: |  |  |  |  |
| Variable-rate bonds: |  |  |  |  |
| Tax-exempt Series A, due 2028 | 50,000 | 50,000 | 50,000 | 50,000 |
| 2003 Series A, due 2038 | 50,000 | 50,000 | 50,000 | 50,000 |
| 2008 Series A, due 2038 | 50,000 | 50,000 | 50,000 | 50,000 |
| 2009 Series A, due 2039 | 50,000 | 50,000 | 50,000 | 50,000 |
| Unamortized discount and debt issuance costs | $(2,024)$ |  | $(2,119)$ |  |
|  | 197,976 |  | 197,881 |  |
| Less: current maturities | - |  | - |  |
| Long-term debt, less current maturities - Southwest Gas Corporation | \$1,818,669 |  | \$1,521,031 |  |
| Centuri: |  |  |  |  |
| Centuri term loan facility | \$ 255,959 | 260,135 | \$ 199,578 | 207,588 |
| Unamortized debt issuance costs | $(1,414)$ |  | $(1,111)$ |  |
|  | 254,545 |  | 198,467 |  |
| Centuri secured revolving credit facility | - | - | 56,472 | 56,525 |
| Centuri other debt obligations | 67,104 | 67,053 | 47,952 | 48,183 |
| Less: current maturities | $(33,060)$ |  | $(25,346)$ |  |
| Long-term debt, less current maturities - Centuri | \$ 288,589 |  | \$ 277,545 |  |
| Consolidated Southwest Gas Holdings, Inc.: |  |  |  |  |
| Southwest Gas Corporation long-term debt | \$1,818,669 |  | \$1,521,031 |  |
| Centuri long-term debt | 321,649 |  | 302,891 |  |
| Less: current maturities | $(33,060)$ |  | $(25,346)$ |  |
| Long-term debt, less current maturities - Southwest Gas Holdings, Inc. | \$2,107,258 |  | \$1,798,576 |  |

Southwest has a $\$ 400$ million credit facility which expires in March 2022. Southwest designates $\$ 150$ million of capacity related to the facility as long-term debt and has designated the remaining $\$ 250$ million for working capital purposes. Interest rates for the credit facility are calculated at either the London Interbank Offered Rate ("LIBOR") or an "alternate base rate," plus in each case an applicable margin that is determined based on Southwest's senior unsecured debt rating. At December 31, 2018, the applicable margin
is $1 \%$ for loans bearing interest with reference to LIBOR and $0 \%$ for loans bearing interest with reference to the alternative base rate. Southwest is also required to pay a commitment fee, of $0.10 \%$ per annum, on the unfunded portion of the commitments, which was not significant for the year ended December 31, 2018. At December 31, 2018, $\$ 150$ million was outstanding on the long-term portion of the credit facility, $\$ 50$ million of which was in commercial paper (see commercial paper program discussion below). The effective interest rate on the long-term portion of the credit facility was $3.41 \%$ at December 31, 2018. Borrowings under the credit facility ranged from none at various times throughout 2018 to a high of $\$ 378$ million during the first quarter of 2018. With regard to the short-term portion of the credit facility, there was $\$ 152$ million outstanding at December 31, 2018 and $\$ 191$ million in borrowings outstanding at December 31, 2017. (See Note 9 - Short-Term Debt).

Southwest has a $\$ 50$ million commercial paper program. Any issuance under the commercial paper program is supported by Southwest's current revolving credit facility and, therefore, does not represent additional borrowing capacity. Any borrowing under the commercial paper program will be designated as long-term debt. Interest rates for the program are calculated at the then current commercial paper rate. At December 31, 2018, and as noted above, $\$ 50$ million was outstanding under the commercial paper program.

In March 2018, Southwest issued $\$ 300$ million in $3.7 \%$ Senior Notes at a discount of $0.185 \%$. The notes will mature in March 2028. The proceeds were used to temporarily pay down, in full, the amount then outstanding under the revolving portion of the credit facility and the remainder to repay amounts then outstanding under the commercial paper program.

In November 2018, Centuri, in association with the acquisition of Linetec (refer to Note 19 - Business Acquisitions), amended and restated its senior secured revolving credit and term loan facility, increasing the borrowing capacity from $\$ 450$ million to $\$ 590$ million. The line of credit portion of the facility increased to $\$ 325$ million; amounts borrowed and repaid under the revolving credit facility are available to be re-borrowed. The term loan facility portion increased to $\$ 265$ million. The $\$ 590$ million credit and term loan facility expires in November 2023 and continues to be secured by substantially all of Centuri's assets except those explicitly excluded under the terms of the agreement (including owned real estate and certain construction and transportation equipment). Centuri assets securing the facility at December 31, 2018 totaled $\$ 1.1$ billion.

Interest rates for Centuri's $\$ 590$ million secured revolving credit and term loan facility are calculated at LIBOR, the Canadian Dealer Offered Rate ("CDOR"), or an alternate base rate or Canadian base rate, plus in each case an applicable margin that is determined based on Centuri's consolidated leverage ratio. The applicable margin ranges from $0.875 \%$ to $2.25 \%$ for loans bearing interest with reference to LIBOR or CDOR and from $0.00 \%$ to $1.25 \%$ for loans bearing interest with reference to the alternate base rate or Canadian base rate. Centuri is also required to pay a commitment fee on the unfunded portion of the commitments based on their consolidated leverage ratio. The commitment fee ranges from $0.125 \%$ to $0.35 \%$ per annum. Borrowings under the secured revolving credit facility ranged from a low of zero during December 2018 to a high of $\$ 103$ million during July 2018. At December 31, 2018 $\$ 256$ million in borrowings were outstanding under the combined secured revolving credit and term loan facility.

All amounts outstanding are considered long-term borrowings. The effective interest rate on the secured revolving credit and term loan facility was $4.1 \%$ at December 31, 2018.

The effective interest rates on Southwest's variable-rate IDRBs are included in the table below:
December 31, 2018 December 31, 2017

| 2003 Series A | $2.61 \%$ | $2.44 \%$ |
| :--- | :--- | :--- |
| 2008 Series A | $2.52 \%$ | $2.59 \%$ |
| 2009 Series A | $2.51 \%$ | $2.40 \%$ |
| Tax-exempt Series A | $2.53 \%$ | $2.56 \%$ |

In Nevada, interest fluctuations due to changing interest rates on Southwest's 2003 Series A, 2008 Series A, and 2009 Series A variable-rate IDRBs are tracked and recovered from ratepayers through a variable interest expense recovery mechanism.

None of Southwest's debt instruments have credit triggers or other clauses that result in default if bond ratings are lowered by rating agencies. Interest and fees on certain debt instruments are subject to adjustment depending on Southwest's bond ratings. Certain debt instruments are subject to a leverage ratio cap and the $6.1 \%$ note due 2041 is also subject to a minimum net worth requirement. At December 31, 2018, Southwest was in compliance with all of its covenants. Under the most restrictive of the financial covenants, approximately $\$ 2.1$ billion in additional debt could be issued while still meeting the leverage ratio requirement. Relating to the minimum net worth requirement, as of December 31, 2018, there is at least $\$ 1.2$ billion of cushion in equity. No specific dividend restrictions exist under the collective covenants. None of the debt instruments contain material adverse change clauses.

Certain Centuri debt instruments have leverage ratio caps and fixed charge ratio coverage requirements. At December 31, 2018, Centuri was in compliance with all of its covenants. Under the most restrictive of the covenants, Centuri could issue over $\$ 101$ million in additional debt and meet the leverage ratio requirement. Centuri has at least $\$ 78$ million of cushion relating to the minimum fixed charge ratio coverage requirement. Centuri's revolving credit and term loan facility is secured by underlying assets of the utility infrastructure services segment. Centuri's covenants limit its ability to provide cash dividends to Southwest Gas Holdings, Inc., its parent. The dividend restriction is equal to a maximum of $60 \%$ of its rolling twelve-month consolidated net income.

Estimated maturities of long-term debt for the next five years are (in thousands):

|  | Southwest | Centuri | Total |  |
| :--- | ---: | ---: | ---: | ---: |
| 2019 | $\$$ | - | $\$ 33,060$ | $\$ 33,060$ |
| 2020 | 125,000 | 38,296 | 163,296 |  |
| 2021 | - | 33,571 | 33,571 |  |
| 2022 | 425,000 | 35,515 | 460,515 |  |
| 2023 | - | 178,614 | 178,614 |  |

## Note 9 - Short-Term Debt

In March 2017, Southwest Gas Holdings, Inc. entered into a credit facility with a borrowing capacity of $\$ 100$ million that expires in March 2022. The Company utilizes this facility for short-term financing needs. Interest rates for this facility are calculated at either LIBOR or the "alternate base rate," plus in each case an applicable margin that is determined based on the Company's senior unsecured debt rating. At December 31, 2018, the applicable margin is $1.125 \%$ for loans bearing interest with reference to LIBOR and $0.125 \%$ for loans bearing interest with reference to the alternative base rate. The Company is also required to pay a commitment fee, of $0.15 \%$ per annum, on the unfunded portion of the commitments, which was not significant for the period ended December 31, 2018. Borrowings under the credit facility ranged from none at various times throughout 2018 to a high of $\$ 23.5$ million during the first quarter of 2018. At December 31, 2018 and 2017, there were no borrowings and $\$ 23.5$ million outstanding under this facility, respectively, with a weighted average interest rate of $2.65 \%$ at December 31, 2017.

At December 31, 2018, Southwest Holdings, Inc. was in compliance with all of its credit facility covenants. Interest and fees on the credit facility are subject to adjustment depending on its bond ratings. The credit facility is subject to a leverage ratio cap. No specific dividend restrictions exist under the collective covenants. The credit facility does not contain a material adverse change clause.

As discussed in Note 8 - Long-Term Debt, Southwest has a $\$ 400$ million credit facility that is scheduled to expire in March 2022, of which $\$ 250$ million has been designated by management for working capital purposes. Southwest had $\$ 152$ million of short-term
borrowings outstanding at December 31, 2018 and $\$ 191$ million short-term borrowings outstanding at December 31, 2017 with weighted average interest rates of $3.47 \%$ and $2.52 \%$, respectively.

## Note 10 - Commitments and Contingencies

The Company and Southwest are defendants in miscellaneous legal proceedings. The Company and Southwest are also parties to various regulatory proceedings. The ultimate dispositions of these proceedings are not presently determinable; however, it is the opinion of management that no litigation or regulatory proceeding to which the Company and Southwest are currently subject to will have a material adverse impact on their financial position, results of operations, or cash flows.

Southwest maintains liability insurance for various risks associated with the operation of its natural gas pipelines and facilities. In connection with these liability insurance policies, Southwest is responsible for an initial deductible or self-insured retention amount per incident, after which the insurance carriers would be responsible for amounts up to the policy limits. For the policy year August 2018 to July 2019, these liability insurance policies require Southwest to be responsible for the first $\$ 1$ million (self-insured retention) of each incident plus the first $\$ 4$ million in aggregate claims above its self-insured retention in the policy year. Through an assessment process, Southwest may determine that certain costs are likely to be incurred in the future related to specific legal matters. In these circumstances and in accordance with accounting policies, Southwest will make an accrual, as necessary.

Centuri maintains liability insurance for various risks associated with its operations. In connection with these liability insurance policies, Centuri is responsible for an initial deductible or self-insured retention amount per occurrence, after which the insurance carriers would be responsible for amounts up to the policy limits. For the policy year April 2018 to March 2019, Centuri is responsible for the first $\$ 300,000$ (self-insured retention) per occurrence under these liability insurance policies.

## Note 11 - Pension and Other Postretirement Benefits

An Employees' Investment Plan is offered to eligible employees of Southwest through deduction of a percentage of base compensation, subject to IRS limitations. The Employees' Investment Plan provides for purchases of various mutual fund investments and Company common stock. One-half of amounts deferred by employees are matched, up to a maximum matching contribution of $3.5 \%$ of an employee's annual compensation. The cost of the plan is disclosed below (in thousands):

|  | 2018 | 2017 | 2016 |
| :--- | :---: | :---: | :---: |
| Employee Investment Plan cost | $\$ 5,530$ | $\$ 5,112$ | $\$ 4,976$ |

Centuri has a separate plan, the cost and liability of which are not significant.

A deferred compensation plan is offered to all officers of Southwest and a separate deferred compensation plan for members of the Company's Board of Directors. The plans provide the opportunity to defer up to $100 \%$ of annual cash compensation. One-half of amounts deferred by officers are matched, up to a maximum matching contribution of $3.5 \%$ of an officer's annual base salary. Upon retirement, payments of compensation deferred, plus interest, are made in equal monthly installments over 10,15 , or 20 years, as elected by the participant. Directors have an additional option to receive such payments over a five-year period. Deferred compensation earns interest at a rate determined each January. The interest rate equals $150 \%$ of Moody's Seasoned Corporate Bond Rate Index.

A noncontributory qualified retirement plan with defined benefits covering substantially all Southwest employees is available in addition to a separate unfunded supplemental executive retirement plan ("SERP") which is limited to Southwest's officers. Postretirement benefits other than pensions ("PBOP") are provided to qualified retirees for health care, dental, and life insurance benefits.

The overfunded or underfunded positions of defined benefit postretirement plans, including pension plans, are recognized in the Consolidated Balance Sheets. Any actuarial gains and losses, prior service costs and transition assets or obligations are recognized in Accumulated other comprehensive income under Stockholders' equity, net of tax, until they are amortized as a component of net periodic benefit cost.

A regulatory asset has been established for the portion of the total amounts otherwise chargeable to Accumulated other comprehensive income that are expected to be recovered through rates in future periods. Changes in actuarial gains and losses and prior service costs pertaining to the regulatory asset will be recognized as an adjustment to the regulatory asset account as these amounts are amortized and recognized as components of net periodic pension costs each year.

The qualified retirement plan invests the majority of its plan assets in common collective trusts which includes a well-diversified portfolio of domestic and international equity securities and fixed income securities, which are managed by a professional investment manager appointed by Southwest. The investment manager has full discretionary authority to direct the investment of plan assets held in trust within the specific guidelines prescribed by Southwest through the plan's investment policy statement. In 2016, Southwest adopted a liability driven investment ("LDI") strategy for part of the portfolio, a form of investing designed to better match the movement in pension plan assets with the impact of interest rate changes and inflation assumption changes on the pension plan liability. The implementation of the LDI strategy will be phased in over time by using a glide path. The glide path is designed to increase the allocation of the plan's assets to fixed income securities, as the funded status of the plan increases, in order to more closely match the duration of the plan assets to that of the plan liability. Pension plan assets are held in a Master Trust. The pension plan funding policy is in compliance with the federal government's funding requirements.

Pension costs for these plans are affected by the amount and timing of cash contributions to the plans, the return on plan assets, discount rates, and by employee demographics, including age, compensation, and length of service. Changes made to the provisions of the plans may also impact current and future pension costs. Actuarial formulas are used in the determination of pension costs and are affected by actual plan experience and assumptions about future experience. Key actuarial assumptions include the expected return on plan assets, the discount rate used in determining the projected benefit obligation and pension costs, and the assumed rate of increase in employee compensation. Relatively small changes in these assumptions, particularly the discount rate, may significantly affect pension costs and plan obligations for the qualified retirement plan. In determining the discount rate, management matches the plan's projected cash flows to a spot-rate yield curve based on highly rated corporate bonds. Changes to the discount rate from year-to-year, if any, are generally made in increments of 25 basis points.

There was a 75 basis points increase in the discount rate between years, as reflected below. The methodology utilized to determine the discount rate was consistent with prior years. The weighted-average rate of compensation increase remained the same (consistent with management's expectations overall). The asset return assumption (which impacts the following year's expense) remained unchanged. The rates are presented in the table below:

|  | December 31,2018 | December 31,2017 |
| :--- | :---: | :---: |
| Discount rate | $4.50 \%$ | $3.75 \%$ |
| Weighted-average rate of compensation increase | $3.25 \%$ | $3.25 \%$ |
| Asset return assumption | $7.00 \%$ | $7.00 \%$ |

Pension expense for 2019 is estimated to be less than that experienced in 2018. Future years' expense level movements (up or down) will continue to be greatly influenced by long-term interest rates, asset returns, and funding levels.

The following table sets forth the retirement plan, SERP, and PBOP funded statuses and amounts recognized on the Consolidated Balance Sheets and Consolidated Statements of Income.

|  | 2018 |  |  | 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qualified Retirement Plan | SERP | PBOP | Qualified Retirement Plan | SERP | PBOP |
| (Thousands of dollars) |  |  |  |  |  |  |
| Change in benefit obligations |  |  |  |  |  |  |
| Benefit obligation for service rendered to date at beginning of year ( $\mathrm{PBO} / \mathrm{PBO} /$ |  |  |  |  |  |  |
| APBO) | \$1,203,484 | \$ 45,727 | \$ 75,322 | \$1,048,353 | \$ 43,311 | \$ 73,865 |
| Service cost | 28,555 | 245 | 1,473 | 23,392 | 309 | 1,468 |
| Interest cost | 44,174 | 1,658 | 2,748 | 46,083 | 1,883 | 3,232 |
| Actuarial loss (gain) | $(102,919)$ | $(3,940)$ | $(6,020)$ | 133,017 | 3,334 | (71) |
| Benefits paid | $(57,280)$ | $(3,087)$ | $(3,567)$ | $(47,361)$ | $(3,110)$ | $(3,172)$ |
| Benefit obligation at end of year ( PBO / |  |  |  |  |  |  |
| $\mathrm{PBO} / \mathrm{APBO})$ | 1,116,014 | 40,603 | 69,956 | 1,203,484 | 45,727 | 75,322 |
| Change in plan assets |  |  |  |  |  |  |
| Market value of plan assets at beginning of year | 871,665 | - | 54,608 | 738,962 | - | 48,113 |
| Actual return on plan assets | $(67,771)$ | - | $(3,061)$ | 144,064 | - | 7,742 |
| Employer contributions | 44,000 | 3,087 | - | 36,000 | 3,110 | - |
| Benefits paid | $(57,280)$ | $(3,087)$ | $(4,206)$ | $(47,361)$ | $(3,110)$ | $(1,247)$ |
| Market value of plan assets at end of year | 790,614 | - | 47,341 | 871,665 | - | 54,608 |
| Funded status at year end | $\underline{\text { \$ }(325,400)}$ | $\underline{\underline{\text { (40,603 }}}$ | $\underline{\underline{\$(22,615)}}$ | $\underline{\underline{\text { ( } 331,819) ~}}$ | $\underline{\underline{\text { (4, }} \text { ( } 727)}$ | $\underline{\underline{\text { (20,714 }}}$ |
| Weighted-average assumptions (benefit obligation) |  |  |  |  |  |  |
| Discount rate | 4.50\% | 4.50\% | 4.50\% | 3.75\% | 3.75\% | 3.75\% |
| Weighted-average rate of compensation increase | 3.25\% | 3.25\% | N/A | 3.25\% | 3.25\% | N/A |

Estimated funding for the plans above during calendar year 2019 is approximately $\$ 55$ million, of which $\$ 52$ million pertains to the retirement plan. Management monitors plan assets and liabilities and could, at its discretion, increase plan funding levels above the minimum in order to achieve a desired funded status and avoid or minimize potential benefit restrictions.

The accumulated benefit obligation for the retirement plan and the SERP is presented below (in thousands):

|  | December 31, 2018 | December 31, 2017 |
| :--- | ---: | :---: |
| Retirement plan | $\$ 1,024,030$ | $\$ 1,088,203$ |
| SERP | 38,793 | 44,343 |

Benefits expected to be paid for pension, SERP, and PBOP over the next 10 years are as follows (in millions):

|  | 2019 | 2020 | 2021 | 2022 | 2023 | $2024-2028$ |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Pension | $\$ 54.0$ | $\$ 55.0$ | $\$ 56.0$ | $\$ 58.0$ | $\$ 59.0$ | $\$ 319.0$ |
| SERP | 3.0 | 2.9 | 2.9 | 2.9 | 2.8 | 13.6 |
| PBOP | 4.5 | 4.6 | 4.6 | 4.6 | 4.5 | 20.9 |

No assurance can be made that actual funding and benefits paid will match these estimates.

For PBOP measurement purposes, the per capita cost of the covered health care benefits medical rate trend assumption is $6.0 \%$, declining to $4.5 \%$. Fixed contributions are made for health care benefits of employees who retire after 1988, but Southwest pays all covered health care costs for employees who retired prior to 1989 . The medical trend rate assumption noted above applies to the benefit obligations of pre-1989 retirees only.

As of January 1, 2018, the Company adopted "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost." The update requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations and be appropriately described. The update also allows only the service cost component (and not the other components of periodic benefit costs) to be eligible for capitalization when applicable, making no exception for specialized industries, including rate-regulated industries. This guidance is required to be applied on a retrospective basis for the presentation of the service cost and other components of net benefit cost, and on a prospective basis for the capitalization of only the service cost component of net benefit cost. Amounts capitalized as part of assets prior to the date of adoption were not adjusted through a cumulative effect adjustment. The guidance allows a practical expedient for the retrospective application that permits use of the amounts disclosed for the various components of net benefit cost in the pension and other postretirement benefit plans footnote as the basis for the retrospective application. This is in lieu of determining how much of the various components of net benefit cost were actually reflected in the income statement each period as a result of capitalization of certain costs into assets and their subsequent amortization. The Company and Southwest have elected to utilize the practical expedient.

Therefore, upon adoption of the update to Topic 715, amounts presented in the Company's and Southwest's Consolidated Statements of Income for the years ended 2017 and 2016 have been revised as required by the update, as follows (in thousands):

|  | December 31, 2017 |  |  | December 31, 2016 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | As <br> Reported | Reclassification | Revised | As <br> Reported | Reclassification | Revised |
| Southwest Gas Holdings, Inc. |  |  |  |  |  |  |
| Operations and maintenance | \$412,187 | \$(19,424) | \$392,763 | \$401,724 | \$(19,760) | \$381,964 |
| Other income (deductions) | 13,394 | $(19,424)$ | $(6,030)$ | 9,469 | $(19,760)$ | $(10,291)$ |
| Southwest Gas Corporation |  |  |  |  |  |  |
| Operations and maintenance | \$410,745 | \$(19,424) | \$391,321 | \$401,724 | \$(19,760) | \$381,964 |
| Other income (deductions) | 13,036 | $(19,424)$ | $(6,388)$ | 8,276 | $(19,760)$ | $(11,484)$ |

Operating income increased by the same amounts that Operations and maintenance expense decreased as reflected in the table above; however, net income was not impacted by this reclassification for either the Company or Southwest.

The service cost component of net periodic benefit costs included in the table below is part of an overhead loading process associated with the cost of labor (refer to discussion above in association with the update to Topic 715). The overhead process ultimately results
in allocation of that portion of overall net periodic benefit costs to the same accounts to which productive labor is charged. As a result, service costs become components of various accounts, primarily Operations and maintenance expense, Net utility plant, and Deferred charges and other assets for both the Company and Southwest. Refer to the discussion above regarding the practical expedient elected related to amounts capitalized as part of assets prior to the adoption date.

Components of net periodic benefit cost:

|  | Qualified Retirement Plan |  |  | SERP |  |  | PBOP |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 2018 | 2017 | 2016 | 2018 | 2017 | 2016 | 2018 | 2017 | 2016 |
| (Thousands of dollars) |  |  |  |  |  |  |  |  |  |
| Service cost | \$ 28,555 \$ | \$ 23,392 \$ | 22,833 \$ | \$ 245 | \$ 309 \$ | \$ 331 \$ | \$ 1,473 \$ | \$ 1,468 \$ | \$ 1,499 |
| Interest cost | 44,174 | 46,083 | 46,027 | 1,658 | 1,883 | 1,859 | 2,748 | 3,232 | 3,180 |
| Expected return on plan assets | $(58,755)$ | $(55,196)$ | $(56,558)$ | - | - | - | $(3,718)$ | $(3,358)$ | $(3,149)$ |
| Amortization of prior service cost | - | - | - | - | - | - | 1,335 | 1,335 | 1,335 |
| Amortization of net actuarial loss | 32,115 | 24,004 | 25,266 | 1,502 | 1,441 | 1,383 | - | - | 417 |
| Net periodic benefit cost | \$ 46,089 \$ | \$ 38,283 \$ | \$ 37,568 \$ | \$3,405 | \$3,633 \$ | \$3,573 \$ | \$ 1,838 \$ | \$ 2,677 \$ | \$ 3,282 |
| Weighted-average assumptions (net benefit cost) |  |  |  |  |  |  |  |  |  |
| Discount rate | 3.75\% | \% 4.50\% | \% 4.50\% | \% 3.75\% | \% 4.50\% | 4.50\% | 3.75\% | 4.50\% | \% 4.50\% |
| Expected return on plan assets | 7.00\% | \% 7.00\% | - 7.25\% | \% / A | N/A | N/A | 7.00\% | - 7.00\% | \% 7.25\% |
| Weighted-average rate of compensation increase | 3.25\% | \% 3.25\% | \% 3.25\% | \% 3.25\% | \% 3.25\% | 3.25\% | N/A | N/A | N/A |

Other Changes in Plan Assets and Benefit Obligations Recognized in Net Periodic Benefit Cost and Other Comprehensive Income

|  | 2018 |  |  |  |  | 2017 |  |  |  | 2016 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total | Qualified <br> Retirement Plan | SERP |  | PBOP | Total | Qualified <br> Retirement Plan | SERP | PBOP | Total | Qualified Retirement Plan | SERP | PBOP |
| (Thousands of dollars) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Net actuarial loss (gain) (a) | \$ 20,426 | \$ 23,607 | \$(3,940) | \$ | 759 | \$ 43,027 | \$ 44,149 | \$ 3,334 | \$(4,456) | \$ 22,770 | \$ 25,153 | \$ 1,347 | \$(3,730) |
| Amortization of prior service cost (b) | $(1,335)$ | - | - |  | $(1,335)$ | $(1,335)$ | - | - | $(1,335)$ | $(1,335)$ | - | - | $(1,335)$ |
| Amortization of net actuarial loss (b) | $(33,617)$ | $(32,115)$ | $(1,502)$ |  | - | $(25,445)$ | $(24,004)$ | $(1,441)$ | - | $(27,066)$ | $(25,266)$ | $(1,383)$ | (417) |
| Regulatory adjustment | 8,233 | 7,657 | - |  | 576 | $(12,340)$ | $(18,131)$ | - | 5,791 | 5,584 | 102 | - | 5,482 |
| Recognized in other comprehensive (income) loss | $(6,293)$ | (851) | $(5,442)$ |  | - | 3,907 | 2,014 | 1,893 | - | (47) | (11) | (36) | - |
| Net periodic benefit costs recognized in net income | 51,332 | 46,089 | 3,405 |  | 1,838 | 44,593 | 38,283 | 3,633 | 2,677 | 44,423 | 37,568 | 3,573 | 3,282 |
| Total of amount recognized in net periodic benefit cost and other comprehensive (income) loss | \$ 45,039 | \$ 45,238 | \$(2,037) | \$ | 1,838 | \$ 48,500 | \$ 40,297 | \$ 5,526 | \$ 2,677 | \$ 44,376 | \$ 37,557 | \$ 3,537 | \$ 3,282 |

The table above discloses the net gain or loss and prior service cost recognized in other comprehensive income, separated into (a) amounts initially recognized in other comprehensive income, and (b) amounts subsequently recognized as adjustments to other comprehensive income as those amounts are amortized as components of net periodic benefit cost.

See also Note 6 - Other Comprehensive Income and Accumulated Other Comprehensive Income ("AOCI").

The following table sets forth, by level within the three-level fair value hierarchy, the fair values of the assets of the qualified pension plan and the PBOP as of December 31, 2018 and December 31, 2017. The SERP has no assets.

|  | December 31, 2018 |  |  | December 31, 2017 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Qualified Retirement Plan | PBOP | Total | Qualified Retirement Plan | PBOP | Total |
| Assets at fair value (thousands of dollars): |  |  |  |  |  |  |
| Level 1 - Quoted prices in active markets for identical financial assets Mutual funds | \$ | \$25,299 | \$ 25,299 | \$ | \$27,020 | \$ 27,020 |
| Total Level 1 Assets (1) | \$ | \$25,299 | \$ 25,299 | \$ | \$27,020 | \$ 27,020 |
| Level 2 - Significant other observable inputs |  |  |  |  |  |  |
| Private commingled equity funds (2) |  |  |  |  |  |  |
| International | \$309,745 | \$ 8,484 | \$318,229 | \$340,217 | \$10,577 | \$350,794 |
| U.S. equity securities | 147,693 | 4,045 | 151,738 | 165,937 | 5,158 | 171,095 |
| Emerging markets | 50,817 | 1,392 | 52,209 | 56,259 | 1,749 | 58,008 |
| Private commingled fixed income funds (3) | 274,062 | 7,506 | 281,568 | 301,217 | 9,364 | 310,581 |
| Pooled funds and mutual funds | 5,198 | 610 | 5,808 | 4,676 | 735 | 5,411 |
| Government fixed income and mortgage backed securities | 163 | 5 | 168 | 172 | 5 | 177 |
| Total Level 2 assets (4) | \$787,678 | \$22,042 | \$809,720 | \$868,478 | \$27,588 | \$896,066 |
| Total Plan assets at fair value | \$787,678 | \$47,341 | \$835,019 | \$868,478 | \$54,608 | \$923,086 |
| Insurance company general account contracts (5) | 2,936 | - | 2,936 | 3,187 | - | 3,187 |
| Total Plan assets | \$790,614 | \$47,341 | \$837,955 | \$871,665 | \$54,608 | \$926,273 |

(1) The Mutual funds category above is a balanced fund that invests in a diversified portfolio of common stocks, preferred stocks, and fixed-income securities. The fund seeks regular income, conservation of principal, and an opportunity for long-term growth of principal and income.
(2) The private commingled equity funds include common collective trusts that invest in a diversified portfolio of domestic and international securities regularly traded on securities exchanges. These funds are shown in the above table at net asset value ("NAV"), which is the value of securities in the fund less the amount of any liabilities outstanding. Strategies employed by the funds include investment in:

- International developed countries equities
- Domestic equities
- Emerging markets equities

Shares in the private commingled equity funds may be redeemed given one business day notice. While they are private equity funds and reported at NAV, due to the short redemption notice period, the lack of redemption fees, the fact that the underlying investments are exchange-traded, and that substantial liabilities do not exist subject to the NAV calculation, these investments are viewed as indirectly observable (Level 2) and are therefore not excluded from the body of the fair value table as a reconciling item.

Two funds are classified as international funds. One invests in international financial markets, primarily those of developed economies in Europe and the Pacific Basin. The fund invests primarily in equity securities issued by foreign corporations, but may invest in other securities perceived as offering attractive investment return opportunities. The other fund provides diversified exposure to global equity markets. The fund seeks to provide long-term capital growth by investing primarily in securities listed on the major developed equity markets of the U.S., Europe, and Asia, as well as within those listed on emerging country equity markets on a tactical basis.

The domestic equities securities funds include a large and medium capitalization fund and a small capitalization fund. The large and medium capitalization fund is designed to track the performance of the large and medium capitalization companies contained in the index, which represents approximately $90 \%$ of the market capitalization of the U.S. stock market. The small capitalization fund is designed to provide maximum long-term appreciation through investments that are well diversified by industry.

The emerging markets fund was developed to invest in emerging market equities worldwide. The purposes of the fund's operations, "emerging market countries," include every country in the world except the developed markets of the U.S., Canada, Japan, Australia, New Zealand, Hong Kong, and Singapore, and most countries located in Western Europe. Fund investments are made directly in each country or, where direct investment is inefficient or prohibited, through appropriate financial instruments or participation in commingled funds.
(3) The private commingled fixed income funds consist primarily of fixed income debt securities issued by the U.S. Treasury, government agencies, and fixed income debt securities issued by corporations. The fixed income fund investments may include the use of high yield, international fixed income securities and other instruments, including derivatives, to ensure prudent diversification over a broad spectrum of investments. The changes in the value of the fixed income funds are intended to offset the changes in the pension plan liabilities due to changes in the discount rate.

These funds are shown in the above table at NAV. Shares in the private commingled fixed equity funds may be redeemed given one business day notice. While they are private fixed income funds and reported at NAV, due to the short redemption notice period, the lack of redemption fees, the fact that the underlying investments are exchange-traded, and that substantial liabilities do not exist subject to the NAV calculation, these investments are viewed as indirectly observable (Level 2), and are also not excluded from the body of the fair value table as a reconciling item.
(4) With the exception of items (2) and (3), which are discussed in detail above, the Level 2 assets consist mainly of pooled funds and mutual funds. These funds are collective short-term funds that invest in Treasury bills and money market funds and are used as a temporary cash repository.
(5) The insurance company general account contracts are annuity insurance contracts used to pay the pensions of employees who retired prior to 1989 . The balance of the account disclosed in the above table is the contract value, which is the result of deposits, withdrawals, and interest credits.

## Note 12 - Share-Based Compensation

At December 31, 2018, three share-based compensation plans existed at Southwest: an omnibus incentive plan, a management incentive plan, and a restricted stock/unit plan. All previous grants under the stock option plan expired in 2016. The table below shows total share-based plan compensation expense which was recognized in the Consolidated Statements of Income (in thousands):

|  | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: |
| Share-based compensation plan expense, net of related tax benefits | $\$ 4,644$ | $\$ 6,751$ | $\$ 7,185$ |
| Share-based compensation plan related tax benefits | 1,467 | 4,137 | 4,404 |

Under the option plan, options to purchase shares of common stock at a stated exercise price were previously granted to key employees and outside directors. The last option grants were in 2006 and no future grants are currently anticipated. Each option had an exercise price equal to the market price of the Company's common stock on the date of grant and a maximum term of ten years. The final options were exercised in 2016.

The following tables summarize the stock option plan activity and related information (thousands of options):

|  | 2018 |  | 2017 |  | 2016 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number of options | Weightedaverage exercise price | Number of options | Weighted average exercise price | Number of options | Weightedaverage exercise price |
| Outstanding at the beginning of the year | - | N/A | - | N/A | 17 | \$31.64 |
| Exercised during the year | - | - | - | - | (17) | 31.64 |
| Forfeited or expired during the year | 二 | - | - | - | - | - |
| Outstanding and exercisable at year end | - | N/A | - | N/A | - | N/A |

The intrinsic value of a stock option is the amount by which the market value of the underlying stock exceeds the exercise price of the option. The aggregate intrinsic value of outstanding and exercisable options, and options that were exercised, are presented in the table below (in thousands):

|  | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: |
| Outstanding and exercisable | $\$-$ | $\$-$ | $\$-$ |
| Exercised | - | - | 554 |


|  | December 31,2018 | December 31, 2017 | December 31, 2016 |
| :--- | :---: | :---: | :---: |
| Market value of Company stock | $\$ 76.50$ | $\$ 80.48$ | $\$ 76.62$ |

In 2017, the Board of Directors of the Company and shareholders approved the omnibus incentive plan. The purpose of the omnibus incentive plan is to promote the long-term growth and profitability of the Company by providing directors, employees, and certain other individuals with incentives to increase shareholder value and otherwise contribute to the success of the Company. In addition, the plan will enable the Company to attract, retain, and reward the best available persons for positions of responsibility. The omnibus incentive plan provides for the grant of stock options, stock appreciation rights, restricted stock, restricted stock units, performance shares, and other equity-based and cash awards. Employees, directors, and consultants who provide services to the Company or any subsidiary may be eligible under this plan.

Under the management incentive plan, awards were historically granted to encourage key employees of Southwest to remain as employees and to achieve short-term and long-term performance goals. Plan participants were eligible to receive a cash bonus (i.e., short-term incentive) and shares (i.e., long-term incentive). The shares granted vest three years after grant and are then issued as common stock. No new share grants will be made under the management incentive plan as all future incentive share compensation will be granted under the omnibus incentive plan.

Restricted stock/units under the restricted stock/unit plan were issued to attract, motivate, retain, and reward key employees of Southwest with an incentive to attain high levels of individual performance and improved financial performance. The restricted stock/units vest $40 \%$ at the end of year one and $30 \%$ at the end of years two and three and are issued annually as common stock in accordance with the percentage vested. The restricted stock/unit plan was also established to attract, motivate, and retain experienced and knowledgeable independent directors. Vesting for grants of restricted stock/units to directors occurred immediately upon grant. The issuance of common stock for directors currently occurs when their service on the Board ends. No new grants will be made under the legacy restricted stock/unit plan as all future incentive compensation, including restricted stock, will be granted under programs of the omnibus incentive plan. For grants under the omnibus incentive plan, directors continue to immediately vest in the shares upon grant but are provided the option to defer receipt of equity compensation until they leave the Board of Directors. With regard to management, grants of time-lapse restricted stock vest based on the same percentages indicated above under the legacy program.

Performance-based incentive opportunities under the omnibus plan were granted to all officers of Southwest in the form of performance shares and will be based on, depending on the officer, consolidated earnings per share, utility net income, and utility return on equity, with an adjustment based on relative total shareholder return, in each case, measured over a three-year performance period from January 1, 2018 to December 31, 2020 for the performance shares granted in 2018, and from January 1, 2017 to December 31, 2019 for the performance shares granted in 2017. Southwest recorded $\$ 2.1$ million and $\$ 1.2$ million of estimated compensation expense associated with these shares during 2018 and 2017, respectively.

The following table summarizes the activity of the management incentive plan shares and restricted stock/units as of December 31, 2018 (thousands of shares):
$\left.\begin{array}{lccc} & \begin{array}{c}\text { Management } \\ \text { Incentive } \\ \text { Plan Shares }\end{array} & \begin{array}{c}\text { Weighted- } \\ \text { average } \\ \text { grant date } \\ \text { fair value }\end{array} & \begin{array}{c}\text { Restricted } \\ \text { Stock/ } \\ \text { Units (1) }\end{array}\end{array} \begin{array}{c}\text { Weighted- } \\ \text { average } \\ \text { grant date } \\ \text { fair value }\end{array}\right]$
(1) The number of securities granted includes 34,000 performance shares, which was derived by assuming that target performance will be achieved during the relevant performance period.
(2) Includes shares for retiree payouts and those converted for taxes.

The weighted average grant date fair value of management incentive plan shares granted in 2017 and 2016 was $\$ 85.44$ and $\$ 59.05$, respectively. The weighted average grant date fair value of restricted stock/units granted in 2017 and 2016 was $\$ 85.39$ and $\$ 60.39$, respectively.

As of December 31, 2018, total compensation cost related to nonvested management incentive plan shares and restricted stock/units not yet recognized is $\$ 4.0$ million, which is expected to be recognized over a weighted average period of 1.5 years.

## Note 13 - Income Taxes

On December 22, 2017, the TCJA was enacted. The majority of the provisions of the TCJA are effective for taxable years beginning after December 31, 2017. The TCJA significantly changes the taxation of business entities with specific provisions for regulated public utilities, such as Southwest.

The following are the major provisions (not all-inclusive) of the TCJA's impact on the Company and Southwest:

- Reduction of the federal income tax rate from $35 \%$ to $21 \%$, effective January 1, 2018 .
- Bonus depreciation considerations for utility property placed-in-service after September 27, 2017.
- $100 \%$ bonus depreciation for most non-utility property placed-in-service after September 27, 2017.
- Interest expense limitations for interest allocable to non-utility businesses. Interest expense allocable to utility businesses will have no limitation.

Under U.S. GAAP, specifically ASC Topic 740 "Income Taxes" ("ASC 740"), the tax effects of changes in tax laws must be recognized in the period in which the law is enacted. Therefore, the TCJA impacted the Company's and Southwest's financial
statements in the fourth quarter of 2017. ASC 740 also requires deferred tax assets and liabilities to be re-measured at the enacted tax rate expected to apply when temporary differences are to be realized or settled. Thus, at the date of enactment, the Company's deferred taxes were re-measured using the new federal income tax rate ( $21 \%$ ). For regulated entities, the reduction in plant-related deferred tax liabilities is recorded as a regulatory liability to be refunded to customers. For unregulated operations, the change in deferred taxes is recorded as an adjustment to deferred tax expense.

The staff of the SEC recognized the complexity of determining the impact of the TCJA, and on December 22, 2017 issued guidance in Staff Accounting Bulletin 118 ("SAB 118"). SAB 118 provides that to the extent the accounting for certain income tax effects of the TCJA is incomplete, but a company can determine a reasonable estimate for those effects, the company may include in its financial statements the reasonable estimate that it had determined. The reasonable estimate would be reported as a provisional amount in the company's financial statements during a "measurement period", not to exceed one year from the date of enactment of the TCJA.

Southwest and the Company included provisional reasonable estimates for the measurement and accounting of the effects of the TCJA, which were reflected in the consolidated financial statements as of and for the year ended December 31, 2017. The Company and Southwest continued to analyze and refine the estimate and classification of all provisional items, during the measurement period, as additional accounting, regulatory, and U.S. Treasury guidance was provided. Adjustments made to the provisional amounts allowed under SAB 118 were identified and recorded as discrete adjustments during the year ended December 31, 2018. The accounting was completed in the fourth quarter of 2018 .

Southwest Gas Holdings, Inc.:

The following is a summary of income before taxes and noncontrolling interest for domestic and foreign operations (thousands of dollars):

| Year ended December 31, | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: |
| U.S. | $\$ 235,120$ | $\$ 246,131$ | $\$ 218,810$ |
| Foreign | $\boxed{8,216}$ | $\underline{12,899}$ | 12,713 |
| Total income before income taxes | $\underline{\$ 243,336}$ | $\underline{\$ 259,030}$ | $\underline{\$ 231,523}$ |

Income tax expense (benefit) consists of the following (thousands of dollars):

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Current: |  |  |  |
| Federal | \$(13,476) | \$ $(1,316)$ | \$ 541 |
| State | $(3,219)$ | 2,965 | 5,748 |
| Foreign | 2,563 | 5,203 | 4,298 |
|  | $\underline{(14,132)}$ | 6,852 | 10,587 |
| Deferred: |  |  |  |
| Federal | 67,784 | 58,443 | 68,270 |
| State | 8,901 | 1,837 | 140 |
| Foreign | (869) | (2,044) | (529) |
|  | 75,816 | 58,236 | 67,881 |
| Total income tax expense | \$ 61,684 | \$65,088 | \$78,468 |

Deferred income tax expense (benefit) consists of the following significant components (thousands of dollars):

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: |
| Deferred federal and state: | $\$ 94,899$ | $\$ 44,516$ | $\$ 76,217$ |
| Property-related items | $(3,507)$ | 8,500 | 361 |
| Purchased gas cost adjustments | $(7,334)$ | $(2,517)$ | $(1,327)$ |
| Employee benefits | 2,412 | 14,401 | 6,322 |
| Regulatory Adjustments | $\underline{(10,041)}$ | $(5,935)$ | $(12,854)$ |
| All other deferred | 76,429 | 58,965 | 68,719 |
| Total deferred federal and state | $\underline{(613)}$ | $(729)$ | $(838)$ |
| Deferred ITC, net | $\underline{\$ 75,816}$ | $\underline{\$ 58,236}$ | $\underline{\$ 67,881}$ |
| Total deferred income tax expense | $\underline{y}$ |  |  |

A reconciliation of the U.S. federal statutory rate to the consolidated effective tax rate for 2018, 2017, and 2016 (and the sources of these differences and the effect of each) are summarized as follows:

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :--- | :---: | :---: | :---: |
| U.S. federal statutory income tax rate | $21.0 \%$ | $35.0 \%$ | $35.0 \%$ |
| Net state taxes | 2.9 | 1.1 | 1.4 |
| Tax credits | $(0.3)$ | $(0.4)$ | $(0.4)$ |
| Company owned life insurance | 0.1 | $(1.6)$ | $(1.2)$ |
| Change in U.S. Federal Income Tax Rate | - | $(7.8)$ | - |
| All other differences | $\underline{1.6}$ | $\underline{(1.2)}$ | $\underline{(0.9)}$ |
| Consolidated effective income tax rate | $\underline{25.3} \%$ | $\underline{25.1 \%}$ | $\underline{33.9} \%$ |

Deferred tax assets and liabilities consist of the following (thousands of dollars):

| December 31, | 2018 | 2017 |
| :--- | ---: | ---: |
| Deferred tax assets: | $\$ 105,791$ | $\$ 98,912$ |
| Deferred income taxes for future amortization of ITC and excess deferred taxes | 39,215 | 31,323 |
| Employee benefits | 21,603 | 4,390 |
| Alternative minimum tax credit | 13,125 | 11,460 |
| Net operating losses and credits | 2,235 | 3,037 |
| Interest rate swap | 17,215 | 13,870 |
| Other | $(1,132)$ | $(728)$ |
| Valuation allowance | 198,052 | 162,264 |
|  |  |  |
| Deferred tax liabilities: | 678,307 | 598,371 |
| Property-related items, including accelerated depreciation | 6,097 | 6,067 |
| Regulatory balancing accounts | 368 | 981 |
| Unamortized ITC | 3,110 | 3,380 |
| Debt-related costs | 7,807 | 7,656 |
| Intangibles | 30,300 | 21,289 |
| Other | 725,989 | 637,744 |

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (thousands of dollars):

|  | 2018 | 2017 |
| :---: | :---: | :---: |
| Unrecognized tax benefits at beginning of year | \$1,430 | \$1,231 |
| Gross increases - tax positions in prior period | - | 100 |
| Gross decreases - tax positions in prior period | 459 | - |
| Gross increases - current period tax positions | - | 99 |
| Gross decreases - current period tax positions | - | - |
| Settlements | - | - |
| Lapse in statute of limitations | - | - |
| Unrecognized tax benefits at end of year | \$ 971 | \$1,430 |

Southwest Gas Corporation:

The following is a summary of income before taxes for continuing and discontinued operations (refer to Note $\mathbf{1}$ - Background, Organization, and Summary of Significant Accounting Policies) (thousands of dollars):

| Year ended December 31, | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | :---: |
| Income from continuing operations before income taxes | $\$ 182,833$ | $\$ 219,953$ | $\$ 178,007$ |
| Income from discontinued operations before income taxes | - | - | 53,516 |
| Total income before income taxes | $\underline{\$ 182,833}$ | $\underline{\$ 219,953}$ | $\underline{\$ 231,523}$ |

Income tax expense (benefit) consists of the following (thousands of dollars):

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: |
| Current: |  |  |  |
| Federal | \$(17,584) | \$ 318 | \$ (9,695) |
| State | $(6,783)$ | 1,420 | 2,510 |
|  | $(24,367)$ | 1,738 | $(7,185)$ |
| Deferred: |  |  |  |
| Federal | 58,136 | 60,662 | 66,037 |
| State | 10,222 | 735 | (268) |
|  | 68,358 | 61,397 | 65,769 |
| Total income tax expense from continuing operations | 43,991 | 63,135 | 58,584 |
| Discontinued operations | - | - | 19,884 |
| Total income tax expense | \$ 43,991 | \$63,135 | \$78,468 |

Deferred income tax expense (benefit) consists of the following significant components (thousands of dollars):

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :--- | ---: | ---: | ---: |
| Deferred federal and state: | $\$ 67,576$ | $\$ 49,129$ | $\$ 72,811$ |
| Property-related items | $(3,507)$ | 8,500 | 361 |
| Purchased gas cost adjustments | 2,156 | $(5,707)$ | $(139)$ |
| Employee benefits | 2,412 | 14,401 | 6,322 |
| Regulatory Adjustments | 334 | $(4,197)$ | $(12,748)$ |
| All other deferred | 68,971 | 62,126 | 66,607 |
| Total deferred federal and state | $\underline{(613)}$ | $(729)$ | $(838)$ |
| Deferred ITC, net | $\underline{\$ 68,358}$ | $\underline{\$ 61,397}$ | $\$ 65,769$ |

A reconciliation of the U.S. federal statutory rate to the consolidated effective tax rate for 2018, 2017, and 2016 (and the sources of these differences and the effect of each) are summarized as follows:

| Year Ended December 31, | 2018 | 2017 | 2016 |
| :--- | :---: | :---: | :---: |
| U.S. federal statutory income tax rate | $21.0 \%$ | $35.0 \%$ | $35.0 \%$ |
| Net state taxes | 2.1 | 0.6 | 0.8 |
| Tax credits | $(0.4)$ | $(0.4)$ | $(0.5)$ |
| Company owned life insurance | 0.3 | $(1.7)$ | $(1.5)$ |
| Change in U.S. Federal Income Tax Rate | - | $(3.6)$ | - |
| All other differences | $\underline{1.1}$ | $\underline{(1.2)}$ | $\underline{(0.9)}$ |
| Effective income tax rate from continuing operations | $\underline{24.1} \%$ | $\underline{28.7} \%$ | $\underline{32.9} \%$ |

Deferred tax assets and liabilities consist of the following (thousands of dollars):

| December 31, | 2018 | 2017 |
| :---: | :---: | :---: |
| Deferred tax assets: |  |  |
| Deferred income taxes for future amortization of ITC and excess deferred taxes | \$105,791 | \$ 98,912 |
| Employee benefits | 17,337 | 18,707 |
| Alternative minimum tax credit | 21,603 | 4,390 |
| Net operating losses and credits | 4,557 | 10,070 |
| Interest rate swap | 2,235 | 3,037 |
| Other | 9,386 | 8,820 |
| Valuation allowance | (37) | (58) |
|  | 160,872 | 143,878 |
| Deferred tax liabilities: |  |  |
| Property-related items, including accelerated depreciation | 614,205 | 561,493 |
| Regulatory balancing accounts | 6,097 | 6,067 |
| Unamortized ITC | 368 | 981 |
| Debt-related costs | 3,110 | 3,380 |
| Other | 27,550 | 17,200 |
|  | 651,330 | 589,121 |
| Net deferred tax liabilities | \$490,458 | \$445,243 |

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows (thousands of dollars):

|  | 2018 | 2017 |
| :---: | :---: | :---: |
| Unrecognized tax benefits at beginning of year | \$1,069 | \$ 903 |
| Gross increases - tax positions in prior period | - | 67 |
| Gross decreases - tax positions in prior period | 98 | - |
| Gross increases - current period tax positions | - | 99 |
| Gross decreases - current period tax positions | - | - |
| Settlements | - | - |
| Lapse in statute of limitations | - | - |
| Unrecognized tax benefits at end of year | \$ 971 | \$1,069 |

The Company's regulated operations accounting for income taxes is impacted by the FASB's ASC 980 - Regulated Operations. Reductions in accumulated deferred income tax balances due to the reduction in the corporate income tax rates to $21 \%$ under the provisions of the TCJA may result in a refund of excess deferred taxes to customers, generally through reductions in future rates. The TCJA includes provisions that stipulate how these excess deferred taxes may be passed back to customers for certain accelerated tax depreciation benefits. Potential refunds of other deferred taxes will be determined in conjunction with appropriate regulatory commissions. As part of the recently concluded Nevada general rate case, excess deferred taxes will begin being refunded to customers starting in January 2019. The December 31, 2018 balance sheets of Southwest and the Company reflect the impact of the TCJA with a recorded regulatory liability of $\$ 456$ million.

The Company and its subsidiaries file a consolidated federal income tax return in the U.S. and in various states, as well as in Canada. With few exceptions, the Company is no longer subject to U.S. federal, state and local, or Canadian income tax examinations for years before 2014.

The Company and each of its subsidiaries, including Southwest, participate in a tax sharing agreement to establish the method for allocating tax benefits and losses among members of the consolidated group. The consolidated federal income tax is apportioned among the subsidiaries using a separate return method.

At December 31, 2018, the Company has a federal net operating loss carryforward of $\$ 62.5$ million which may be carried forward indefinitely. The Company also has general business credits of $\$ 3.5$ million, which begin to expire in 2035. The Company has net capital loss carryforwards of $\$ 107,000$, which will begin to expire in 2019. At December 31, 2018, the Company has an income tax net operating loss carryforward related to Canadian operations of $\$ 7.6$ million, which begins to expire in 2034.

Management intends to continue to permanently reinvest any future foreign earnings in Canada.

In assessing whether uncertain tax positions should be recognized in its financial statements, management first determines whether it is more-likely-than-not that a tax position will be sustained upon examination, including resolution of any related appeals or litigation processes, based on the technical merits of the position. In evaluations of whether a tax position has met the more-likely-than-not recognition threshold, management presumes that the position will be examined by the appropriate taxing authority that would have full knowledge of all relevant information. For tax positions that meet the more-likely-than-not recognition threshold, management measures the amount of benefit recognized in the financial statements at the largest amount of benefit that is greater than $50 \%$ likely of being realized upon ultimate settlement. Unrecognized tax benefits are recognized in the first financial reporting period in which information becomes available indicating that such benefits will more-likely-than-not be realized. For each reporting period, management applies a consistent methodology to measure unrecognized tax benefits, and all unrecognized tax benefits are reviewed periodically and adjusted as circumstances warrant. Measurement of unrecognized tax benefits is based on management's assessment of all relevant information, including prior audit experience, the status of audits, conclusions of tax audits, lapsing of applicable statutes of limitation, identification of new issues, and any administrative guidance or developments.

At December 31, 2018, the total amount of unrecognized tax benefits that, if recognized, would impact the effective tax rate was $\$ 1$ million individually for both the Company and Southwest. No significant increases or decreases in unrecognized tax benefit are expected within the next 12 months.

The Company and Southwest recognize interest expense and income and penalties related to income tax matters in income tax expense. There was no tax-related interest income for 2018, 2017, and 2016.

## Note 14 - Derivatives

Derivatives. In managing its natural gas supply portfolios, Southwest has historically entered into fixed- and variable-price contracts, which qualify as derivatives. Additionally, Southwest utilizes fixed-for-floating swap contracts ("Swaps") to supplement its fixed-price contracts. The fixed-price contracts, firm commitments to purchase a fixed amount of gas in the future at a fixed price, qualify for the normal purchases and normal sales exception that is allowed for contracts that are probable of delivery in the normal course of business, and are exempt from fair value reporting. The variable-price contracts qualify as derivative instruments; however, because the contract price is the prevailing price at the future transaction date, the contract has no determinable fair value. The Swaps' contract prices are determined at the beginning of each month to reflect that month's published first of month index price and are recorded at fair value. Southwest does not utilize derivative financial instruments for speculative purposes, nor does it have trading operations.

The fixed-price contracts and Swaps are utilized by Southwest under its volatility mitigation programs to effectively fix the price on a portion (up to $25 \%$ in the Arizona and California jurisdictions) of its natural gas supply portfolios. The maturities of the Swaps highly correlate to forecasted purchases of natural gas, during time frames ranging from January 2019 through October 2020. Under such contracts, Southwest pays the counterparty a fixed rate and receives from the counterparty a floating rate per MMBtu ("dekatherm") of natural gas. Only the net differential is actually paid or received. The differential is calculated based on the notional amounts under the contracts, which are detailed in the table below (thousands of dekatherms):

December 31, 2018 December 31, 2017
Contract notional amounts $\underline{\underline{13,387}}$ 10,929

The following table sets forth the gains and (losses) recognized on Southwest's Swaps (derivatives) for the years ended December 31, 2018, 2017, and 2016 and their location in the Consolidated Statements of Income:

| Instrument | Location of Gain or (Loss) <br> Recognized in Income on Derivative | 2018 | 2017 | 2016 |
| :---: | :---: | :---: | :---: | :---: |
| Swaps | Net cost of gas sold | \$ 2,113 ) | \$(11,572) | \$ 5,006 |
| Swaps | Net cost of gas sold | 2,113* | 11,572* | $(5,006){ }^{*}$ |
| Total |  | \$ - | \$ | \$ |

* Represents the impact of regulatory deferral accounting treatment under U.S. GAAP for rate-regulated entities.

No gains (losses) were recognized in net income or other comprehensive income during the periods presented for derivatives designated as cash flow hedging instruments. Previously, Southwest entered into two forward-starting interest rate swaps ("FSIRS"), both of which were designated cash flow hedges, to partially hedge the risk of interest rate variability during the period leading up to the planned issuance of debt. The first FSIRS terminated in December 2010, and the second, in March 2012. Losses on both FSIRS are being amortized over ten-year periods from Accumulated other comprehensive income (loss) into interest expense.

The following table sets forth the fair values of the Swaps and their location in the Consolidated Balance Sheets of Southwest and the Company (thousands of dollars).

Fair values of derivatives not designated as hedging instruments:

| December 31, 2018 Instrument | Balance Sheet Location | Asset <br> Derivatives | Liability Derivatives | Net <br> Total |
| :---: | :---: | :---: | :---: | :---: |
| Swaps | Prepaid and other current assets | \$ 243 | \$ (99) | \$ 144 |
| Swaps | Other current liabilities | 1,595 | $(3,347)$ | $(1,752)$ |
| Swaps | Other deferred credits | 141 | (251) | (110) |
| Total |  | \$1,979 | \$ $(3,697)$ | \$(1,718) |
| December 31, 2017 <br> Instrument | Balance Sheet Location | Asset <br> Derivatives | Liability Derivatives | Net Total |
| Swaps | Deferred charges and other assets | \$ 11 | \$ $(4,468)$ | \$(4,457) |
| Swaps | Prepaid and other current assets | 19 | $(1,342)$ | $(1,323)$ |
| Total |  | \$ 30 | \$(5,810) | \$(5,780) |

The estimated fair values of the natural gas derivatives were determined using future natural gas index prices (as more fully described below). Master netting arrangements exist with each counterparty that provide for the net settlement (in the settlement month) of all contracts through a single payment. As applicable, management has elected to reflect the net amounts in its balance sheets. No outstanding collateral associated with the Swaps existed during any period presented in the above table.

Pursuant to regulatory deferral accounting treatment for rate-regulated entities, unrealized gains and losses in fair value of the Swaps are recorded as a regulatory asset and/or liability. When the Swaps mature, any prior positions held are reversed and the settled position is recorded as an increase or decrease of purchased gas under the related PGA mechanism in determining deferred PGA balances. Neither changes in fair value, nor settled amounts, of Swaps have a direct effect on earnings or other comprehensive income.

The following table presents the amounts paid to and received from counterparties for settlements of matured Swaps.

|  | $\begin{gathered} \text { Year ended } \\ \text { December } 31 \text {, } \\ 2018 \end{gathered}$ | Year ended December 31, 2017 | $\begin{gathered} \text { Year ended } \\ \text { December } 31 \text {, } \\ 2016 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| (Thousands of dollars) |  |  |  |
| Paid to counterparties | \$6,781 | \$3,100 | \$5,583 |
| Received from counterparties | \$ 606 | \$1,685 | \$ 726 |

The following table details the regulatory assets/(liabilities) offsetting the derivatives at fair value in the Consolidated Balance Sheets (thousands of dollars).

December 31, 2018

| Instrument | Balance Sheet Location | Net Total |
| :--- | :--- | ---: |
| Swaps | Other current liabilities | $\$(144)$ |
| Swaps | Prepaid and other current assets | 1,752 |
| Swaps | Deferred charges and other assets | 110 |


| December 31, 2017 | Balance Sheet Location | Net Total |
| :--- | :--- | ---: |
| Instrument | Prepaid and other current assets | $\$ 4,457$ |
| Swaps | Deferred charges and other assets | 1,323 |

Fair Value Measurements. The estimated fair values of Southwest's Swaps were determined at December 31, 2018 and December 31, 2017 using futures settlement prices, published by the CME Group, for the delivery of natural gas at Henry Hub adjusted by the prices of basis future settlements, which reflect the difference between the price of natural gas at a given delivery basin and the Henry Hub pricing points. These Level 2 inputs are observable in the marketplace throughout the full term of the Swaps, but have been credit-risk adjusted with no significant impact to the overall fair value measurement.

The following table sets forth, by level within the three-level fair value hierarchy that ranks the inputs used to measure fair value by their reliability, financial assets and liabilities that were accounted for at fair value:

Level 2 - Significant other observable inputs
December 31, 2018 December 31, 2017
(Thousands of dollars)
Assets at fair value:

Prepaid and other current assets - Swaps
Deferred charges and other assets - Swaps
Liabilities at fair value:
Other current liabilities - Swaps
Other deferred credits - Swaps
Net Assets (Liabilities)
\$ 144

| - | - |
| :---: | ---: |
| $(1,752)$ | $(4,457)$ |
| $(110)$ | $\underline{(1,323)}$ |
| $\underline{\$(1,718)}$ | $\underline{\$(5,780)}$ |

No financial assets or liabilities associated with the Swaps, which were accounted for at fair value, fell within Level 1 or Level 3 of the fair value hierarchy.

## Note 15 - Segment Information

The Company's operating segments are determined based on the nature of their activities. The natural gas operations segment is engaged in the business of purchasing, distributing, and transporting natural gas. Revenues are generated from the distribution and transportation of natural gas. The utility infrastructure services segment is primarily engaged in the business of providing utility companies with trenching and installation, replacement, and maintenance services for energy distribution systems, and providing industrial construction solutions. Although our utility infrastructure services operations are geographically dispersed, they are aggregated and reported as a single segment as each reporting unit has similar economic characteristics. Over $99 \%$ of the total Company's long-lived assets are in the U.S.

The accounting policies of the reported segments are the same as those described within Note $\mathbf{1}$ - Background, Organization, and Summary of Significant Accounting Policies. Centuri accounts for the services provided to Southwest at contractual prices at contract inception. Accounts receivable for these services, which are not eliminated during consolidation, are presented in the table below (in thousands).

December 31, 2018 December 31, 2017
Accounts receivable for Centuri services

## \$18,830

\$12,987

The following table presents the amount of revenues for both segments by geographic area (thousands of dollars):

|  | $\begin{gathered} \text { December 31, } \\ 2018 \end{gathered}$ | $\begin{gathered} \text { December 31, } \\ 2017 \end{gathered}$ | $\begin{gathered} \text { December } 31 \text {, } \\ 2016 \end{gathered}$ |
| :---: | :---: | :---: | :---: |
| Revenues (a) |  |  |  |
| United States | \$2,664,670 | \$2,345,134 | \$2,256,600 |
| Canada | 215,343 | 203,658 | 203,890 |
| Total | \$2,880,013 | \$2,548,792 | \$2,460,490 |

(a) Revenues are attributed to countries based on the location of customers.

The Company has two reportable segments: natural gas operations and utility infrastructure services. Southwest has a single reportable segment that is referred to herein as the natural gas operations segment of the Company. In order to reconcile to net income as disclosed in the Consolidated Statements of Income, an Other column is included associated with impacts related to corporate and administrative activities related to Southwest Gas Holdings, Inc. The financial information pertaining to the natural gas operations and utility infrastructure services segments for each of the three years in the period ended December 31, 2018 is as follows (thousands of dollars):

| 2018 | Gas Operations | Utility Infrastructure Services | Other | Total |
| :---: | :---: | :---: | :---: | :---: |
| Revenues from unaffiliated customers | \$1,357,728 | \$1,386,371 | \$ | \$2,744,099 |
| Intersegment sales | - | 135,914 | - | 135,914 |
| Total | \$1,357,728 | \$1,522,285 | \$ | \$2,880,013 |
| Interest revenue | \$ 6,020 | \$ 88 | \$ | \$ 6,108 |
| Interest expense | \$ 81,740 | \$ 14,190 | \$ 741 | \$ 96,671 |
| Depreciation and amortization | \$ 191,816 | \$ 57,396 | \$ - | \$ 249,212 |
| Income tax expense | \$ 43,991 | \$ 18,420 | \$ (727) | \$ 61,684 |
| Segment net income | \$ 138,842 | \$ 44,977 | \$(1,542) | \$ 182,277 |
| Segment assets | \$6,141,584 | \$1,215,573 | \$ 572 | \$7,357,729 |
| Capital expenditures | \$ 682,869 | \$ 83,045 | \$ | \$ 765,914 |
| 2017 | Gas Operations | Utility Infrastructure Services | Other | Total |
| Revenues from unaffiliated customers | \$1,302,308 | \$1,149,325 | \$ | \$2,451,633 |
| Intersegment sales | - | 97,159 | - | 97,159 |
| Total | \$1,302,308 | \$1,246,484 | \$ - | \$2,548,792 |
| Interest revenue | \$ 2,784 | \$ 3 | \$ | \$ 2,787 |
| Interest expense | \$ 69,733 | \$ 7,986 | \$ 345 | \$ 78,064 |
| Depreciation and amortization | \$ 201,922 | \$ 49,029 | \$ | \$ 250,951 |
| Income tax expense | \$ 63,135 | \$ 2,390 | \$ (437) | \$ 65,088 |
| Segment net income | \$ 156,818 | \$ 38,360 | \$(1,337) | \$ 193,841 |
| Segment assets | \$5,482,669 | \$ 752,496 | \$ 1,901 | \$6,237,066 |
| Capital expenditures | \$ 560,448 | \$ 63,201 | \$ - | \$ 623,649 |
| 2016 | Gas Operations | Utility Infrastructure Services | Other | Total |
| Revenues from unaffiliated customers | \$1,321,412 | \$1,040,957 | \$ | \$2,362,369 |
| Intersegment sales | - | 98,121 | - | 98,121 |
| Total | \$1,321,412 | \$1,139,078 | \$ | \$2,460,490 |
| Interest revenue | \$ 1,848 | \$ | \$ | \$ 1,849 |
| Interest expense | \$ 66,997 | \$ 6,663 | \$ | \$ 73,660 |
| Depreciation and amortization | \$ 233,463 | \$ 55,669 | \$ | \$ 289,132 |
| Income tax expense | \$ 58,584 | \$ 19,884 | \$ | \$ 78,468 |
| Segment net income | \$ 119,423 | \$ 32,618 | \$ | \$ 152,041 |
| Segment assets | \$5,001,756 | \$ 579,370 | \$ | \$5,581,126 |
| Capital expenditures | \$ 457,120 | \$ 72,411 | \$ | \$ 529,531 |

## Note 16 - Quarterly Financial Data (Unaudited)

Quarter Ended

|  | March 31 | June 30 | September 30 | December 31 |
| :---: | :---: | :---: | :---: | :---: |
| Operating income (loss) (4) |  |  |  |  |
| Continuing operations | \$140,885 | \$20,210 | \$ $(5,292)$ | \$100,685 |
| Discontinued operations - utility infrastructure services | $(1,849)$ | 12,847 | 25,770 | 22,218 |
| Total | \$139,036 | \$33,057 | \$ 20,478 | \$122,903 |
| Net income (loss) |  |  |  |  |
| Continuing operations | \$ 77,583 | \$ 2,358 | \$(12,405) | \$ 51,887 |
| Discontinued operations - utility infrastructure services | $(2,137)$ | 6,585 | 14,877 | 13,293 |
| Total | \$ 75,446 | \$ 8,943 | \$ 2,472 | \$ 65,180 |

(1) The sum of quarterly earnings (loss) per average common share may not equal the annual earnings (loss) per share due to the ongoing change in the weighted-average number of common shares.
(2) Refer to Notes 1 and 18. Effective 2017, Southwest Gas Holdings, Inc. ("Company) is the successor equity issuer to Southwest Gas Corporation ("Southwest"). Both Southwest and Centuri became subsidiaries of the Company.
(3) Periods prior to 2017 depict Centuri amounts as discontinued operations of Southwest.
(4) Periods prior to 2018 depict revised operating income for the reclassification of non-service components of net periodic benefit costs, associated with pensions and other post-retirement benefits, out of the operations and maintenance line item of both the Company's and Southwest's Condensed Consolidated Statements of Income due to the adoption of ASU 2017-07. The resultant figures for Operating income, but not Net income, were increased accordingly to reflect reclassification. See Note $\mathbf{1 1}$ - Pension and Other Postretirement Benefits for further information relating to the adoption of this update.

The demand for natural gas is seasonal, and it is the opinion of management that comparisons of earnings for interim periods do not reliably reflect overall trends and changes in operations. Also, the timing of general rate relief can have a significant impact on earnings for interim periods.

## Note 17 - Utility Infrastructure Services Noncontrolling Interests

In conjunction with the acquisition of the Canadian utility infrastructure services businesses in October 2014, the previous owners of the acquired companies retained a $3.4 \%$ equity interest in Centuri, which, subject to an eligibility timeline, would have been redeemable (in its entirety) at the election of the noncontrolling parties beginning in July 2022. In August 2017, in advance of when otherwise eligible, the parties agreed to a redemption. Southwest Gas Holdings, Inc. paid $\$ 23$ million to the previous owners, thereby acquiring the remaining $3.4 \%$ equity interest in Centuri. Accordingly, Centuri is now a wholly owned subsidiary of the Company.

In connection with the acquisition of Linetec in November 2018, the previous owner retained a $20 \%$ equity interest in Linetec, subject to certain rights based on the passage of time or upon the occurrence of certain triggering events. Effective January 2022, the Company has the right, but not the obligation, to purchase at fair value (subject to a floor) a portion of the interest held by the noncontrolling party, and in incremental amounts each year thereafter. The shares subject to the election cumulate (if earlier elections are not made) such that $100 \%$ of the interest retained by the noncontrolling party is subject to the election beginning in 2024. If the Company does not exercise its rights at each or any of the specified intervals, the noncontrolling party has the ability, but not the obligation, to exit their investment retained by requiring Centuri to purchase a similar portion of their interest up to the maximum cumulative amounts specified and at each interval discussed above. The outstanding noncontrolling interest is not subject to minimum purchase provisions and following the eligibility dates for the elections, they do not expire. The redemption price represents
the greater of fair value of the ownership interest to be redeemed on the redemption date or a floor amount under the terms of the agreement.

The Company has determined that this noncontrolling interest is a redeemable noncontrolling interest and, in accordance with SEC guidance, is classified as mezzanine equity (temporary equity) in the Company's Consolidated Balance Sheets. As of November 30, 2018, the redeemable noncontrolling interest was reported at its estimated fair value of $\$ 81.7$ million. The fair value was estimated using a market approach that utilizes certain financial metrics from guideline public companies of similar industry and operating characteristics; however, no significant change in the fair value occurred through December 31, 2018. Changes in the value of the redeemable noncontrolling interest will be recognized as they occur and the carrying value will be adjusted accordingly at each quarterly reporting date. Generally, adjustments to the redemption value are expected to impact retained earnings, but not net income.

The following depicts changes to the balance of the redeemable noncontrolling interest between the indicated periods.

| (Thousands of dollars): | Redeemable <br> Noncontrolling <br> Interest |
| :--- | :---: |
| Balance, December 31, 2016 | $\$ 22,590$ |
| Net Income (loss) attributable to redeemable noncontrolling interest | 248 |
| Foreign currency exchange translation adjustment |  |
| Centuri distribution to redeemable noncontrolling interest | 11 |
| Adjustment to redemption value | $(204)$ |
| Redemption of Centuri shares from noncontrolling parties | 355 |
| Balance, December 31, 2017 | $-23,000)$ |
| Redeemable noncontrolling interest acquired | - |
| Net income attributable to redeemable noncontrolling interest | 81,659 |
| Balance, December 31, 2018 | 172 |

Centuri also holds a $95 \%$ interest in a venture to market natural gas engine-driven heating, ventilating, and air conditioning technology and products. Centuri consolidates the entity (IntelliChoice Energy, LLC) as a majority-owned subsidiary. The interest is immaterial to the consolidated financial statements, but is identified as the Noncontrolling interest within Total equity on the Company's Consolidated Balance Sheets.

## Note 18 - Reorganization Impacts - Discontinued Operations Solely Related to Southwest Gas Corporation

In association with the January 2017 holding company reorganization, no substantive change occurred with regard to the Company's business segments on the whole. Centuri operations remain part of continuing operations of the controlled group of companies, and financial information related to Centuri continues to be included in the consolidated financial statements of the Company. While Centuri has since expanded its footprint with the Linetec and Neuco acquisitions (See Note 19 - Business Acquisitions), its core business has remained consistent.

As part of the holding company reorganization, however, Centuri is no longer a subsidiary of Southwest; whereas historically, Centuri had been a direct subsidiary of Southwest. To give effect to this change, the consolidated financial statements related to Southwest, which are separately included in this report, depict Centuri-related amounts as discontinued operations for periods prior to January 2017.

Due to the discontinued operations accounting reflection, the following table presents the major income statement components of discontinued operations - utility infrastructure services reported in the Consolidated Income Statements of Southwest for the period prior to the beginning of 2017:
$\underline{\text { Results of Utility Infrastructure Services }}$

|  | Year Ended December 31, |
| :--- | :---: |
| (Thousands of dollars) | 2016 |
| Utility infrastructure services revenues | $\$ 1,139,078$ |
| Operating expenses: | $1,024,423$ |
| Utility infrastructure services expenses | 55,669 |
| Depreciation and amortization | 58,986 |
| Operating income | 1,193 |
| Other income (deductions) | 6,663 |
| Net interest deductions | 53,516 |
| Income before income taxes | 19,884 |
| Income tax expense | 33,632 |
| Net income | 1,014 |
| Net income attributable to noncontrolling interests | $\$ 32,618$ |
| Discontinued operations - utility infrastructure services - net income | $=$ |

## Note 19 - Business Acquisitions

As indicated in Note 1 - Background, Organization, and Summary of Significant Accounting Policies, on November 30, 2018, the Company, through its subsidiaries, led principally by Centuri, completed the acquisition of an $80 \%$ interest in a privately held utility infrastructure services business, Linetec Services, LLC ("Linetec") for approximately $\$ 326.6$ million, with the remaining 20\% retained by the seller. The above figure includes unremitted amounts as of the closing date as follows: $\$ 30$ million associated with the subsequent collection of Linetec unbilled customer receivable balances recorded at their estimated realizable values as of the acquisition date, $\$ 29.6$ million of seller liabilities related to future payments to certain Linetec employees, and $\$ 16.9$ million representing consideration held back for estimated purchase price and working capital adjustments to be paid during 2019. Additionally, $\$ 24.1$ million of consideration transferred related to future estimated tax payments related to a mutual $338(\mathrm{~h})(10)$ election under U.S. Treasury regulations (deemed asset sale/purchase under those tax regulations). In December 2018, $\$ 25$ million of the $\$ 29.6$ million referred to above was paid to certain Linetec employees.

The acquisition will extend the utility services operations in the southeastern region of the U.S. and provide additional opportunities for expansion of the amount of work Centuri performs for electric utilities. Funding for the acquisition was provided by a portion of net proceeds from the Company's equity offering in November 2018 and from Centuri's $\$ 590$ million secured revolving credit and term loan facility, as amended, described below and in Note 7 - Common Stock and Note 8 - Long-Term Debt.

The Company is currently performing a detailed valuation analysis of the assets and liabilities of the acquired company, which was substantially completed during the fourth quarter of 2018. Certain payments were estimated as of the acquisition date and will be adjusted when finally paid in 2019. The necessary analysis will consider acquired intangibles including customer relationships, trade names, and customer contracts. Based on preliminary results, a substantial majority of the purchase price will be allocated to goodwill and other finite-lived intangible assets.

Assets acquired and liabilities assumed in the transaction were recorded, generally, at their acquisition date fair values. Transaction costs associated with the acquisition were expensed as incurred. The Company's allocation of the purchase price was based on an evaluation of the appropriate fair values and represented management's best estimate based on available data (including market data, data regarding customers of the acquired businesses, terms of acquisition-related agreements, analysis of historical and projected results, and other types of data). The analysis included consideration of types of intangibles that were acquired, including customer relationships, trade names, and customer contracts. The final purchase accounting has not yet been completed. Further refinement is expected to occur, including potential changes to income taxes and intangibles, as well as additional consideration payments held back.

The preliminary estimated fair values of assets acquired and liabilities assumed as of November 30, 2018, are as follows (in millions of dollars):
Cash and cash equivalents ..... $\$ 3.9$
Accounts receivable ..... 32.8
Revenue earned on contracts in progress in excess of billings ..... 21.6
Prepaid expenses and other current assets ..... 1.1
Property and equipment ..... 89.4
Intangible assets ..... 89.3
Goodwill ..... 188.5
Total assets acquired ..... 426.6
Accounts payable ..... 8.0
Accrued liabilities ..... 6.9
Deferred compensation and related accrued taxes ..... 3.4
Redeemable noncontrolling interest ..... 81.7
Total liabilities assumed and noncontrolling interest ..... 100.0
Net assets acquired ..... $\$ 326.6$

Goodwill consists of the value associated with the assembled workforce, consolidation of operations, and the estimated economic value attributable to future opportunities related to the transaction. As the business of Linetec was deemed an asset purchase for tax purposes, the $\$ 188.5$ million of tax-basis goodwill is expected to be deductible for tax purposes. As of the acquisition date, other intangible assets totaled $\$ 89.3$ million which will be amortized over a weighted-average life of 19 years. Of the $\$ 89.3$ million of intangible assets, $\$ 79$ million is attributable to customer relationships with an assigned life of 20 years, $\$ 10$ million is attributable to a trade name with a 15 -year useful life, and $\$ 300,000$ is attributable to customer contracts with a useful life of one year. The intangible assets other than goodwill are included in Other property and investments in the Company's Consolidated Balance Sheets.

The unaudited pro forma consolidated financial information for fiscal 2018 and fiscal 2017 (assuming the acquisition of Linetec occurred as of the beginning fiscal 2017) is as follows (in thousands of dollars, except per share amounts):

|  | Year Ended December 31, |  |  |
| :--- | ---: | ---: | ---: |
|  | 2018 | 2017 |  |
| Total operating revenues | $\$ 3,037,209$ | $\$ 2,626,721$ |  |
| Net income attributable to Southwest Gas Holdings, Inc. | $\$ 187,642$ | $\$$ | 192,368 |
| Basic earnings per share | $\$$ | 3.80 | $\$$ |
| Diluted earnings per share | $\$ .01$ |  |  |

Acquisition costs of $\$ 6.9$ million that were incurred during 2018, and included in Utility infrastructure expenses in the Consolidated Statements of Income, were excluded from the 2018 unaudited pro forma consolidated financial information shown above and included in the 2017 amounts. No material nonrecurring pro forma adjustments directly attributable to the business combination were included in the unaudited pro forma consolidated financial information.

The pro forma financial information includes assumptions and adjustments made to incorporate various items including, but not limited to, additional interest expense and depreciation and amortization expense, and tax effects, as appropriate. The pro forma financial information has been prepared for comparative purposes only, and is not intended to be indicative of what the Company's results would have been had the acquisition occurred at the beginning of the periods presented or of the results which may occur in the future, for a number of reasons. These reasons include, but are not limited to, differences between the assumptions used to prepare the pro forma information, potential cost savings from operating efficiencies, and the impact of incremental costs incurred in integrating the businesses.

Actual results from Linetec operations, excluding transaction costs incurred by Centuri, included in the Consolidated Statements of Income since the date of acquisition are as follows (in thousands of dollars):

|  | Year ended <br> December 31, 2018 |
| :--- | :---: |
| Utility infrastructure services revenues | $\$ 14,119$ |
| Net income attributable to Southwest Gas Holdings, Inc. | 690 |

In November 2017, the Company, through its subsidiaries, led principally by Centuri, completed the acquisition of Neuco, a privately held utility infrastructure services business, for approximately $\$ 99$ million, less assumed debt. The acquisition extended the utility infrastructure services to the Northeastern region of the U.S., and provided additional opportunities for expansion. Funding for the acquisition was primarily provided by Centuri's revolving credit and term loan facilities, described in Note 8 - Long-Term Debt.

Assets acquired and liabilities assumed in the transaction were recorded, generally, at their acquisition date fair values. Transaction costs associated with the acquisition were expensed as incurred. The Company's allocation of the purchase price was based on an evaluation of the appropriate fair values and represented management's best estimate based on available data (including market data, data regarding customers of the acquired businesses, terms of acquisition-related agreements, analysis of historical and projected results, and other types of data). The analysis included consideration of types of intangibles that were acquired, including non-competition agreements, customer relationships, trade names, and work backlog. The final purchase accounting has been completed.

The fair values of assets acquired and liabilities assumed as of November 1, 2017, the acquisition date, were as follows (in millions of dollars):
Cash and cash equivalents ..... \$ 0.8
Contracts receivable ..... 18.3
Other receivables ..... 5.4
Property, plant and equipment ..... 15.1
Prepaid expenses and deposits ..... 1.6
Intangible assets ..... 44.8
Goodwill ..... 32.2
Total assets acquired ..... 118.2
Current liabilities(18.6)
Other long-term liabilities(0.3)
Net assets acquired ..... \$ 99.3

The allocation of the purchase price of Neuco was accounted for in accordance with applicable accounting guidance. Goodwill, which is generally not deductible for tax purposes, consists of the value associated with the assembled workforce and consolidation of operations. However, as the business of Neuco was acquired via asset purchase for tax purposes, the approximately $\$ 32$ million of tax-basis goodwill is expected to be deductible for tax purposes. Following a one-year post-acquisition measurement period, the values were adjusted as reflected in the table above, with no significant overall impact to the Company's consolidated balance sheets.

The unaudited pro forma consolidated financial information for fiscal 2017 is as follows (in thousands of dollars, except per share amounts):

|  | Year Ended <br> December 31, |
| :--- | ---: |
| Total operating revenues | 2017 |
| Net income attributable to Southwest Gas Holdings, Inc. | $\$ 2,639,452$ |
| Basic earnings per share | $\$ 203,245$ |
| Diluted earnings per share | $\$$ |

The pro forma financial information includes assumptions and adjustments made to incorporate various items including, but not limited to, additional interest expense and depreciation and amortization expense, and tax effects, as appropriate. The pro forma financial information has been prepared for comparative purposes only, and is not intended to be indicative of what the Company's results would have been had the acquisition occurred at the beginning of the periods presented or of the results which may occur in the future, for a number of reasons. These reasons include, but are not limited to, differences between the assumptions used to prepare the pro forma information, potential cost savings from operating efficiencies, and the impact of incremental costs incurred in integrating the businesses.

The Company incurred and expensed acquisition costs of $\$ 2.6$ million related to the acquisition. No acquisition-related costs were incurred during 2018.

## CHAPTER 6

# Summary of Earnings (Including Cost of Capital) 

## Company Witness: Timothy S. Lyons

# SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA SUMMARY OF AUTHORIZED OVERALL RESULTS OF OPERATIONS FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021 




| Line <br> No. | Description |
| :--- | :--- |
|  |  |
|  |  |
| 1 | Debt |
| 2 | Common Equity |
| 3 | Cost of Capital |

$$
\begin{gathered}
\text { SOUTHWEST GAS CORPORATION } \\
\text { NORTHERN CALIFORNIA } \\
\text { COST OF CAPITAL }
\end{gathered}
$$

$$
\begin{array}{rlr}
\text { Rate } & & \text { Weight } \\
\cline { 1 - 1 } & & (\mathrm{d}) \\
& \\
4.67 \% & 47.00 \% \\
10.50 \% & 53.00 \% \\
& 100.00 \% \\
\hline \hline
\end{array}
$$

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> COMPUTATION OF GROSS REVENUE CONVERSION FACTOR <br> TEST YEAR 2021

| Line No. | $\frac{\text { Description }}{\text { (a) }}$ | $\frac{\text { Reference - Col (d) }}{\text { (b) }}$ | Base Amount (c) | Rate (d) |  | Amount <br> (e) | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Gross Operating Revenues |  |  |  | \$ | 1,000.00 | 1 |
| 2 | Less: Uncollectibles | WP Ch 6, Sh 3, Ln 6(c) | 1,000.00 | 0.0495\% |  | 0.49 | 2 |
| 3 | Subtotal |  |  |  | \$ | 999.51 | 3 |
| 4 | Less: Franchise Taxes | WP Ch 15, Sh 9, Ln 10(c) | 999.51 | 2.0218\% |  | 20.21 | 4 |
| 5 | Subtotal |  |  |  | \$ | 979.30 | 5 |
| 6 | Less: State Income Tax | WP Ch 16, Sh 6, Ln 2(b) | 979.30 | 8.8400\% |  | 86.57 | 6 |
| 7 | Subtotal |  |  |  | \$ | 892.73 | 7 |
| 8 | Less: Federal Income Tax | WP Ch 16, Sh 6, Ln 1 (b) | 892.73 | 21.0000\% |  | 187.47 | 8 |
| 9 | Total |  |  |  | \$ | 705.25 | 9 |
| 10 | Gross Revenue Conversion Factor | (Ln $1 / \operatorname{Ln} 9)$ |  |  |  | 1.41793 | 10 |

## CHAPTER 7

Escalation

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA ESCALATION AND CONSTANT DOLLAR FACTORS CHAPTER 7

The labor escalation factor for 2019 was based on the actual wage increase granted during 2019. The 2020 and 2021 labor escalation factors were developed based on the actual, 7-year historical average of non-exempt wage increases granted at Southwest Gas Corporation. See Chapter 7 Workpapers, Sheet 1.

See Chapter 18 for the computation of the labor loading (pensions and benefits) escalation methodology and percentages for 2019, 2020, and 2021.

The non-labor escalation factor for 2019 utilized the forecasted inflation for nonlabor from the Consumer Price Index - All Urban Consumers. The forecast source is recent Blue Chip Economic Indicators and Blue Chip Financial Forecasts reports. See Chapter 7 Workpapers, Sheet 2.

The constant dollar factors were computed using the compounded escalation factors with 2018 as the base year. The source is the Consumer Price Index - All Urban Consumers from the U.S. Department of Labor Bureau of Labor Statistics. The indices were then recalculated to set 2018 as the base year (i.e. $2018=$ 100). See Chapter 7 Workpapers, Sheet 3.

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA ESCALATION PERCENTAGES

| Line No. | Description | Escalation Factor | Compounded Escalation 2021 | Line No. |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |  |
| 2018 Escalation Percentages |  |  |  |  |
| 1 | Labor - Corporate |  | 1.0000 | 1 |
| 2 | Labor - Division |  | 1.0000 | 2 |
| 3 | Materials and Expenses |  | 1.0000 | 3 |
| 2019 Escalation Percentages |  |  |  |  |
| 4 | Labor - Corporate | 1.0230 | 1.0230 | 4 |
| 5 | Labor - Division | 1.0230 | 1.0230 | 5 |
| 6 | Materials and Expenses | 1.0180 [1] | 1.0180 | 6 |
| 2020 Escalation Percentages |  |  |  |  |
| 7 | Labor - Corporate | 1.0229 | 1.0464 | 7 |
| 8 | Labor - Division | 1.0229 | 1.0464 | 8 |
| 9 | Materials and Expenses | 1.0210 [1] | 1.0394 | 9 |
| 2021 Escalation Percentages |  |  |  |  |
| 10 | Labor - Corporate | 1.0229 | 1.0703 | 10 |
| 11 | Labor - Division | 1.0229 | 1.0703 | 11 |
| 12 | Materials and Expenses | 1.0210 [1] | 1.0612 | 12 |

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA CONSTANT DOLLAR FACTORS

| Line <br> No. | Year | Annual <br> Avg CPI | Factor | Line No. |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |  |
|  |  | [1] |  |  |
| 1 | 2012 | 229.594 | 0.91433 | 1 |
| 2 | 2013 | 232.957 | 0.92772 | 2 |
| 3 | 2014 | 236.736 | 0.94277 | 3 |
| 4 | 2015 | 237.017 | 0.94389 | 4 |
| 5 | 2016 | 240.007 | 0.95580 | 5 |
| 6 | 2017 | 245.120 | 0.97616 |  |
| 7 | 2018 | 251.107 | 1.00000 | 7 |

[^0]CHAPTER 8
System Allocable

## Company Witness: Timothy S. Lyons

## CHAPTER 8A Expenses

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA SYSTEM ALLOCABLE EXPENSES CHAPTER 8, TAB A

Chapter 8A contains System Allocable expenses, before and after allocation to Northern California, in nominal dollars and 2018 dollars. Labor, labor loading, and materials and expenses are provided by FERC account. Seven years of historical data are provided (2012 through 2018), as well as three years of projections (2019, 2020, and Test Year 2021). All amounts are rounded to the nearest dollar.

Projection Methodologies: The projections for system allocable expenses were developed on a total Company basis, to eliminate the impact that varying rates of growth amongst the Company's various ratemaking jurisdictions have on the amounts allocated to Northern California (this can be verified by analyzing the historical 4-factor allocation calculations provided in Chapter 8C).

The labor loading (pensions and benefits) percentage for each projected year is calculated in Chapter 18. This percentage is applied to each dollar of projected labor in each account in Chapter 8A workpapers. The labor loading required for each projected year is calculated in the Chapter 8 A sheets $3-4 \operatorname{col}(\mathrm{q})$, col(s), and col(u). The adjustments required to increase expenses each year is shown in Chapter 8A workpapers col(d).

The projected amounts for labor and non-labor are escalated based on the compounded escalation factors described in Chapter 7.

Account 920: These expenses have generally increased by an increase in staffing over the past 7 years. Specifically, Southwest Gas employees assigned to corporate have increase from 590 employees in 2011 to 902 employees in 2018. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 921: These expenses have generally increased over the past 7 years, approximately at the rate of inflation. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 922: These credits have generally increased over the past 7 years, approximately at the rate of inflation. The 2018 credit level is expected to continue; thus, projections were based on 2018 expenses.

Account 923: These expenses have generally increased over the past 7 years, largely related to implementation and maintenance of additional technology at the Company. Specifically, the higher expenses are associated with outside contractor services to maintain software projects. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 924: These expenses have generally increased over the past 7 years, largely related to increases in plant investments. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 925: These expenses have generally increased over the past 7 years, approximately at the rate of inflation. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses. Self-insured retention was projected based on a 7-year average normalization of settlements.

Account 926: These expenses are higher in 2018 since the expenses were previously charged through labor loading. The projections were based on a seven-year normalization of 2013 through 2019 pension, post-employment benefits other than pension, and supplemental executive retirement plan costs for the projected periods.

Account 930.1: These expenses are zero since Southwest Gas charges all safety advertising expenses directly to each ratemaking jurisdiction.

Account 930.2: These expenses have generally fluctuated over the past 7 years. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 931: These expenses have generally decreased over the past 7 years. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 935: These expenses have generally increased over the past 7 years, largely related to increases in plant investments. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.


# CHAPTER 8B Rate Base 

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION SYSTEM ALLOCABLE <br> RATE BASE <br> CHAPTER 8, TAB B

Chapter 8, Tab B contains the computations of the allocation of System Allocable Gas Plant in Service (GPIS) and Accumulated Depreciation and Amortization (AD\&A) to Northern California (NCA) for the historical years 2012 through 2018 (historical period), and projections for years 2019, 2020 and test year 2021.

System Allocable GPIS and AD\&A is allocated to NCA based on the use of the 4Factor Allocation percentage as shown in Chapter 8, Tab C.

The System Allocable GPIS and AD\&A amounts are shown by FERC account. They are also reported by plant functions (Intangible and General). GPIS is compiled to report a beginning balance, additions, retirements/transfers, and an ending balance. AD\&A is also compiled to report a beginning balance, the provision for depreciation expense, retirements, transfers/costs of removal/net salvage value, and an ending balance.

System Allocable GPIS and AD\&A are computed by using actual, recorded amounts for the years 2012 through 2018.

The projected year 2019 GPIS computation begins with the recorded year-end 2018 GPIS balance and adds the projected additions through December 2019. System Allocable GPIS consists of the intangible and general plant functions. The projected year 2019 intangible plant projection is estimated on a project basis. Software development projects that either closed to plant in service by May 2019, or are expected to close by December 2019 were used in the projection. A detail listing of projects expected to close is shown on Chapter 8B Workpapers Sheet 10-13. The 2019 general plant projection is based on the Company's capital planning as shown on Chapter 8B Workpaper Sheet 5. Overheads are not applied to general plant. The general additions plant are adjusted for the 2018 escalation factors contained in Chapter 7. Retirements for the projected year 2019 are based on the seven-year average of the historical period as shown on Chapter 8 Workpapers Sheet 2. Retirements are historical amounts and are not subject to escalation.

Chapter 8, Tab B also contains the calculation of the average of the sum of the year-end 2018 and the year-end 2019 GPIS balances to determine the average 2019 balance of System Allocable GPIS used for SC. This average is carried forward to Chapter 17 to determine the average rate base for 2019.

Chapter 17 also contains the calculation of the simple average of the sum of the year-end 2018 and the year-end 2019 GPIS balances to determine the average

2019 balance of System Allocable GPIS used for SC. These additions are escalated by the factors shown in Chapter 7 and are calculated in Chapter 8 Workpapers at Sheet 5.

The 2019 AD\&A computation begins with the year-end 2018 AD\&A balance. An annualized depreciation and amortization provision for 2019, utilizing the halfyear convention for forecasted 2019 additions, is added to that balance, with the exception of Account 303. The Account 303 amortization provision is based on the calculations shown in the Chapter 8B Workpapers, Sheets 10-13. The 2019 forecasted retirements, removal costs and net salvage values were based on the historical period seven-year average of System Allocable plant retired/removed. The calculations can be found in the Chapter 8B Workpapers at Sheets 2 through 4.

Chapter 8, Tab B, also contains the calculation of the average of the sum of the year-end 2018 and year-end 2019 AD\&A balances to determine the average 2019 AD\&A balance of System Allocable AD\&A used for SC. This average is carried forward to Chapter 17 to determine the average rate base for 2019.

Chapter 17 also contains the calculation of the simple average of the sum of the year-end 2018 and year-end 2019 AD\&A balances to determine the average 2019 balance of System Allocable AD\&A used for SC.

The 2020 GPIS computation begins with the year-end 2019 GPIS balance and adds the projected intangible plant for 2020, as summarized in the Chapter 8B Workpapers at Sheet 5. The general plant System Allocable additions are based on Company's capital planning. These additions are escalated by the factors shown in Chapter 7 and are calculated in the Chapter 8B Workpapers at Sheet 5. The 2020 retirements are based on the historical period seven-year average of System Allocable plant retired as detailed in the Chapter 8B Workpapers at Sheet 2.

Chapter 17 contains the calculation of the simple average of the sum of the yearend 2019 and year-end 2020 GPIS balances to determine the average 2020 balance of System Allocable GPIS used for SC.

The 2020 AD\&A computation begins with the year-end 2019 AD\&A balance. An annualized depreciation and amortization provision for 2020, utilizing the halfyear convention for forecasted 2020 additions, is added to that balance, with the exception of Intangible Plant. The Account 303 amortization provision is based on the calculations shown in the Chapter 8B Workpapers, Sheets 10-13. The 2020 forecasted retirements, removal costs and net salvage values were based on the historical period seven-year average of System Allocable plant retired/removed, and salvaged. The calculations can be found in the Chapter 8B Workpapers at Sheets 2 through 4.

Chapter 17 contains the calculation of the simple average of the sum of the yearend 2019 and the year-end 2020 AD\&A balances to determine the average 2020 balance of System Allocable AD\&A used for SC.

The 2021 GPIS computation begins with the year-end 2020 GPIS balance and adds the projected additions for Intangible Plant for 2021, as summarized in the Chapter 8B Workpapers at Sheet 5. The general plant System Allocable additions are based on the Company's capital planning. These additions are escalated by the factors shown in Chapter 7 and are calculated in the Chapter 8B Workpapers at Sheet 5. The 2021 retirements are based on the historical period seven-year average of System Allocable plant retired as detailed in the Chapter 8B Workpapers at Sheet 2.

Chapter 17 contains the calculation of the simple average of the sum of the yearend 2020 and year-end 2021 GPIS balances to determine the average 2021 balance of System Allocable GPIS used for NCA in the test year.

The 2021 AD\&A computation begins with the year-end 2020 AD\&A balance. An annualized depreciation and amortization provision for 2021, utilizing the halfyear convention for forecasted 2021 additions, is added to that balance, except for Account 303. The Account 303 amortization provision is based on the calculations shown in the Chapter 8B Workpapers at Sheets 10-13. The 2021 forecasted retirements, removal costs and net salvage values were based on the historical period seven-year average of System Allocable plant retired and salvage. The calculations are shown in Chapter 8B Workpaper Sheets 2 through 4.

Chapter 17 contains the calculation of the simple average of the sum of the yearend 2020 and year-end 2021 AD\&A balances to determine the average 2021 balance of System Allocable AD\&A used for NCA in the test year.

System Allocable deferred taxes are computed in Chapter 16 of this filing.
Amortization expense for 2019, 2020 and 2021 is based on the amortization of individual projects that generally have a useful life of three to five years. Major software development projects have useful lives of ten and in some cases fifteen years. The calculation of amortization expense is computed in Chapter 8B Workpaper, Sheets 10-13. The system allocable depreciation expense for years 2019, 2020 and 2021 are calculated using rates effective January 1, 2019. System Allocable amortization and depreciation expense are subject to the 4factor allocation contained in Chapter 8C for the NCA rate jurisdiction.
SOUTHWEST GAS CORPORATION
MATERIALS AND SUPPLIES ACCOUNTS 154, 155 AND 163

| LineNo. | Description | 13-Month Balances [1] |  |  |  |  |  |  |  | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |  |
|  | (a) |  | (b) | (c) | (d) | (e) | (f) | (g) | (h) |  |
| [1] ${ }^{\text {l }}$ |  |  |  |  |  |  |  |  |  |  |
| 1 | December | \$ | $(31,307)$ \$ | $(29,537)$ \$ | $(21,037)$ \$ | $(17,537)$ \$ | $(17,537)$ \$ | $(15,829)$ \$ | $(14,365)$ | 1 |
| 2 | January |  | $(30,966)$ | $(26,037)$ | $(17,537)$ | $(17,537)$ | $(17,537)$ | $(15,835)$ | $(14,091)$ | 2 |
| 3 | February |  | $(31,011)$ | $(25,037)$ | $(17,537)$ | $(17,537)$ | $(17,387)$ | $(15,197)$ | $(13,766)$ | 3 |
| 4 | March |  | $(31,011)$ | $(24,537)$ | $(17,537)$ | $(17,537)$ | $(17,402)$ | $(15,104)$ | $(13,425)$ | 4 |
| 5 | April |  | $(31,011)$ | $(23,258)$ | $(17,537)$ | $(17,537)$ | $(16,010)$ | $(14,805)$ | $(13,420)$ | 5 |
| 6 | May |  | $(31,011)$ | $(24,037)$ | $(17,537)$ | $(17,537)$ | $(284,690)$ | $(14,802)$ | $(12,856)$ | 6 |
| 7 | June |  | $(31,011)$ | $(22,126)$ | $(17,537)$ | $(17,537)$ | $(15,996)$ | $(14,801)$ | $(12,266)$ | 7 |
| 8 | July |  | $(31,011)$ | $(24,037)$ | $(17,537)$ | $(17,537)$ | $(15,964)$ | $(14,801)$ | $(79,713)$ | 8 |
| 9 | August |  | $(31,011)$ | $(21,537)$ | $(17,537)$ | $(17,537)$ | $(15,964)$ | $(14,252)$ | $(76,501)$ | 9 |
| 10 | September |  | $(31,037)$ | $(21,537)$ | $(17,537)$ | $(17,537)$ | $(15,964)$ | $(14,467)$ | $(76,310)$ | 10 |
| 11 | October |  | $(30,037)$ | $(21,037)$ | $(17,537)$ | $(17,537)$ | $(15,930)$ | $(13,915)$ | 31,551 | 11 |
| 12 | November |  | $(29,537)$ | $(21,037)$ | $(17,537)$ | $(17,537)$ | $(15,562)$ | $(14,323)$ | $(75,649)$ | 12 |
| 13 | December |  | $(29,537)$ | $(21,037)$ | $(17,537)$ | $(17,537)$ | $(15,829)$ | $(14,365)$ | $(75,491)$ | 13 |
| 14 | 13-Month Total | \$ | $(399,498)$ \$ | $(304,792)$ \$ | $(231,482)$ \$ | $(227,983)$ \$ | $(481,771)$ \$ | $(192,494)$ \$ | $(446,303)$ | 14 |
| 15 | 13-Month Average | \$ | $(30,731)$ \$ | $(23,446)$ \$ | $(17,806)$ \$ | $(17,537)$ \$ | $(37,059)$ \$ | $(14,807)$ \$ | $(34,331)$ | 15 |
| 16 | NCA 4-Factor |  | 1.46\% | 1.45\% | 1.57\% | 1.57\% | 1.58\% | 1.65\% | 1.56\% | 16 |
| 17 | NCA Allocation | \$ | (448) $\$$ | (340) $\$$ | (280) $\$$ | (276) $\$$ | (586) $\$$ | (244) $\$$ | (534) | 17 |
| 18 |  |  |  |  |  |  |  | ar Average \$ | $(25,102)$ | 18 |
| 19 |  |  |  |  |  |  |  | A 4-Factor | 1.56\% | 19 |
| 20 |  |  |  |  |  |  |  | Allocation \$ | (391) | 20 |
|  |  |  |  |  |  |  |  |  | h 8B, Sh 4(i) |  |
|  | [1] Company Records |  |  |  |  |  |  |  |  |  |


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CHAPTER 8C

## Allocation Factors

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> ALLOCATION FACTORS <br> CHAPTER 8, TAB C

The allocation chapter contains seven years of historical allocation factors, as well as allocation factors projected for 2019, 2020, and 2021, which are used to allocate common expenses that have not already been allocated within Southwest Gas' general ledger for ratemaking purposes.

4-Factor: The 4-Factor allocation methodology is calculated from the following four items, which are equally weighted to determine the recorded 4-Factor percentages:
Factor I: direct operating expenses;
Factor II: average direct gas plant in service;
Factor III: direct labor;
Factor IV: average number of customers.
The projected 4-Factors are based on the calculation from data recorded during 2018.

Modified Massachusetts Formula (MMF): The MMF is used to allocate common costs to Southwest Gas' federal ratemaking jurisdictions. The MMF is calculated from the following three items, which are equally weighted to determine the recorded MMF:

1. direct labor
2. margin
3. gross plant

The projected MMF factors are based on the calculation from data recorded during 2018 for the same reason recorded factors were used for the projected 4Factors.

A\&G Overhead Factor: The A\&G overhead factor is used to capitalize a percentage of A\&G in Accounts 920 and 921 to construction. The credit to A\&G is in Account 922. This credit in Account 922 is allocated to the various ratemaking jurisdictions based on the A\&G overhead factor. The recorded overhead factor is calculated based on each jurisdiction's relative percentage of construction. The projected A\&G overhead factors are based on a seven-year historical average.

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\begin{gathered}
\begin{array}{c}
\text { SOUTHWEST GAS CORPORATION } \\
\text { NORTHERN CALIFORNIA }
\end{array} \\
\text { SUMMARY OF 4-FACTOR ALLOCATION FACTORS } \\
\text { 2012 THROUGH 2021 }
\end{gathered}
$$









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| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
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| 9 | \％00＇001 |  | \％SO＇0 |  | \％SO＇t |  | \％tL＇8乙 |  | \％レ6 ${ }^{\circ}$ |  | \％ 290 |  | \％06．9 |  | \％8＇て |  | \％9¢＇z¢ |  | ｜eło | 9 |
| G | 6 6ガと¢S「レカガカ |  | 0zs＇ 291 ＇乙 | \＄ | ع08＇z80＇081 |  | Z89＇688＇9Lでし |  | ャ68＊0L8「くレて |  | 9 ${ }^{\circ} 8^{\prime} \mathrm{G} \angle \mathrm{t}^{\prime} \angle Z$ | \＄ | \＆とし「レャて＇90¢ |  | LL9＇GlL＇96 | \＄ |  | \＄ | fueld ssoup | G |
| $\dagger$ | \％00．001 |  | \％ 80 |  |  |  |  |  | \％91＇s |  | \％Z8．0 |  | \％ 6 6 4 |  | \％レ゙て |  | $\% L 6$ ¢ |  | ｜eło | $\downarrow$ |
| $\varepsilon$ | OZL＇GSL＇G8L | \＄ | 6Str912 | \＄ | 698＇909＇1 |  | とてヤ＇9と6‘と0乙 |  | 86と＇6Zs＇0t | \＄ | \＆ऽ9＇カてカ＇9 | \＄ | 081＇290＇z9 | \＄ | 096＇869＇91 | \＄ | 88L＇9LL＇とても | \＄ | u！bıew | $\varepsilon$ |
| $\tau$ | \％00＇001 |  | \％00＇0 |  | \％6でと |  | $\% \angle \varepsilon \varepsilon 乙$ |  | \％68．9 |  | \％ZL＇0 |  | \％乙8＇8 |  | \％ $80 \cdot 1$ |  | $\%$ \％と．99 |  |  | 乙 |
| $\downarrow$ | 068＇018＇\＆6 | \＄ | 0 | \＄ | 8\＆L＇980＇$\varepsilon$ |  | 96ヶ＇GZ6＇レて |  | 880＇966＇s |  | 96L＇6＜9 |  | ャ99＇カLて＇8 | \＄ | OGZ＇sı0＇ | \＄ | 600 ＇ャ¢8＇乙¢ | \＄ |  | $\downarrow$ |
|  | （！） |  | （！） |  | （4） |  | （6） |  | （ $\dagger)$ |  | （ә） |  | （p） |  | （0） |  | （q） |  |  |  |
| $\begin{aligned} & \hline \text { ON } \\ & \text { әu! } 7 \end{aligned}$ | ｜ełol |  |  |  | әъn！ed |  | ＾NS |  | ＾NN |  | 175 |  | $\forall$ OS |  | $\forall$ ON |  | Z $V$ |  | uo！？d！usea | $\begin{aligned} & \hline \mathrm{ON} \\ & \text { ר רוּ } \end{aligned}$ |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| 8 | \％00＇001 |  | \％ EO＇0 $^{\circ}$ |  | \％てO ${ }^{\text {t }}$ |  | \％GL｀GZ |  | \％6でG |  | \％LL＇0 |  | \％98 ${ }^{\circ}$ |  | \％92＇L | $\%$ CS ${ }^{\text {b }}$ S |  |  | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L | \％00＇00ع |  | \％ $\mathrm{OL}^{\circ} \mathrm{O}$ |  | \％90＇で |  | \％ç゙LL |  | \％88＇${ }^{\text {¢ }}$ |  | \％レと＇て |  | \％8G ¢ |  | \％8でG | \％¢¢ ¢91 |  | ｜セłロ」 | L |
| 9 | \％00＇001 |  | \％SO＇0 |  | \％てL「カ |  | \％98．8乙 |  | \％6L＇カ |  | \％SL゙0 |  | \％ $00 \cdot \mathrm{~L}$ |  | \％SL＇て | \％8L＇ZG |  | ｜eło | 9 |
| G | て89＇とらガヤく9＇ヤ | \＄ | OZS＇LSL＇Z | \＄ | 9GL＇ELL＇Z61 |  | LS8＇GL9＇sZと＇L |  | †Z0‘9ZL＇とてZ | \＄ | レع0＇0tr＇s¢ |  | 8Z9｀とて0｀$\angle 乙 \varepsilon$ | \＄ | LLL＇EL9＇001 |  | \＄ | fueld ssoro | G |
| $\downarrow$ | \％00＇001 |  | \％SO＇0 |  | \％¢でャ |  | \％で・¢ |  | \％66＇$\dagger$ |  | \％6200 |  | \％ $9^{\circ}{ }^{\circ}$ |  | \％+0 ＇$て$ | \％01－s |  |  | $\downarrow$ |
| $\varepsilon$ | L90＇920＇ 218 |  | 8Lく＇Gレt | \＄ | ャ8t＇9しく「も | \＄ | 8SL＇69Z＇90Z |  | G01＇28L＇0t | \＄ | 06L＇Etガ9 |  | 8L6‘8Z9＇z9 | \＄ | ZLt＇GOL＇91 | z9と＇60て＇09ヶt | \＄ | u！̣ıew | $\varepsilon$ |
| 乙 | \％00．001 |  | \％00＇0 |  | \％69 ${ }^{\circ} \varepsilon$ |  | \％9L｀を |  | \％ 1 －${ }^{\text {9 }}$ |  | \％LL＇0 |  | \％ 86.8 |  | \％ $80 \cdot 1$ | \％99＇s |  | ｜ełol Of luajard | 乙 |
| $\downarrow$ |  | \＄ |  | \＄ | $691 \times 66 \varepsilon^{\prime} \varepsilon$ |  | L19＇ャ68＇レて |  | EtL＇tz9＇s | \＄ | LOZ＇s02 |  | 188‘9zて＇8 | \＄ | LSて＇666 | 061＇ャ8て＇レG | \＄ | ৷09¢ | $\downarrow$ |
|  | （！） |  | （！） |  | （4） |  | （6） |  | （ $\downarrow$ ） |  | （ә） |  | （p） |  | （）） | （q） |  |  |  |
| ON จบ！ 7 | $\mid$｜리이 |  | Э」๑S |  | әın！ed |  | ＾NS |  | ＾NN |  | 17S |  | $\forall$ SS |  | $\forall$ ON | ZV |  | uo！！d！ıうsə | －ON әи！า |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| 8 | \％00＇001 |  | \％ 800 |  | $\% \angle 6 \cdot \varepsilon$ |  | \％カt G |  | \％+ －${ }^{\text {S }}$ |  | \％ $8 L^{\circ} 0$ |  | \％08＇L |  | \％$\varepsilon L^{*} \cdot$ | \％ $08{ }^{\text { }} \mathrm{\square} \mathrm{~S}$ |  |  | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $L$ | \％00＇00ع |  | \％ $80{ }^{\circ}$ |  | \％て6．1． |  | \％てと 92 |  | \％レع91 |  | \％S\＆＇乙 |  | \％レナ |  | \％61＇s | \％レガャ91 |  | ｜セłロ」 | L |
| 9 | \％00＇001 |  | \％ 800 |  | \％ $00 \cdot \downarrow$ |  | \％ $96.2 乙$ |  | \％ $02 \cdot \downarrow$ |  | \％LL＇O |  | \％SO＇L |  | \％98＇乙 |  |  | ｜eło | 9 |
| G | 0ヤて＇66ガて88＇ゅ | \＄ | t9て＇169＇レ | \＄ | 069＇Z\＆9＇S61 | \＄ | 9SL＇z91＇s98＇レ |  | 0ع8‘と0ヤ＇6てZ | \＄ | レレで $288 \times 2$ ¢ |  |  | \＄ | 0Z8‘900‘SIL | 1ع9＇c91＇ท6s＇乙 | \＄ | fueld ssoro | G |
| $\dagger$ | \％00＇001 |  | \％SO＇0 |  | \％90＇$\downarrow$ |  | \％00＇s ${ }^{\circ}$ |  | $\% E 0 \cdot ¢$ |  | \％ $8 L^{\circ} 0$ |  | \％98＇L |  | \％ \＆$^{\cdot}$ ． | \％68＇s |  |  | $\downarrow$ |
| $\varepsilon$ | 099＇898＇を¢8 | \＄ | Otع＇80t | \＄ | ع68＇909＇ャ $\downarrow$ | \＄ | 196＇198＇とし乙 |  | ちて9「068「で | \＄ | 096‘8t9‘9 |  | G61＇66L＇z9 | \＄ | ع98＇899＇¢ | ャて8＇£86＇9くヵ | \＄ | u！bıew | $\varepsilon$ |
| 乙 | \％00＇001 |  | \％00＇0 |  | \％98＇$\varepsilon$ |  | \％9ع＇દ乙 |  | \％88＇9 |  | \％080 |  | \％00＇6 |  | \％ $00 \cdot$－ | $\% 68$ ¢я |  |  | 乙 |
| $\downarrow$ | てしで $268{ }^{\text {a }}$（6 | \＄ | 0 |  | $0 \varepsilon$ ¢＇0ss＇$^{\prime}$ | \＄ | ع18＇L9t＇レて |  | 18t＇$\angle \pm 0 \times 9$ | \＄ | ع09＇¢عL |  | てャ9＇tくで8 | \＄ | ャ06‘てZ6 | $6 \varepsilon \varepsilon^{\prime} 868{ }^{\prime} 09$ | \＄ | ৷09¢ | $\downarrow$ |
|  | （！） |  | （！） |  | （4） |  | （6） |  | （ $\downarrow$ ） |  | （ә） |  | （p） |  | （ 0 | （q） |  |  |  |
| $\begin{aligned} & \hline \text { on } \\ & \text { әuıl } \end{aligned}$ | ｜ełol |  | O•S |  | әłn！ed |  | ＾NS |  | ＾NN |  | 17S |  | $\forall$ SS |  | $\forall$ ON | ZV |  | uo！！d！ussə | $\begin{aligned} & \hline \text { ON } \\ & \text { әu! } 7 \end{aligned}$ |
|  <br>  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| 8 | \％00＇001 |  | \％E0＇0 |  | \％00＇t |  | \％Zと＇¢乙 |  | \％$\angle \mathcal{S}^{\circ} \mathrm{G}$ |  | \％Z8＇0 |  | \％ $89{ }^{\circ} \mathrm{L}$ |  | \％LL＇L |  | $\% \angle 8{ }^{\circ} \downarrow$ |  | $\pm W W 10 \downarrow 0 \perp$ | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $L$ | \％00＇00ع |  | \％60＇0 |  | \％66－レ |  | \％L6＇GL |  | \％02．91 |  | \％Str |  | \％68＇ $\mathrm{Z乙}$ |  | \％0¢＇${ }^{\circ}$ |  | \％19＇ャ91 |  | ｜セłロ」 | L |
| 9 | \％00＇001 |  | \％$+0 \times 0$ |  | \％ZO＇${ }^{\text {® }}$ |  | \％ZS＇LZ |  | \％ 69 ＇$\dagger$ |  | \％8200 |  | \％06． 9 |  | \％Z¢＇乙 |  | \％6¢＇$¢$ ¢ |  | ｜eło | 9 |
| G |  | \＄ | OZS＇ $291 \times$＇ |  | 108＇sLZ＇LOZ | \＄ | 9St「6E0「8レガレ |  | ャ69＇968‘8¢乙 | \＄ | 09L＇66て＇0t |  | Z88‘688‘ऽSع | \＄ | とャع＇レ6L＇6Zし | \＄ | LOS＇tSL＇L9L＇Z | \＄ | fueld ssoro | G |
| $\dagger$ | \％00＇001 |  | \％SO＇0 |  | \％ZL＇ |  | \％98＇¢ |  | \％ $10 \cdot \mathrm{G}$ |  | \％9200 |  | \％カガく |  | \％て8＇ |  | \％カ8 $\mathrm{c}^{\text {c }}$ |  |  | $\downarrow$ |
| $\varepsilon$ | 8८¢＇6ャ8＇898 | \＄ | 09ぐレレ | \＄ | レて「‘0ع‘て¢ | \＄ | 8\＆9｀01E‘0zて |  | S\＆t＇G6t＇\＆t | \＄ | 601＇LE9‘9 |  | 91ع‘899＇t9 | \＄ | $6 \varepsilon 99^{\prime}\left\llcorner\triangleright 8^{\prime}\right.$ ¢ | \＄ | 029＇081＇s8t | \＄ | u！bıew | $\varepsilon$ |
| 乙 | \％00＇001 |  | \％00＇0 |  | \％乌で† |  | \％60＇६乙 |  | \％LO＇L |  | \％ $16{ }^{\circ} 0$ |  | \％SS＇8 |  | \％96．0 |  | \％81－¢¢ |  | ｜eło | 乙 |
| $\downarrow$ | ャ6て＇£9¢＇乙6 | \＄ | 0 |  | 88L＇GZ6‘¢ | \＄ | ع0ع＇6Zと＇レ乙 |  | レーO＇8Zs‘9 | \＄ | て18‘8¢8 |  | 691＇t68＇L | \＄ | عSt＇¢88 | \＄ | $8 Z L^{\prime} 196{ }^{\prime} 09$ | \＄ | ৷09¢ | $\downarrow$ |
|  | （！） |  | （！） |  | （4） |  | （6） |  | （」） |  | （ә） |  | （p） |  | （） |  | （q） |  |  |  |
| $\begin{aligned} & \hline \text { on } \\ & \text { әuıl } \end{aligned}$ | ｜ełol |  | O•S |  | әłn！ed |  | ＾NS |  | ＾NN |  | 17S |  | $\forall$ SS |  | $\forall$ ON |  | ZV |  | uo！！d！ussə | $\begin{aligned} & \hline \text { ON } \\ & \text { әu! } 7 \end{aligned}$ |
|  <br>  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


| 8 | \％00＇001 |  | \％ 800 |  | \％ $\mathrm{L}^{\circ} \mathrm{\square}$ |  | \％9で「て |  | \％99＇G |  | \％と6 ${ }^{\circ}$ |  | \％OG ${ }^{\circ}$ |  | \％ $28 \cdot 1$ |  | \％レぐゅG |  | JWW Iełol | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| L | \％00＇00ع |  | \％60＇0 |  | \％8\＆＇てレ |  | \％6L＇GL |  | \％69＇9 ${ }^{\text {l }}$ |  | \％08＇乙 |  | \％09＇ž |  | $\%$ \％9＇ |  | \％と1．t91 |  | ｜ełol | L |
| 9 | \％00．001 |  | \％$+0 \cdot 0$ |  | \％68＇$\varepsilon$ |  | \％しでくて |  | \％ 69 ＇$\dagger$ |  | \％6＜${ }^{\circ} 0$ |  | \％08＇9 |  | \％9s＇乙 |  | $\% \angle 0{ }^{\circ} \mathrm{S}$ |  | ｜eło | 9 |
| G | Lع8＇09s＇E68＇s |  | 0zs＇ 291 ＇乙 |  | 6ع0＇とャ6‘60z |  |  |  | 80ع＇989＇6ヶて |  | 00て＇七てL｀で |  | ャ0て＇192＇998 | \＄ |  |  | S8と＇レ9ナ「916＇z | \＄ | fueld ssoar | G |
| $\dagger$ | \％00．001 |  | \％S0＇0 |  | \％68＇$\varepsilon$ |  | \％8¢＇乌乙 |  | \％96＇t |  | \％S0＇$\downarrow$ |  | \％ZS＇${ }^{\circ}$ |  | \％ $20^{\circ} \mathrm{Z}$ |  | \％60＇s |  | ｜eło | $\downarrow$ |
| $\varepsilon$ | 90く‘ゅてて＇ャ88 |  | て09「てレ |  |  |  | LSI＇86と＇bてZ |  | \＆S0＇GL8＇¢t |  | L6L＇乙てع‘6 |  |  | \＄ | ャSG＇06で81 |  | LZ8＇980「く8t | \＄ | u！bıew | $\varepsilon$ |
| 乙 | \％00＇001 |  | \％00＇0 |  | \％09 ${ }^{\circ}$ |  | \％0でとて |  | \％ $\mathrm{Ll}^{\circ} \mathrm{L}$ |  | \％96 ${ }^{\circ}$ |  | \％61．8 |  | \％66 0 |  | $\% L 6{ }^{\circ} \mathrm{tG}$ |  | ｜eło | 乙 |
| 1 | 88t＇0عS＇68 | \＄ |  |  | 0¢8‘Sル＇t |  | 881＇ZLL＇0Z |  | レヒE＇LSE＇9 |  | ZLE＇9¢8 |  | ZL9＇6Zと＇L | \＄ | G69＇988 |  | 068＇ELで6t | \＄ | 10qе7 | $\downarrow$ |
|  | （！） |  | （！） |  | （4） |  | （6） |  | （ $\dagger)$ |  | （ә） |  | （p） |  | （） |  | （q） |  |  |  |
| $\begin{aligned} & \hline \text { ON } \\ & \text { ou! } 7 \end{aligned}$ | ｜ełO1 |  | Эค૭S |  | әłn！ed |  | ＾NS |  | ＾NN |  | 17S |  | $\forall$ SS |  | $\forall$ ON |  | Z $V$ |  | uo！！d！ıosəa | $\begin{aligned} & \hline \text { ON } \\ & \text { әu! } 7 \end{aligned}$ |


| 8 | \％00．001 |  | \％EO＇0 |  | \％6で $\downarrow$ |  | \％0t＇s |  | \％ZG＇G |  | \％66．0 |  | \％LS＇$\angle$ |  | \％ $28 \cdot 1$ |  | \％ャどャ¢ |  | $\pm W W \left\lvert\, E+\frac{1}{}\right.$ | 8 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $L$ | \％00＇008 |  | \％80＇0 |  | \％88＇Zレ |  | \％61．92 |  | \％S¢ ${ }^{\circ} 9$ |  | \％96＇乙 |  | \％02＇Z乙 |  | \％Z9＇9 |  | \％Z0＇E91 |  | ｜ełpl | $L$ |
| 9 | \％00＇001 |  | \％+0 O |  | \％8で $\dagger$ |  | \％08．92 |  | \％LS＇t |  | \％ $88^{\circ} 0$ |  | \％ 98.9 |  | \％6ちでて |  | \％Oでャ |  | ｜eło | 9 |
| G | カャ8＇969＇ャ0L＇s |  | 0z9＇L91＇z | \＄ | と6でくてカ＇カャて |  | S89＇169＇829＇レ |  | LOO＇LOt＇Ls |  | GLL＇GOE＇$\angle t$ |  | L8t＇989「068 |  | 69と＇レ91「てカレ |  | 80L＇S06＇L60＇$\varepsilon$ | \＄ | fueld ssodo | G |
| $\checkmark$ | \％00．001 |  | \％SO＇0 |  | \％カー「 |  | \％t9＇sz |  | \％ $10 \cdot \mathrm{G}$ |  | \％$+0^{\circ}$－ |  | \％6S＇L |  | \％90＇乙 |  | \％9t＇$\dagger$ S |  | ｜eło | $\downarrow$ |
| $\varepsilon$ | ESL＇L68＇L06 |  | S9891t | \＄ | 8St＇SSG＇LE |  |  |  | عOt＇0Lt＇St |  | $0 t$ ¢＇6Lt＇6 |  | 088＇ZS6‘89 |  | ヤLL＇$¢$ LL＇8レ |  | LSG＇8Lガロ6カ | \＄ | u！buew | $\varepsilon$ |
| 乙 | \％00＇001 |  | \％00＇0 |  | \％9t゙ $\downarrow$ |  | \％GL｀EZ |  | \％EO＇L |  | \％ $80^{\circ}$－ |  | \％GZ゙8 |  | \％ $20^{\circ} 1$ |  | \％9ど $\downarrow$ G |  | letol Of lueraed | 乙 |
| $\downarrow$ | 6LL｀と0t＇68 | \＄ |  |  | 998＊986＇$\varepsilon$ |  | SII＇9Eて＇レて |  | 861＇t8て＇9 |  | Z68＇ 296 |  | 208＇8LE＇L |  | L68＇\＆¢6 |  | 6S6＇G69＇8t | \＄ | ı09е7 | $\downarrow$ |
|  | （！） |  | （！） |  | （4） |  | （6） |  | （ $\downarrow)$ |  | （ә） |  | （p） |  | （ 0 ） |  |  |  |  |  |
| $\begin{aligned} & \hline \text { ON } \\ & \text { ou! } 7 \end{aligned}$ | 1 ｜ełO1 |  | Эค૭S |  | əın！ed |  | ＾NS |  | ＾NN |  | 17S |  | $\forall$ SS |  | $\forall$ ON |  | Z $V$ |  | uo！！d！ussəด | $\begin{aligned} & \hline \text { ON } \\ & \text { әu! } 7 \end{aligned}$ |
| LLOZ ‘LO 人ヌ甘 <br> （ョww）$\forall$ ） NOIL甘YOdyOכ SVO $\perp$ SヨMH |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |







กั้

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| Line <br> No. | Description |
| :--- | :--- |
|  | (a) |
| 1 | Arizona |
| 2 | Southern California |
| 3 | Northern California |
| 4 | South Lake Tahoe |
| 5 | Southern Nevada |
| 6 | Northern Nevada |
| 7 | Total |

[1] Allocates Account 922 to each ratemaking jurisdiction based on each jurisdiction's relative percentage of capital expenditures.

# CHAPTER 9 <br> Billing Determinants 

## Company Witness: Brandy Little

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA <br> BILLING DETERMINANTS TWELVE MONTHS ENDED DECEMBER 2018 AS RECORDED

| Line No. | Description | Rate Schedule | Number of Bills | Therms |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) |
| 1 | Primary Residential Gas Service | GN-10 | 14,270 | 1,572,125 |
| 2 | Primary Residential Gas Service - PQ/MS | GN-10 | 14 | 1,995 |
| 3 | Primary Residential Gas Service - PQ/MS - Expanded | GN-10 | 1 | 158 |
| 4 | CARE Residential Gas Service | GN-12 | 747 | 62,699 |
| 5 | CARE Residential Gas Service - PQ/MS | GN-12 | 13 | 1,026 |
| 6 | CARE Residential Gas Service - PQ/MS - Expanded | GN-12 | 1 | 40 |
| 7 | Secondary Residential Gas Service | GN-15 | 10,581 | 1,048,426 |
| 8 | Multi-Family Master Metered Apartments Gas Service (No Submeter) | GN-20 | 2 | 1,467 |
| 9 | Multi-Family Master Metered Mobile Homes Gas Service (No Submeter) | GN-20 | 0 | 0 |
| 10 | Multi-Family Master Metered Apartments Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 11 | Multi-Family Master Metered Mobile Homes Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 12 | Small Commercial Gaslight - Association, 0.48 Therms/Day | GN-30 | 0 | 0 |
| 13 | Small Commercial Gaslight - Association, 0.62 Therms/Day | GN-30 | 0 | 0 |
| 14 | Small Commercial Gaslight - Association, 0.72 Therms/Day | GN-30 | 0 | 0 |
| 15 | Agricultural Employee Housing and Nonprofit Group Living | GN-35 | 3 | 321 |
| 16 | Core General Small Commercial Gas Service | GN-40 | 1,545 | 571,500 |
| 17 | Core General Large Commercial Gas Service | GN-40 | 6 | 140,234 |
| 18 | Core General Industrial Commercial Gas Service | GN-40 | 0 | 0 |
| 19 | Core General Irrigation Gas Service | GN-40 | 2 | 33 |
| 20 | Core Natural Gas Service for Motor Vehicles | GN-50 | 3 | 17,451 |
| 21 | Small Electric Power Generation Gas Service | GN-66 | 0 | 0 |
|  | Total Sales Service |  | 27,188 | 3,417,475 |
| 22 | Noncore General Gas Transportation Small Commercial Gas Service | GN-70 | 28 | 54,528 |
| 23 | Noncore General Gas Transportation General Gas Service | GN-70 | 1 | 0 |
| 24 | Noncore General Gas Transportation Small Industrial Gas Service | GN-70 | 1 | 0 |
|  | Total Transportation Service |  | 30 | 54,528 |
|  | Total Gas Service |  | 27,218 | 3,472,003 |

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> BILLING DETERMINANTS TWELVE MONTHS ENDED DECEMBER 2019

| Line No. | Description | Rate Schedule | Number of Bills [1] | Therms [1] |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) |
| 1 | Primary Residential Gas Service | GN-10 | 14,872 | 1,672,303 |
| 2 | Primary Residential Gas Service - PQ/MS | GN-10 | 17 | 2,074 |
| 3 | Primary Residential Gas Service - PQ/MS - Expanded | GN-10 | 1 | 136 |
| 4 | CARE Residential Gas Service | GN-12 | 717 | 57,491 |
| 5 | CARE Residential Gas Service - PQ/MS | GN-12 | 10 | 945 |
| 6 | CARE Residential Gas Service - PQ/MS - Expanded | GN-12 | 1 | 38 |
| 7 | Secondary Residential Gas Service | GN-15 | 10,273 | 1,037,416 |
| 8 | Multi-Family Master Metered Apartments Gas Service (No Submeter) | GN-20 | 2 | 1,549 |
| 9 | Multi-Family Master Metered Mobile Homes Gas Service (No Submeter) | GN-20 | 0 | 0 |
| 10 | Multi-Family Master Metered Apartments Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 11 | Multi-Family Master Metered Mobile Homes Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 12 | Small Commercial Gaslight - Association, 0.48 Therms/Day | GN-30 | 0 | 0 |
| 13 | Small Commercial Gaslight - Association, 0.62 Therms/Day | GN-30 | 0 | 0 |
| 14 | Small Commercial Gaslight - Association, 0.72 Therms/Day | GN-30 | 0 | 0 |
| 15 | Agricultural Employee Housing and Nonprofit Group Living | GN-35 | 3 | 445 |
| 16 | Core General Small Commercial Gas Service | GN-40 | 1,558 | 586,686 |
| 17 | Core General Large Commercial Gas Service | GN-40 | 6 | 137,183 |
| 18 | Core General Industrial Commercial Gas Service | GN-40 | 0 | 0 |
| 19 | Core General Irrigation Gas Service | GN-40 | 2 | 25 |
| 20 | Core Natural Gas Service for Motor Vehicles | GN-50 | 3 | 16,115 |
| 21 | Small Electric Power Generation Gas Service | GN-66 | 0 | 0 |
|  | Total Sales Service |  | 27,465 | 3,512,406 |
| 22 | Noncore General Gas Transportation Small Commercial Gas Service | GN-70 | 32 | 66,930 |
| 23 | Noncore General Gas Transportation General Gas Service | GN-70 | 1 | 0 |
| 24 | Noncore General Gas Transportation Small Industrial Gas Service | GN-70 | 1 | 0 |
|  | Total Transportation Service |  | 34 | 66,930 |
|  | Total Gas Service |  | 27,499 | 3,579,336 |

[1] Workpapers, Chapter 9, Sheet 1-2

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> BILLING DETERMINANTS TWELVE MONTHS ENDED DECEMBER 2020

| Line No. | Description | Rate Schedule | Number of Bills [1] | Therms [1] |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) |
| 1 | Primary Residential Gas Service | GN-10 | 15,457 | 1,739,801 |
| 2 | Primary Residential Gas Service - PQ/MS | GN-10 | 19 | 2,302 |
| 3 | Primary Residential Gas Service - PQ/MS - Expanded | GN-10 | 1 | 136 |
| 4 | CARE Residential Gas Service | GN-12 | 701 | 56,230 |
| 5 | CARE Residential Gas Service - PQ/MS | GN-12 | 10 | 945 |
| 6 | CARE Residential Gas Service - PQ/MS - Expanded | GN-12 | 1 | 38 |
| 7 | Secondary Residential Gas Service | GN-15 | 9,991 | 1,008,097 |
| 8 | Multi-Family Master Metered Apartments Gas Service (No Submeter) | GN-20 | 2 | 1,549 |
| 9 | Multi-Family Master Metered Mobile Homes Gas Service (No Submeter) | GN-20 | 0 | 0 |
| 10 | Multi-Family Master Metered Apartments Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 11 | Multi-Family Master Metered Mobile Homes Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 12 | Small Commercial Gaslight - Association, 0.48 Therms/Day | GN-30 | 0 | 0 |
| 13 | Small Commercial Gaslight - Association, 0.62 Therms/Day | GN-30 | 0 | 0 |
| 14 | Small Commercial Gaslight - Association, 0.72 Therms/Day | GN-30 | 0 | 0 |
| 15 | Agricultural Employee Housing and Nonprofit Group Living | GN-35 | 3 | 445 |
| 16 | Core General Small Commercial Gas Service | GN-40 | 1,571 | 591,551 |
| 17 | Core General Large Commercial Gas Service | GN-40 | 6 | 137,183 |
| 18 | Core General Industrial Commercial Gas Service | GN-40 | 0 | 0 |
| 19 | Core General Irrigation Gas Service | GN-40 | 2 | 25 |
| 20 | Core Natural Gas Service for Motor Vehicles | GN-50 | 3 | 16,115 |
| 21 | Small Electric Power Generation Gas Service | GN-66 | 0 | 0 |
|  | Total Sales Service |  | 27,767 | 3,554,417 |
| 22 | Noncore General Gas Transportation Small Commercial Gas Service | GN-70 | 32 | 66,930 |
| 23 | Noncore General Gas Transportation General Gas Service | GN-70 | 1 | 0 |
| 24 | Noncore General Gas Transportation Small Industrial Gas Service | GN-70 | 1 | 0 |
|  | Total Transportation Service |  | 34 | 66,930 |
|  | Total Gas Service |  | 27,801 | 3,621,347 |

[1] Workpapers, Chapter 9, Sheet 7-8

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> BILLING DETERMINANTS TWELVE MONTHS ENDED DECEMBER 2021

| Line No. | Description | Rate Schedule | Number of Bills [1] | Therms [1] |
| :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) | (d) |
| 1 | Primary Residential Gas Service | GN-10 | 15,929 | 1,793,965 |
| 2 | Primary Residential Gas Service - PQ/MS | GN-10 | 20 | 2,417 |
| 3 | Primary Residential Gas Service - PQ/MS - Expanded | GN-10 | 1 | 136 |
| 4 | CARE Residential Gas Service | GN-12 | 687 | 55,131 |
| 5 | CARE Residential Gas Service - PQ/MS | GN-12 | 10 | 945 |
| 6 | CARE Residential Gas Service - PQ/MS - Expanded | GN-12 | 1 | 38 |
| 7 | Secondary Residential Gas Service | GN-15 | 9,829 | 991,374 |
| 8 | Multi-Family Master Metered Apartments Gas Service (No Submeter) | GN-20 | 2 | 1,549 |
| 9 | Multi-Family Master Metered Mobile Homes Gas Service (No Submeter) | GN-20 | 0 | 0 |
| 10 | Multi-Family Master Metered Apartments Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 11 | Multi-Family Master Metered Mobile Homes Gas Service (With Submeter) | GN-25 | 0 | 0 |
| 12 | Small Commercial Gaslight - Association, 0.48 Therms/Day | GN-30 | 0 | 0 |
| 13 | Small Commercial Gaslight - Association, 0.62 Therms/Day | GN-30 | 0 | 0 |
| 14 | Small Commercial Gaslight - Association, 0.72 Therms/Day | GN-30 | 0 | 0 |
| 15 | Agricultural Employee Housing and Nonprofit Group Living | GN-35 | 3 | 445 |
| 16 | Core General Small Commercial Gas Service | GN-40 | 1,584 | 596,417 |
| 17 | Core General Large Commercial Gas Service | GN-40 | 6 | 137,183 |
| 18 | Core General Industrial Commercial Gas Service | GN-40 | 0 | 0 |
| 19 | Core General Irrigation Gas Service | GN-40 | 2 | 25 |
| 20 | Core Natural Gas Service for Motor Vehicles | GN-50 | 3 | 16,115 |
| 21 | Small Electric Power Generation Gas Service | GN-66 | 0 | 0 |
|  | Total Sales Service |  | 28,077 | 3,595,740 |
| 22 | Noncore General Gas Transportation Small Commercial Gas Service | GN-70 | 32 | 66,930 |
| 23 | Noncore General Gas Transportation General Gas Service | GN-70 | 1 | 0 |
| 24 | Noncore General Gas Transportation Small Industrial Gas Service | GN-70 | 1 | 0 |
|  | Total Transportation Service |  | 34 | 66,930 |
|  | Total Gas Service |  | 28,111 | 3,662,670 |

[1] Workpapers, Chapter 9, Sheet 13-14

## CHAPTER 10

# Operating Revenues 

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA OPERATING MARGIN CHAPTER 10

This chapter sets forth both Southwest Gas authorized operating margins by rate schedule for 2016 through 2020 and the requested operating margins by rate schedule for 2021 through 2025.
SOUTHWEST GAS CORPORATION


| Line No. | Description | Rate Schedule |  | 2016 |  | 2017 |  | 2018 |  | 2019 |  | 2020 | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  |
| 1 | Primary Residential Gas Service | GN-10/ GN-12 | \$ | 7,901,455 | \$ | 8,118,562 | \$ | 8,341,631 | \$ | 8,570,854 | \$ | 8,806,364 | 1 |
| 2 | Secondary Residential Gas Service | GN-15 | \$ | 7,939,626 | \$ | 8,158,006 | \$ | 8,382,346 | \$ | 8,612,812 | \$ | 8,849,664 | 2 |
| 3 | Multi-Family Master Metered Gas Service | GN-20 | \$ | 10,454 | \$ | 10,767 | \$ | 11,089 | \$ | 11,420 | \$ | 11,775 | 3 |
| 4 | Multi-Family Master Metered Gas Service - Submetered | GN-25 | \$ | 10,881 | \$ | 11,317 | \$ | 11,764 | \$ | 12,224 | \$ | 12,708 | 4 |
| 5 | Core General Gas Service | GN-35/ GN-40 | \$ | 2,506,018 | \$ | 2,574,933 | \$ | 2,645,769 | \$ | 2,718,510 | \$ | 2,793,269 | 5 |
| 6 | Core Natural Gas Service for Motor Vehicles | GN-50 | \$ | 14,466 | \$ | 14,863 | \$ | 15,273 | \$ | 15,692 | \$ | 16,124 | 6 |
| 7 | Core Internal Combustion Engine Gas Service | GN-60 | \$ | 697 | \$ | 700 | \$ | 704 | \$ | 707 | \$ | 726 | 7 |
| 8 | Core Small Electric Power Generation Gas Service | GN-66 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | 8 |
| 9 | Sales Subtotal |  |  | 18,383,597 |  | 18,889,148 |  | 19,408,576 |  | 19,942,219 |  | 20,490,630 | 9 |
| 10 | Noncore General Gas Transportation Service | GN-70 | \$ | 59,937 | \$ | 61,586 | \$ | 63,280 | \$ | 65,020 | \$ | 66,808 | 10 |
| 11 | Special Contract Gas Service | G-T |  | 0 |  | 0 | \$ | 0 | \$ | 0 | \$ | 0 | 11 |
| 12 | Other Operating Revenue |  | \$ | 210,566 | \$ | 216,357 | \$ | 222,307 | \$ | 228,420 | \$ | 234,702 | 12 |
| 13 | Total Margin Revenue |  |  | 18,654,100 |  | 19,167,091 |  | 19,694,163 |  | 20,235,659 |  | 2,792,140 | 13 |

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDICTION
SUMMARY OF PROPOSED OPERATING MARGIN FOR 2021-2025 [1] \& [2]

| 2021 | 2022 | 2023 | 2024 | 2025 | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| (c) | (d) | (e) | (f) | (g) |  |
| \$11,705,775 | \$ 12,361,659 | \$ 14,456,874 | \$ 17,407,757 | \$ 20,855,630 | 1 |
| \$ 7,361,033 | \$ 7,773,508 | \$ 9,091,155 | \$ 10,946,916 | \$ 13,115,227 | 2 |
| 9,690 | \$ 10,281 | 12,169 | \$ 14,826 | \$ 17,932 | 3 |
| \$ 0 | \$ 0 | \$ 0 | \$ | \$ 0 | 4 |
| \$ 2,548,911 | \$ 2,691,740 | \$ 3,148,001 | \$ 3,790,598 | \$ 4,541,420 | 5 |
| \$ 6,572 | \$ 6,940 | 8,116 | \$ 9,773 | \$ 11,709 | 6 |
| 744 | \$ 786 | 919 | \$ 1,107 | \$ 1,326 | 7 |
| \$ 0 | \$ 0 | \$ 0 | \$ | \$ 0 | 8 |
| \$21,632,725 | \$ 22,844,914 | \$26,717,234 | \$32,170,977 | \$38,543,244 | 9 |
| \$ 483,191 | \$ 510,267 | \$ 596,760 | \$ 718,575 | \$ 860,907 | 10 |
| \$ 0 | \$ 0 | \$ | \$ 0 | \$ 0 | 11 |
| \$ 145,472 | \$ 153,624 | \$ 179,664 | \$ 216,339 | \$ 259,190 | 12 |
| \$22,261,388 | \$ 23,508,805 | \$27,493,658 | \$33,105,891 | \$39,663,341 | 13 |


| Rate <br> Schedule |
| :---: |
| (b) |
| GN-10/ GN-12 |
| GN-15 |
| GN-20 |
| GN-25 |
| GN-35/ GN-40 |
| GN-50 |
| GN-60 |
| GN-66 |


| Line <br> No. | Description |
| :--- | :--- |
|  | (a) |
| 1 | Primary Residential Gas Service |
| 2 | Secondary Residential Gas Service |
| 3 | Multi-Family Master Metered Gas Service |
| 4 | Multi-Family Master Metered Gas Service - Submetered |
| 5 | Core General Gas Service |
| 6 | Core Natural Gas Service for Motor Vehicles |
| 7 | Core Internal Combustion Engine Gas Service |
| 8 | Core Small Electric Power Generation Gas Service |
| 9 | Sales Subtotal |
| 10 | Noncore General Gas Transportation Service |
| 11 | Special Contract Gas Service |
| 12 | Other Operating Revenue |
| 13 | Total Margin Revenue |

CHAPTER 11

# Gas Supply, Transmission and 

Distribution Expenses

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA CHAPTER 11A LOST AND UNACCOUNTED FOR GAS (LUFG)

This chapter sets forth Southwest Gas' distribution system average LUFG percentage for the five-year period 2014 through December 2018. Recorded purchases and sales reflect a net bss for the period of 0.75 percent. Southwest Gas proposes to use this percentage to calculate the Distribution System rate applicable to transportation customer volumes.

## CHAPTER 11B

Other Gas Supply,

# Transmission and Distribution 

## Company Witness: Timothy S. Lyons

# SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA GAS SUPPLY, TRANSMISSION, AND DISTRIBUTION EXPENSES CHAPTER 11, TAB B 

Chapter 11B contains Northern California gas supply and distribution expenses in nominal dollars and 2018 dollars. Labor, labor loading, and materials and expenses are provided by FERC account. Seven years of historical data is provided (2012 through 2018), and projections are provided for 2019, 2020, and Test Year 2021. All amounts are rounded to the nearest dollar.

Recorded labor loading dollars were adjusted to remove payroll taxes, which are in Chapter 16. Please see Chapter 18 for the recalculation of the recorded labor loading rate without payroll taxes.

Projection Methodologies: The labor loading (pensions and benefits) percentage for each projected year is calculated in Chapter 18. This percentage is applied to each dollar of projected labor in each account. The labor loading required for each projected year is calculated in the Chapter 11 sheets 3-6 col(j), $\operatorname{col}(\mathrm{k})$, and $\operatorname{col}(\mathrm{l})$. The adjustments required to increase expenses each year is shown in Chapter 11 workpapers col(d).

The projected amounts for labor and non-labor are escalated based on the general escalation factors described in Chapter 7.

Gas Supply: These expenses have generally increased over the past 7 years, approximately at the rate of inflation. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Transmission: There are no transmission-related expenses since there is no transmission-related plant.

Distribution: With the exception of Account 880, these expenses have generally increased over the past 7 years, approximately at the rate of inflation. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

For Account 880 (Other Expenses), these expenses have decreased over the last 4-5 years. The lower 2018 expenditure level is not expected to continue; thus, projections were based on a 7-year average.

For Northern California and Salt Lake Tahoe jurisdictions, adjustments are made to 2018 recorded expenses for Accounts 870, 878, 880, 881, 885, 887, 889, 892, and 893 . The adjustments reflect expense amounts that were incorrectly charged to Northern Nevada District 22.
GAS SUPPLY EXPENSE - NOMINAL DOLLARS
 SHEET 3 OF 10

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 [1] Company Records
[2] Labor Loading equals Labor multiplied by the labor loading rate on Ln 6 .

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$\stackrel{\circ}{5} \dot{2}$

| Line <br> No. | Description | Account <br> Number | Recorded [1] |  |  |  |  |  |  |  |  |  |  |  |  |  | Projected 2019 |  |  | Projected 2020 |  |  | Projection Method | LineNo. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  |  |  |  |  |  |
|  | (a) | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  | (h) |  | (i) |  | (j) |  |  |  | ${ }^{\text {(k) }}$ |  | (1) | (m) |  |
| Operation ${ }^{\text {a }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Operation Supervision \& Engineering | 870 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Labor |  | \$ | 175,687 | \$ | 190,768 | \$ | 188,863 | \$ | 179,212 | \$ | 206,726 | \$ | 241,194 | \$ | 427,355 | \$ | 422,406 | \$ | 432,061 | \$ | 441,937 | Prior year | 1 |
| 2 | Labor Loading [5] |  |  | 118,388 |  | 125,621 |  | 107,322 |  | 105,513 |  | 122,502 |  | 137,942 |  | 253,807 |  | 214,517 |  | 219,317 |  | 224,225 | Labor loading adjustment | 2 |
| 3 | Materials and Expenses |  |  | 14,603 |  | 15,739 |  | 18,035 |  | 26,287 |  | 26,003 |  | 18,918 |  | 55,727 |  | 56,730 |  | 57,922 |  | 59,138 | Prior year | 3 |
| 4 | Total |  | \$ | 308,678 | \$ | 332,128 | \$ | 314,221 | \$ | 311,011 | \$ | 355,230 | \$ | 398,053 | \$ | 736,889 | \$ | 693,653 | \$ | 709,300 | \$ | 725,300 |  | 4 |
|  | Distribution Load Dispatching | 871 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 5 | Labor |  | \$ | 21,692 | \$ | 20,749 | \$ | 21,327 | \$ | 25,372 | \$ | 24,619 | \$ | 23,568 | \$ | 24,960 | \$ | 25,534 | \$ | 26,117 | \$ | 26,714 | Prior year | 5 |
| 6 | Labor Loading [5] |  |  | 14,617 |  | 13,663 |  | 12,119 |  | 14,938 |  | 14,589 |  | 13,479 |  | 14,824 |  | 12,967 |  | 13,257 |  | 13,554 | Labor loading adjustment | 6 |
| 7 | Materials and Expenses |  |  | 2,527 |  | 2,591 |  | 2,961 |  | 4,487 |  | 5,520 |  | 4,831 |  | 5,527 |  | 5,627 |  | 5,745 |  | 5,865 | Prior year | 7 |
| 8 | Total |  | \$ | 38,836 |  | 37,002 |  | 36,408 |  | 44,798 |  | 44,727 | \$ | 41,878 |  | 45,310 | \$ | 44,127 | \$ | 45,119 | \$ | 46,134 |  | 8 |
|  | Mains Expense | 874 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Labor |  | \$ | 14,119 | \$ | 8,893 | \$ | 25,196 | \$ | 21,473 | \$ | 52,000 | \$ | 42,263 | \$ | 24,733 | \$ | 25,302 | \$ | 25,881 | \$ | 26,472 | Prior year | 9 |
| 10 | Labor Loading [5] |  |  | 9,514 |  | 5,856 |  | 14,318 |  | 12,642 |  | 30,814 |  | 24,171 |  | 14,689 |  | 12,850 |  | 13,137 |  | 13,431 | Labor loading adjustment | 10 |
| 11 | Materials and Expenses |  |  | 48,998 |  | 55,504 |  | 118,945 |  | 38,975 |  | 127,240 |  | 103,185 |  | 124,570 |  | 126,812 |  | 129,475 |  | 132,194 | Prior year | 11 |
| 12 | Total |  | \$ | 72,632 | \$ | 70,252 | \$ | 158,459 | \$ | 73,090 | \$ | 210,054 | \$ | 169,619 | \$ | 163,992 | \$ | 164,964 | \$ | 168,493 | \$ | 172,097 |  | 12 |
|  | Measuring \& Regulating Station Expense | 875 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Labor |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ | - | Prior year | 13 |
| 14 | Labor Loading [5] |  |  |  |  | - |  | - |  | - |  | - |  | - |  | - |  | ${ }^{-}$ |  | - |  | - | Labor loading adjustment | 14 |
| 15 | Materials and Expenses |  |  | - |  | - |  | 239 |  | - |  | 102 |  | 100 |  | 253 |  | 257 |  | 263 |  | 268 | Prior year | 15 |
| 16 | Total |  | \$ |  |  | - |  | 239 |  | - |  | 102 | \$ | 100 |  | 253 | \$ | 257 | \$ | 263 | \$ | 268 |  | 16 |
|  | Meter and House Regulator Expense | 878 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 17 | Labor |  | \$ | 103,325 | \$ | 69,230 | \$ | 56,722 | \$ | 81,072 | \$ | 94,194 | \$ | 74,930 | , | 141,096 | \$ | 144,341 | \$ | 147,641 | \$ | 151,015 | Prior year | 17 |
| 18 | Labor Loading [5] |  |  | 69,626 |  | 45,588 |  | 32,232 |  | 47,732 |  | 55,818 |  | 42,854 |  | 83,797 |  | 73,303 |  | 74,943 |  | 76,621 | Labor loading adjustment | 18 |
| 19 | Materials and Expenses |  |  | 24,391 |  | 17,200 |  | 14,720 |  | 63,174 |  | 46,247 |  | 101,022 |  | 49,309 |  | 50,197 |  | 51,251 |  | 52,327 | Prior year | 19 |
| 20 | Total |  | \$ | 197,342 | \$ | 132,018 | \$ | 103,674 |  | 191,977 |  | 196,259 | \$ | 218,806 |  | 274,203 | \$ | 267,842 | \$ | 273,835 | \$ | 279,964 |  | 20 |
|  | Customer Installation Expense | 879 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 21 | Labor |  | \$ | 78,333 | \$ | 64,425 | \$ | 58,191 | \$ | 76,546 | \$ | 83,114 | \$ | 117,666 | \$ | 162,092 | \$ | 165,820 | \$ | 169,610 | \$ | 173,487 | Prior year | 21 |
| 22 | Labor Loading [5] |  |  | 52,785 |  | 42,424 |  | 33,067 |  | 45,067 |  | 49,252 |  | 67,295 |  | 96,267 |  | 84,211 |  | 86,095 |  | 88,022 | Labor loading adjustment | 22 |
| 23 | Materials and Expenses |  |  | 11,554 |  | 8,173 |  | 6,469 |  | 24,896 |  | 14,649 |  | 26,265 |  | 42,564 |  | 43,331 |  | 44,241 |  | 45,170 | Prior year | 23 |
| 24 | Total |  | \$ | 142,673 | \$ | 115,022 | \$ | 97,728 | \$ | 146,509 | \$ | 147,014 | \$ | 211,226 | \$ | 300,923 |  | 293,361 | \$ | 299,946 |  | 306,678 |  | 24 |


| Line <br> No. | Description | Account Number | Recorded [1] |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Projected } \\ 2019 \\ \hline \end{gathered}$ |  | $\begin{aligned} & \text { Projected } \\ & 2020 \\ & \hline \end{aligned}$ |  | $\begin{gathered} \text { Test Year } \\ 2021 \\ \hline \end{gathered}$ |  | Projection Method | ine <br> No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  |  |  |  |  |  |  |  |
|  | (a) | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  | (h) |  | (i) |  | (j) |  | (k) |  | (1) | (m) |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Projected [2] |  | Projected [3] |  | Projected [4] |  |  |
|  | Other Expense | 880 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | Labor |  | \$ | 87,324 | \$ | 86,829 | \$ | 86,578 | \$ | 80,375 | \$ | 93,361 | \$ | 127,036 | \$ | 83,149 | \$ | 98,947 | \$ | 101,208 | \$ | 103,522 | 7-Year Average | 25 |
| 26 | Labor Loading [5] |  |  | 58,844 |  | 57,177 |  | 49,199 |  | 47,321 |  | 55,324 |  | 72,653 |  | 49,382 |  | 50,249 |  | 51,374 |  | 52,524 | Labor loading adjustment | 26 |
| 27 | Materials and Expenses |  |  | 66,184 |  | 62,206 |  | 121,546 |  | 161,401 |  | 240,193 |  | 250,986 |  | 135,401 |  | 157,525 |  | 160,833 |  | 164,210 | 7-Year Average | 27 |
| 28 | Total |  | \$ | 212,352 | \$ | 206,212 | \$ | 257,323 | \$ | 289,097 | \$ | 388,878 | \$ | 450,674 | \$ | 267,932 | \$ | 306,721 | \$ | 313,415 | \$ | 320,256 |  | 28 |
| 29 | Rents | 881 | \$ | 236,472 | \$ | 236,727 | \$ | 233,297 | \$ | 213,298 | \$ | 217,202 | \$ | 175,777 | \$ | 201,860 | \$ | 205,493 |  | 209,809 |  | 214,215 | Prior year | 29 |
|  | Total Distribution - Operations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | Labor |  | \$ | 480,481 | \$ | 440,893 | \$ | 436,878 | \$ | 464,049 | \$ | 554,013 | \$ | 626,657 | \$ | 863,385 | \$ | 882,350 | \$ | 902,518 | \$ | 923,147 |  | 30 |
| 31 | Labor Loading |  |  | 323,776 |  | 290,329 |  | 248,258 |  | 273,213 |  | 328,298 |  | 358,393 |  | 512,766 |  | 448,096 |  | 458,124 |  | 468,377 |  | 31 |
| 32 | Materials and Expenses |  |  | 404,730 |  | 398,140 |  | 516,212 |  | 532,518 |  | 677,155 |  | 681,083 |  | 615,212 |  | 645,972 |  | 659,538 |  | 673,388 |  | 32 |
| 33 | Total |  | \$ | 1,208,986 | \$ | 1,129,361 | \$ | 1,201,347 | \$ | 1,269,780 | \$ | 1,559,466 | \$ | 1,666,133 | \$ | 1,991,362 | \$ | 1,976,418 | \$ | 2,020,180 | \$ | 2,064,912 |  | 33 |
|  | Maintenance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Maintenance Supervision \& Engineering | 885 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34 | Labor |  | \$ | 30,348 | \$ | 38,318 | \$ | 39,077 | \$ | 31,603 | \$ | 34,033 | \$ | 20,292 | \$ | 49,810 | \$ | 43,567 | \$ | 44,563 | \$ | 45,581 | Prior year | 34 |
| 35 | Labor Loading [5] |  |  | 20,450 |  | 25,232 |  | 22,206 |  | 18,606 |  | 20,167 |  | 11,606 |  | 29,582 |  | 22,125 |  | 22,620 |  | 23,127 | Labor loading adjustment | 35 |
| 36 | Materials and Expenses |  |  | 3,111 |  | 4,225 |  | 4,892 |  | 3,601 |  | 3,955 |  | 13,633 |  | 4,434 |  | 4,514 |  | 4,609 |  | 4,705 | Prior year | 36 |
| 37 | Total |  | \$ | 53,908 | \$ | 67,775 | \$ | 66,174 | \$ | 53,809 | \$ | 58,155 | \$ | 45,531 | \$ | 83,827 | \$ | 70,206 | \$ | 71,792 | \$ | 73,414 |  | 37 |
|  | Maintenance of Structures \& Impr. | 886 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 38 | Labor |  | \$ | - | \$ |  | \$ |  | \$ | 2,536 | \$ | 4,489 | \$ | 5,305 | \$ | 35,571 | \$ | 36,389 | \$ | 37,221 | \$ | 38,072 | Prior year |  |
| 39 | Labor Loading [5] |  |  | - |  | - |  | - |  | 1,493 |  | 2,660 |  | 3,034 |  | 21,126 |  | 18,480 |  | 18,894 |  | 19,316 | Labor loading adjustment | 39 |
| 40 | Materials and Expenses |  |  | - |  | - |  | - |  | 232 |  | 1,248 |  | 3,434 |  | 12,204 |  | 12,423 |  | 12,684 |  | 12,951 | Prior year | 40 |
| 41 | Total |  | \$ | - | \$ | - | \$ | - | \$ | 4,261 | \$ | 8,397 | \$ | 11,773 | \$ | 68,900 | \$ | 67,292 | \$ | 68,799 | \$ | 70,338 |  | 41 |
|  | Maintenance of Mains | 887 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 42 | Labor |  | \$ | 44,948 | \$ | 70,757 | \$ | 53,019 | \$ | 54,366 | \$ | 40,284 | \$ | 67,451 | \$ | 69,533 | \$ | 71,132 | \$ | 72,758 | \$ | 74,421 | Prior year | 42 |
| 43 | Labor Loading [5] |  |  | 30,289 |  | 46,594 |  | 30,128 |  | 32,008 |  | 23,871 |  | 38,576 |  | 41,296 |  | 36,124 |  | 36,933 |  | 37,759 | Labor loading adjustment | 43 |
| 44 | Materials and Expenses |  |  | 149,580 |  | 114,326 |  | 191,649 |  | 156,166 |  | 163,558 |  | 184,275 |  | 150,678 |  | 153,390 |  | 156,612 |  | 159,900 | Prior year | 44 |
| 45 | Total |  | \$ | 224,818 | \$ | 231,677 | \$ | 274,796 | \$ | 242,541 | \$ | 227,713 | \$ | 290,302 | \$ | 261,507 | \$ | 260,647 | \$ | 266,302 | \$ | 272,081 |  | 45 |
|  | Maintenance of Measuring \& Reg Station | 889 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 46 | Labor |  | \$ | 30,951 | \$ | 28,637 | \$ | 24,607 | \$ | 25,097 | \$ | 27,899 | \$ | 31,531 | \$ | 31,144 | \$ | 31,860 | \$ | 32,588 | \$ | 33,333 | Prior year | 46 |
| 47 | Labor Loading [5] |  |  | 20,856 |  | 18,857 |  | 13,983 |  | 14,776 |  | 16,532 |  | 18,033 |  | 18,496 |  | 16,180 |  | 16,542 |  | 16,912 | Labor loading adjustment | 47 |
| 48 | Materials and Expenses |  |  | 9,610 |  | 7,909 |  | 20,142 |  | 6,234 |  | 8,802 |  | 46,520 |  | 55,822 |  | 56,827 |  | 58,020 |  | 59,238 | Prior year | 48 |
| 49 | Total |  | \$ | 61,416 | \$ | 55,402 | \$ | 58,732 | \$ | 46,106 | \$ | 53,233 | \$ | 96,084 | \$ | 105,462 | \$ | 104,867 |  | 107,150 |  | 109,484 |  | 49 |



| $\begin{gathered} \text { Projected } \\ 2019 \end{gathered}$ | $\begin{aligned} & \text { Projected } \\ & 2020 \end{aligned}$ | $\begin{aligned} & \text { Test Year } \\ & 2021 \end{aligned}$ |
| :---: | :---: | :---: |
| （j） | （k） | （1） |
| Projected［2］ | Projected［3］ | Projected（4） |
| 44，135 | 45，144 | 46，176 |
| 22，414 | 22，915 | 23，428 |
| 2，078 | 2，121 | 2，166 |

DISTRIBUTION EXPENSE－NOMINAL DOLLARS
2012 THROUGH 2021

231 $=68$

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SOUTHWEST GAS CORPORATION
DISTRIBUTION EXPENSE - REAL DOLLARS



| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA DISTRIBUTION EXPENSE - REAL DOLLARS 2012 THROUGH 2021 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Description | $\begin{aligned} & \text { Account } \\ & \text { Number } \\ & \hline \text { (b) } \end{aligned}$ | Recorded 1] |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{aligned} & \text { Projected } \\ & 2019 \end{aligned}$ |  |  | $\begin{aligned} & \text { Projected } \\ & 2020 \\ & \hline \end{aligned}$ |  |  | Projection Method |
|  |  |  |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  |  |  |  |  |
|  | (a) |  |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  | (h) |  | (i) |  | (j) Projected |  |  |  | (k) Projected |  | (I) Projected | (m) |
|  | Other Expense | 880 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25 | Labor |  | \$ | 95,506 | \$ | 93,594 | \$ | 91,834 | \$ | 85,153 | \$ | 97,679 | \$ | 130,138 | \$ | 83,149 | \$ | 96,722 | \$ | 96,722 \$ | \$ | 96,722 | 7-Year Average |
| 26 | Labor Loading [2] |  |  | 64,358 |  | 61,632 |  | 52,185 |  | 50,134 |  | 57,883 |  | 74,428 |  | 49,382 |  | 49,120 |  | 49,097 |  | 49,074 | Labor loading adjustment |
| 27 | Materials and Expenses |  |  | 72,386 |  | 67,052 |  | 128,924 |  | 170,996 |  | 251,302 |  | 257,116 |  | 135,401 |  | 154,740 |  | 154,740 |  | 154,740 | 7-Year Average |
| 28 | Total |  | \$ | 232,250 | \$ | 222,278 | \$ | 272,944 |  | 306,283 | \$ | 406,863 | \$ | 461,682 | \$ | 267,932 | \$ | 300,581 | \$ | 300,558 | \$ | 300,535 |  |
| 29 | Rents | 881 | \$ | 258,629 | \$ | 255,171 | \$ | 247,459 | \$ | 225,978 | \$ | 227,247 | \$ | 180,070 | \$ | 201,860 | \$ | 201,860 | \$ | 201,860 | \$ | 201,860 | Prior year |
|  | Total Distribution - Operations |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 30 | Labor |  | \$ | 525,502 | \$ | 475,244 | \$ | 463,399 | \$ | 491,636 | \$ | 579,636 | \$ | 641,963 | \$ | 863,385 | \$ | 862,512 | \$ | 862,512 | \$ | 862,512 |  |
| 31 | Labor Loading |  |  | 354,114 |  | 312,949 |  | 263,328 |  | 289,455 |  | 343,481 |  | 367,147 |  | 512,766 |  | 438,022 |  | 437,817 |  | 437,613 |  |
| 32 | Materials and Expenses |  |  | 442,653 |  | 429,159 |  | 547,548 |  | 564,175 |  | 708,472 |  | 697,718 |  | 615,212 |  | 634,550 |  | 634,550 |  | 634,550 |  |
| 33 | Total |  | \$ | 1,322,268 | \$ | 1,217,352 | \$ | 1,274,275 |  | 1,345,265 | \$ | 1,631,589 |  | 1,706,828 | \$ | 1,991,362 |  | 1,935,084 | \$ | 1,934,879 |  | 1,934,675 |  |
|  | Maintenance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | Maintenance Supervision \& Engineering | 885 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 34 | Labor |  | \$ | 33,191 | \$ | 41,303 | \$ | 41,449 | \$ | 33,481 | \$ | 35,607 | \$ | 20,788 | \$ | 49,810 | \$ | 42,588 | \$ | 42,588 \$ | \$ | 42,588 | Prior year |
| 35 | Labor Loading [2] |  |  | 22,366 |  | 27,198 |  | 23,554 |  | 19,712 |  | 21,100 |  | 11,889 |  | 29,582 |  | 21,628 |  | 21,618 |  | 21,608 | Labor loading adjustment |
| 36 | Materials and Expenses |  |  | 3,402 |  | 4,554 |  | 5,188 |  | 3,815 |  | 4,138 |  | 13,966 |  | 4,434 |  | 4,434 |  | 4,434 |  | 4,434 | Prior year |
| 37 | Total |  | \$ | 58,959 | \$ | 73,055 | \$ | 70,191 |  | 57,008 | \$ | 60,845 |  | 46,643 | \$ | 83,827 | \$ | 68,649 | \$ | 68,639 | \$ | 68,629 |  |
|  | Maintenance of Structures \& Impr. | 886 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 38 | Labor |  | \$ |  | \$ |  | \$ |  | \$ | 2,687 | \$ | 4,697 | \$ | 5,435 | \$ | 35,571 | \$ | 35,571 | \$ | 35,571 | \$ | 35,571 | Prior year |
| 39 | Labor Loading [2] |  |  | - |  | - |  | - |  | 1,582 |  | 2,783 |  | 3,108 |  | 21,126 |  | 18,064 |  | 18,056 |  | 18,048 | Labor loading adjustment |
| 40 | Materials and Expenses |  |  |  |  |  |  |  |  | 246 |  | 1,305 |  | 3,518 |  | 12,204 |  | 12,204 |  | 12,204 |  | 12,204 | Prior year |
| 41 | Total |  | \$ | - | \$ | - | \$ | - |  | 4,514 | \$ | 8,785 | \$ | 12,060 | \$ | 68,900 | \$ | 65,839 | \$ | 65,831 | \$ | 65,822 |  |
|  | Maintenance of Mains | 887 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 42 | Labor |  | \$ | 49,160 | \$ | 76,270 | \$ | 56,237 | \$ | 57,598 | \$ | 42,147 | \$ | 69,099 | \$ | 69,533 | \$ | 69,533 | \$ | 69,533 | \$ | 69,533 | Prior year |
| 43 | Labor Loading [2] |  |  | 33,127 |  | 50,224 |  | 31,957 |  | 33,911 |  | 24,975 |  | 39,518 |  | 41,296 |  | 35,312 |  | 35,295 |  | 35,279 | Labor loading adjustment |
| 44 | Materials and Expenses |  |  | 163,596 |  | 123,233 |  | 203,283 |  | 165,450 |  | 171,122 |  | 188,776 |  | 150,678 |  | 150,678 |  | 150,678 |  | 150,678 | Prior year |
| 45 | Total |  | \$ | 245,883 | \$ | 249,727 | \$ | 291,477 | \$ | 256,959 | \$ | 238,244 | \$ | 297,393 | \$ | 261,507 | \$ | 255,523 | \$ | 255,507 |  | 255,490 |  |
|  | Maintenance of Measuring \& Reg Station | 889 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 46 | Labor |  | \$ | 33,851 | \$ | 30,868 | \$ | 26,101 | \$ | 26,589 | \$ | 29,189 | \$ | 32,301 | \$ | 31,144 | \$ | 31,144 | \$ | 31,144 | \$ | 31,144 | Prior year |
| 47 | Labor Loading [2] |  |  | 22,811 |  | 20,326 |  | 14,832 |  | 15,654 |  | 17,297 |  | 18,473 |  | 18,496 |  | 15,816 |  | 15,809 |  | 15,801 | Labor loading adjustment |
| 48 | Materials and Expenses |  |  | 10,510 |  | 8,525 |  | 21,365 |  | 6,604 |  | 9,209 |  | 47,656 |  | 55,822 |  | 55,822 |  | 55,822 |  | 55,822 | Prior year |
| 49 | Total |  | \$ | 67,171 | \$ | 59,719 | \$ | 62,298 | \$ | 48,847 | \$ | 55,695 |  | 98,431 | \$ | 105,462 | \$ | 102,782 | \$ | 102,774 |  | 102,767 |  |

SOUTHWEST GAS CORPORATION DISTRIBUTION EXPENSE - REAL DOLLARS
2012 THROUGH 2021





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 | $453 \$$ |
| :--- |
| 213 |
| 182 |

$$
\begin{array}{r}
43,143 \\
21,910 \\
2,041 \\
\hline 67,094 \\
\hline \hline
\end{array}
$$





| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Description | Account Number |
| :---: | :---: | :---: |
|  | (a) | (b) |
|  | Maintenance of Services | 892 |
| 50 | Labor |  |
| 51 | Labor Loading [2] |  |
| 52 | Materials and Expenses |  |
| 53 | Total |  |
|  | Maintenance of Meters \& House Regs | 893 |
| 54 | Labor |  |
| 55 | Labor Loading [2] |  |
| 56 | Materials and Expenses |  |
| 57 | Total |  |
|  | Maintenance of Other Equipment | 894 |
| 58 | Labor |  |
| 59 | Labor Loading [2] |  |
| 60 | Materials and Expenses |  |
| 61 | Total |  |
|  | Total Distribution - Maintenance |  |
| 62 | Labor |  |
| 63 | Labor Loading |  |
| 64 | Materials and Expenses |  |
| 65 | Total |  |
|  | Total Distribution |  |
| 66 | Labor |  |
| 67 | Labor Loading |  |
| 68 | Materials and Expenses |  |
| 69 | Total |  |
| 70 | Constant Dollar Factor |  |
| 71 | Scale-Up Factor |  |
|  | Escalation and Labor Loading |  |
| 72 | Labor |  |
| 73 | Labor Loading |  |
| 74 | Materials \& Expenses |  |

## CHAPTER 12

# Customer Accounts Expenses 

## Company Witness: Timothy S. Lyons

# SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA CUSTOMER ACCOUNTS EXPENSES CHAPTER 12 

Chapter 12 contains Northern California customer accounts expenses in nominal dollars and 2018 dollars. Labor, labor loading, and materials and expenses are provided by FERC account. Seven years of historical data is provided (2012 through 2018), and projections are provided for 2019, 2020, and Test Year 2021. All amounts are rounded to the nearest dollar.

Projection Methodologies: Account 904, uncollectibles expense, is projected separately from the other customer accounts. First, the uncollectibles percentage is calculated for 2018. This percentage is multiplied by projected margin for the test year to project the portion of uncollectibles expense that should be collected through base rates. The portion of uncollectibles related to gas cost is collected through the gas cost rate and is therefore excluded from the cost of service. The large negative adjustment to this account reflects the fact that the amounts recorded on Southwest Gas' books include uncollectibles related to total revenues, including gas cost.

For Accounts 901, 902, 903, and 905, these expenses have generally decreased over the last 4-5 years. The lower 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

For Northern California and Salt Lake Tahoe jurisdictions, adjustments are made to 2018 recorded expenses for Accounts 901, 902, and 903. The adjustments reflect expense amounts that were incorrectly charged to Northern Nevada District 22.

The labor loading (pensions and benefits) percentage for each projected year is calculated in Chapter 18. This percentage is applied to each dollar of projected labor in each account. The labor loading required for each projected year is calculated in the Chapter 12 sheets $2-3 \operatorname{col}(\mathrm{j}), \operatorname{col}(\mathrm{k})$, and col(I). The adjustments required to increase expenses each year is shown in Chapter 12 workpapers $\mathrm{col}(\mathrm{d})$.

The projected amounts for labor and non-labor are escalated based on the general escalation factors described in Chapter 7.
SOUTHWEST GAS CORPORATION

SOUTHWEST GAS CORPORATION


| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Description | Accoun Number |
| :---: | :---: | :---: |
|  | (a) | (b) |
|  | Supervision | 901 |
| 1 | Labor |  |
| 2 | Labor Loading [2] |  |
| 3 | Materials and Expenses |  |
| 4 | Total |  |
|  | Meter Reading Expense | 902 |
| 5 | Labor |  |
| 6 | Labor Loading [2] |  |
| 7 | Materials and Expenses |  |
| 8 | Total |  |
|  | Customer Records \& Collections | 903 |
| 9 | Labor |  |
| 10 | Labor Loading [2] |  |
| 11 | Materials and Expenses |  |
| 12 | Total |  |
| 13 | Uncollectibles [3] | 904 |
|  | Misc. Customer Accounts Expense | 905 |
| 14 | Labor |  |
| 15 | Labor Loading [2] |  |
| 16 | Materials and Expenses |  |
| 17 | Total |  |
|  | Total Customer Accounts Expense |  |
| 18 | Labor |  |
| 19 | Labor Loading |  |
| 20 | Materials and Expenses |  |
| 21 | Total |  |
|  | Escalation and Labor Loading |  |
| 22 | Labor |  |
| 23 | Labor Loading |  |
| 24 | Materials \& Expenses |  |
| 25 | Constant Dollar Factor |  |
| 26 | Scale-Up Factor |  |

## CHAPTER 13

Customer Service
and

## Informational Expenses

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA CUSTOMER SERVICE AND INFORMATION EXPENSES CHAPTER 13


#### Abstract

Chapter 13 contains Northern California customer service and information expenses in nominal dollars and 2018 dollars. Labor, labor loading, and materials and expenses are provided by FERC account. Seven years of historical data is provided (2012 through 2018), and projections are provided for 2019, 2020, and Test Year 2021. All amounts are rounded to the nearest dollar.


Recorded labor loading dollars were adjusted to remove payroll taxes, which are in Chapter 16. Please see Chapter 18 for the recalculation of the recorded labor loading rate without payroll taxes.

Projection Methodology: For Accounts 908, 909 and 910, these expenses have generally decreased over the last $4-5$ years. The lower 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

The labor loading (pensions and benefits) percentage for each projected year is calculated in Chapter 18. This percentage is applied to each dollar of projected labor in each account. The labor loading required for each projected year is calculated in the Chapter 13 sheets 2-3 col $(\mathrm{j})$, $\operatorname{col}(\mathrm{k})$, and $\operatorname{col}(\mathrm{l})$. The adjustments required to increase expenses each year is shown in Chapter 13 workpapers col(d).

The projected amounts for labor and non-labor are escalated based on the general escalation factors described in Chapter 7.
SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
CUSTOMER SERVICE AND INFORMATION EXPENSE - NOMINAL DOLLARS





$\stackrel{N}{\sim}$
$\frac{\begin{array}{c}\text { Projected } \\ 2020\end{array}}{(\mathrm{k})}$


-

## $\substack{\text { Projected } \\ 2019 \\(\mathrm{j}) \\ \text { Projected }[2]}$

CUSTOMER SERVGC 2012 THROUGH 2021
Recorded [1]

| $\begin{aligned} & \text { Line } \\ & \text { No. } \\ & \hline \end{aligned}$ | Description | Account Number |
| :---: | :---: | :---: |
|  | (a) | (b) |
|  | Customer Assistance Expense | 908 |
| 1 | Labor |  |
| 2 | Labor Loading [5] |  |
| 3 | Materials and Expenses |  |
| 4 | Total |  |
|  | Informational \& Instructional | 909 |
| 5 | Labor |  |
| 6 | Labor Loading [5] |  |
| 7 | Materials and Expenses |  |
| 8 | Total |  |
|  | Misc. Customer Service \& Information | 910 |
| 9 | Labor |  |
| 10 | Labor Loading [5] |  |
| 11 | Materials and Expenses |  |
| 12 | Total |  |
|  | Total Customer Service \& Information |  |
| 13 | Labor |  |
| 14 | Labor Loading |  |
| 15 | Materials and Expenses |  |
| 16 | Total |  |
|  | Escalation and Labor Loading |  |
| 17 | Labor |  |
| 18 | Labor Loading |  |
| 19 | Materials \& Expenses |  |
| 20 | Constant Dollar Factor |  |
| 21 | Scale-Up Factor |  |

SOUTHWEST GAS CORPORATION


# CHAPTER 14 Sales Expenses 

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA <br> SALES EXPENSES CHAPTER 14

Chapter 14 contains Northern California sales expenses (Accounts 911-913) in nominal dollars and 2018 dollars. Labor, labor loading, and materials and expenses are provided by FERC account. Seven years of historical data is provided (2012 through 2018), and projections are provided for 2019, 2020, and Test Year 2021. All amounts are rounded to the nearest dollar.

Southwest Gas is not requesting recovery of Sales expenses in this rate case. Therefore, the projection for the test year is $\$ 0$.





# CHAPTER 15 

# Administrative and 

 General ExpensesCompany Witness: Timothy S. Lyons / Byron Williams

# SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA DIRECT ADMINISTRATIVE AND GENERAL EXPENSES CHAPTER 15 

Chapter 15 contains administrative and general expenses (A\&G) charged directly to Northern California in nominal dollars and 2018 dollars. Labor, labor loading, and materials and expenses are provided by FERC account. Seven years of historical data is provided (2012 through 2018), and projections are provided for 2019, 2020, and Test Year 2021. All amounts are rounded to the nearest dollar.

Projection Methodologies: The labor loading (pensions and benefits) percentage for each projected year is calculated in Chapter 18. This percentage is applied to each dollar of projected labor in each account. The labor loading required for each projected year is calculated in the Chapter 15 sheets 3-4 col(j), $\operatorname{col}(\mathrm{k})$, and $\operatorname{col}(\mathrm{l})$. The adjustments required to increase expenses each year is shown in Chapter 15 workpapers col(d).

The projected amounts for labor and non-labor are escalated based on the general escalation factors described in Chapter 7.

Account 923: These expenses have generally decreased over the last 4-5 years. The lower 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 925: These expenses have generally fluctuated over the past 7 years; thus, projections were based on a 7-year average.

Southwest Gas manages its general liability expenses with a combination of insurance premiums and what is known as "self-insurance" - which is similar to a deductible. The Company is currently self-insured for up to $\$ 1.0$ million of expense for each claim. To the extent that a specific gas operation claim exceeds $\$ 1.0$ million, the Company is currently self-insured for the excess over $\$ 1.0$ million up to an aggregate of $\$ 5.0$ million. Once the $\$ 5.0$ million plus aggregate is reached, any amount paid above the $\$ 5.0$ million is the responsibility of the insurance carrier. The $\$ 5.0$ million plus aggregate can be the result of payouts from more than one gas operations claim and/or from one or more ratemaking jurisdictions. For this reason, Southwest Gas proposes to normalize self-insured retention based on a seven-year average of claims for all California jurisdictions, and allocate the total to each jurisdiction based on its relative 4-factor percentage.

Account 926: These expenses are certain employee benefits, which are fully described in Chapter 18. An adjustment was made to remove the amounts directly charged to Account 926 by Northern California in this chapter, since they
are already included in Chapter 18. For Northern California and Salt Lake Tahoe jurisdictions, an adjustment is made to 2018 recorded expenses that reflects expense amount that was incorrectly charged to Northern Nevada District 22.

Account 927: The projected franchise taxes are calculated on WP Chapter 15, Sheet 9. An average tax rate was developed in WP Chapter 15, Sheet 9, Column (c) based on actual taxable operating revenues and actual franchise taxes paid for 2018. A combined rate is used for both Northern California and South Lake Tahoe, because these two jurisdictions pay the same gas cost rate. The combined rate is proposed for administrative efficiency. This average percentage was then applied to the projected operating margin to develop the projected franchise taxes. Southwest Gas records its franchise tax payments in Account 408.1. An adjustment was made to reclassify the amounts related to margin to Account 927 for presentation purposes. The franchise tax related to gas cost is not included in base rates.

Account 928: The recorded amounts from 2015 to 2018 were the rate case expense amortizations from the TY2014 rate case. The incremental rate case expense for processing the TY2021 rate case was estimated. WP Chapter 15, Sheet 10 provides details supporting the rate case expense estimate. A five-year amortization of these costs is requested to begin January 1, 2021. An adjustment was made for 2021 expenses to reflect the difference between recorded base year 2018 rate case expense and annual rate case amortization expense resulting from the TY2021 rate case.

Account 930.1: Southwest Gas charges its safety advertising expenses directly to each ratemaking jurisdiction. These expenses have generally increased over the past 7 years, approximately at the rate of inflation. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses.

Account 930.2: This account includes $\$ 250,000$ per year in R\&D expenses proposed by Southwest Gas in the TY2014 rate case. This amount is allocated to each ratemaking jurisdiction based on its weighted 4-Factor relative to the total California 4-Factor percentage.

Account 935: These expenses have generally fluctuated over the past 7 years since certain types of maintenance are not needed at the same level every year. The 2018 expenditure level is expected to continue; thus, projections were based on 2018 expenses. For Northern California and Salt Lake Tahoe jurisdictions, an adjustment is made to 2018 recorded expenses that reflects expense amount that was incorrectly charged to Northern Nevada District 22.
SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
DIRECT ADMINISTRATIVE AND GENERAL EXPENSE - NOMINAL DOLLARS

| Description | Account <br> Number | Recorded [1] |  |  |  |  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { Projected } \\ 2019 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Projected } \\ 2020 \\ \hline \end{gathered}$ |  | $\begin{gathered} \text { Test Year } \\ 2021 \\ \hline \end{gathered}$ |  | Projection Method | Line <br> No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  |  |  |  |  |  |  |  |
| (a) | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  | (h) |  | (i) |  | $\begin{gathered} \hline(\mathrm{j}) \\ \text { Projected [2] } \end{gathered}$ |  | $\begin{gathered} (k) \\ \text { Projected [3] } \end{gathered}$ |  | $\begin{gathered} \text { (I) } \\ \text { Projected [4] } \end{gathered}$ | (m) |  |
| Outside Services Employed | 923 | \$ | 316 | \$ |  | \$ |  | \$ | 2,735 | \$ | 7,725 | \$ | 1,379 | \$ | 4,526 | \$ | 4,607 | \$ | 4,704 | \$ | 4,803 | Prior year | 1 |
| Injuries and Damages | 925 | \$ | 5,147 | \$ | 6,146 | \$ | 493,972 | \$ | 5,202 | \$ | 8,496 | \$ | 140,408 | \$ | 6,476 | \$ | 96,433 | \$ | 98,458 | \$ | 100,525 | Prior Year and SIR normalization | 2 |
| Employee Pension and Benefits | 926 | \$ | - | \$ | - | \$ |  | \$ |  | \$ |  | \$ |  | \$ | 404 | \$ | 411 | \$ | 420 | \$ | 429 | Prior year | 3 |
| Franchise Taxes [5] | 927 | \$ | 347,744 | \$ | 339,034 | \$ | 375,931 | \$ | 440,369 | \$ | 492,666 | \$ | 483,658 | \$ | 440,696 | \$ | 440,696 | \$ | 440,696 | \$ | 420,374 | Prior Year and WP15 Franch adjustment | 4 |
| Regulatory Commission Expense | 928 | \$ | 2,648 | \$ | 2,648 | \$ | 11,070 | \$ | 4,631 | \$ | 4,648 | \$ | 4,648 | \$ | 4,648 | \$ | 4,732 | \$ | 4,831 | \$ | 23,581 | WP15 928 adjustment | 5 |
| General Advertising/Safety Education | 930.1 | \$ | 57,399 | \$ | 45,387 | \$ | 50,250 | \$ | 47,786 | \$ | 54,626 | \$ | 44,876 | \$ | 48,850 | \$ | 49,729 | \$ | 50,773 | \$ | 51,839 | Prior year | 6 |
| Miscellaneous General Expense | 930.2 | \$ |  | \$ |  | \$ | 35,872 | \$ | 35,476 | \$ | 33,611 | \$ | 38,119 | \$ | 35,875 | \$ | 36,521 | \$ | 37,288 | \$ | 38,071 | Prior year | 7 |
| Maintenance of General Plant | 935 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Labor |  | \$ | 2,708 | \$ | 3,471 | \$ | 193 | \$ | 858 | \$ | 852 | \$ | 1,423 | \$ | 5,248 | \$ | 5,369 | \$ | 5,492 | \$ | 5,617 | Prior year | 8 |
| Labor Loading [6] |  |  | 1,825 |  | 2,286 |  | 109 |  | 505 |  | 505 |  | 814 |  | 3,117 |  | 2,727 |  | 2,788 |  | 2,850 | Labor loading adjustment | 9 |
| Materials and Expenses |  |  | 36,052 |  | 28,497 |  | 38,262 |  | 31,508 |  | 31,476 |  | 28,650 |  | 76,604 |  | 77,983 |  | 79,621 |  | 81,293 | Prior year | 10 |
| Total |  | \$ | 40,584 | \$ | 34,255 | \$ | 38,564 | \$ | 32,871 | \$ | 32,833 | \$ | 30,886 | \$ | 84,969 | \$ | 86,078 | \$ | 87,900 | \$ | 89,760 |  | 11 |
| Total Direct Administrative and General Expense |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Labor |  | \$ | 2,708 | \$ | 3,471 | \$ | 193 | \$ | 858 | \$ | 852 | \$ | 1,423 | \$ | 5,248 | \$ | 5,369 | \$ | 5,492 | \$ | 5,617 |  | 12 |
| Labor Loading |  |  | 1,825 |  | 2,286 |  | 109 |  | 505 |  | 505 |  | 814 |  | 3,117 |  | 2,727 |  | 2,788 |  | 2,850 |  | 13 |
| Materials and Expenses |  |  | 449,305 |  | 421,712 |  | 1,005,357 |  | 567,706 |  | 633,247 |  | 741,738 |  | 618,078 |  | 711,112 |  | 716,790 |  | 720,914 |  | 14 |
| Total |  | \$ | 453,837 | \$ | 427,470 | \$ | 1,005,659 | \$ | 569,069 | \$ | 634,604 | \$ | 743,975 | \$ | 626,444 | \$ | 719,207 | \$ | 725,070 | \$ | 729,382 |  | 15 |
| Escalation and Labor Loading |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Labor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 2.30\% |  | 4.64\% |  | 7.03\% |  | 16 |
| Labor Loading |  |  | 67.39\% |  | 65.85\% |  | 56.83\% |  | 58.88\% |  | 59.26\% |  | 57.19\% |  | 59.39\% |  | 50.78\% |  | 50.76\% |  | 50.74\% |  | 17 |
| Materials \& Expenses |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 1.80\% |  | 3.94\% |  | 6.12\% |  | 18 |
| Constant Dollar Factor |  |  | 0.9143 |  | 0.9277 |  | 0.9428 |  | 0.9439 |  | 0.9558 |  | 0.9762 |  | 1.0000 |  |  |  |  |  |  |  | 19 |
| Scale-Up Factor |  |  | 1.0937 |  | 1.0779 |  | 1.0607 |  | 1.0594 |  | 1.0462 |  | 1.0244 |  | 1.0000 |  |  |  |  |  |  |  | 20 |
| ${ }^{\text {[1] Company Records }}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [2] Multiplied by the applicable escalation factor, except Acct. 927 Franchise Payments. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [3] Multiplied by the applicable escalation factor, except Acct. 927 Franchise Payments. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [5] WP Ch 15 , Sh 8, Ln 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| [6] Labor Loading equals Labor multiplied by the | loading rate | 倍 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

$\stackrel{\circ}{5} 20$
SOUTHWEST GAS CORPORATION

\section*{ <br> | Description |
| :---: |
| (a) |
| Outside Services Employed |
| Injuries and Damages |
| Employee Pension and Benefits |
| Franchise Taxes [2] |
| Regulatory Commission Expense |
| General Advertising/Safety Education |
| Miscellaneous General Expense |
| Maintenance of General Plant Labor |
| Labor Loading [3] |
| Materials and Expenses Total |
| Total Direct Administrative and General Ex |
| Labor Loading |
| Materials and Expenses |
| Escalation and Labor Loading |
| Labor |
| Labor Loading |
| Materials \& Expenses |
| Constant Dollar Factor |
| Scale-Up Factor |
| [1] Company Records |
| [2] WP Ch 15, Sh 8, Ln 4 |
| [3] Labor Loading equals Labor multiplied by the |

$5{ }^{\circ}{ }^{\circ}$

## CHAPTER 16

## Taxes

## Company Witness: Timothy S. Lyons / Byron Williams

# SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA <br> TAXES <br> CHAPTER 16 

Pursuant to California Public Utilities Commission decisions for the applications 88-02003, 91-12-049, 94-01-021, 02-02-012, 07-12-022 and 12-12-024, income tax expense has been computed using full normalization including:

## Federal Income Tax Expense (FIT)

A. The tax benefits from using accelerated depreciation and the 10 percent ITC for 1981 through 1986 plant additions is being normalized in conformance with the provisions of the Economic Recovery Tax Act of 1981 and the Tax Reform Act of 1986.
B. The tax basis of 1983 through 1985 plant additions have been reduced by 50 percent of the ITC generated in conformance with provisions of federal tax rules.
C. Payroll taxes, pension costs and construction period interest related to selfconstructed projects are capitalized for income tax purposes in conformance with provisions of federal tax rules.
D. Interest deduction was derived by applying the weighted average embedded cost of debt from Chapter 6 to the estimated rate base per Chapter 17. Unamortized deferred ITC is not deducted from rate base for this calculation under the "interest synchronization" rules permitted by Treasury Regulations.
E. The amortization of excess accumulated deferred income taxes as a result of the Tax Cuts and Jobs Act of 2017 is calculated in Chapter 16.

## California Corporation Franchise Tax Expense (CCFT)

A. Deferred ITC has been deducted from rate base for the interest charge deduction computation.
B. Interest deduction was computed by applying the weighted average embedded cost of debt to the estimated rate base net of the deferred ITC.

## Contributions in Aid of Construction (CIAC) and Customer Advances

Since January 1, 1991, Southwest Gas collects gross-up taxes on CIAC and customer advances in accordance with CPUC Decision No. 87-09-026.

## Property Taxes

The actual property taxes in California are paid for each fiscal year ended June. The lien and/or levy date and asset valuation date is January 1 of each year; with the tax payments due in two installments; the first during December and the final installment the following April.

The California property taxes are calculated on Sheets 3 and 4 as follows:

1. The 2012-2018 tax rates have been calculated by dividing the actual property taxes paid by the Total Full State Value. The forecasted rate for 2019-2021 is based on the latest two-year average actual rate changes.
2. The calculated property tax rate for the future years is then applied to the projected Total Full State Value for those years to arrive at the estimated future years' property taxes. The resultant property tax projected to be paid, as shown on the summary, will reflect the actual method of payment (i.e., half of the current year's assessment and half of the prior year's assessment).

## Franchise Taxes

Please see Chapter 15 for the narrative on franchise taxes.

## Payroll Taxes

Payroll taxes include federal unemployment insurance (FUI), state unemployment insurance (SUI), Federal Insurance Contributions Act (FICA) taxes, and Medicare taxes. FUI and SUI were calculated based on the Northern Nevada Division (NND) number of employees for 2018. The applicable tax base per employee was multiplied by the rate to determine the expense which was then allocated to Northern California jurisdiction based on 4 -factor allocation method. The rates used to project 2021 expense were based on anticipated increases. For Social Security and Medicare taxes, the rates were multiplied by the NND 2018 eligible salaries for Social Security and by NND 2018 total salaries for Medicare, escalated by the compounded labor escalation factor for 2021 to determine test year expense which was then allocated to Northern California jurisdiction based on 4factor allocation method. Southwest Gas records payroll taxes in Account 236 and distributes them to each FERC account charged with labor through its labor loading process. For ratemaking purposes consistent with prior rate cases, Southwest Gas has removed payroll taxes from labor loadings (Chapter 18) and includes them in Chapter 16.
SOUTHWEST GAS CORPORATION
SUMMARY OF TAXES OTHER THAN INCOME TAXES

| Line No. | Description | Reference |  | 2018 |  | $\begin{gathered} \text { Test Year } \\ 2021 \\ \hline \end{gathered}$ | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) |  | (c) |  | (d) |  |
|  | Property Tax |  |  |  |  |  |  |
| 1 | 1/2 Prior Year | Ch 16, Sh 4 | \$ | 490,590 | \$ | 581,998 | 1 |
| 2 | 1/2 Current Year Year | Ch $16, \mathrm{Sh} 4$ |  | 558,204 |  | 698,298 | 2 |
| 3 | Total Property Tax | Ln $1+\operatorname{Ln} 2$ | \$ | 1,048,794 | \$ | 1,280,296 | 3 |
| 4 | FUI and SUI | Ch 16 , Sh 5 | \$ | 7,100 | \$ | 7,100 | 4 |
| 5 | FICA Taxes | Ch $16, \mathrm{Sh} 6$ | \$ | 174,442 | \$ | 186,705 | 5 |
|  | Other Taxes |  |  |  |  |  |  |
| 6 | Modified Business Tax [1] | Company Records |  | 11,705 |  | 11,705 | 6 |
| 7 | Other Miscellaneous Taxes | Company Records |  | 1,486 |  | 1,486 | 7 |
| 8 | Total Other Taxes |  | \$ | 13,191 | \$ | 13,191 | 8 |
| 9 | Total Taxes Other than Income Taxes | $\operatorname{Ln} 3+\operatorname{Ln} 4+\operatorname{Ln} 5+\operatorname{Ln} 9$ | \$ | 1,243,527 | \$ | 1,487,292 | 9 |
|  |  |  |  |  |  | Ch 6, Sh 1 |  |
| [1] | Allocation of Modified Business Tax |  |  |  |  |  |  |
|  | Modified Business Tax | Company Records | \$ | 752,021 |  |  |  |
|  | NCA 4 - Factor | Company Records |  | 1.56\% |  |  |  |
|  |  |  | \$ | 11,705 |  |  |  |

[1] Chapter 17 - Average Rate Base


 SOUTHWEST SUMMARY OF TAXES



# SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA FEDERAL AND STATE UNEMPLOYMENT INSURANCE 

| Line |  | Tax Base or |  |  | Test Year | Line |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | Allocation Factor | Reference | 2018 | 2021 | No. |
|  | (a) | (b) | (c) | (d) | (e) |  |

Federal Unemployment Insurance (FUI)

|  | Northern Nevada Division (NND) [1] |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Tax Base \$ | 7,000 | \$7,000 * Ln 20 | \$ | 1,113,000 | \$ | 1,113,000 | 1 |
| 2 | FUI Rate |  |  |  | 0.60\% |  | 0.60\% | 2 |
| 3 | Total FUI |  | $\operatorname{Ln} 1 * \operatorname{Ln} 2$ | \$ | 6,678 | \$ | 6,678 | 3 |
| 4 | NND Allocation to NCA [2] | 8.23\% | Ln 3*Ln 4(b) | \$ | 550 | \$ | 550 | 4 |
|  | Corporate Staff |  |  |  |  |  |  |  |
| 5 | Tax Base \$ | 7,000 | \$7,000 * Ln 21 | \$ | 6,314,000 | \$ | 6,314,000 | 5 |
| 6 | FUl Rate |  |  |  | 0.60\% |  | 0.60\% | 6 |
| 7 | Total FUI |  | $\operatorname{Ln} 5^{*} \operatorname{Ln} 6$ | \$ | 37,884 | \$ | 37,884 | 7 |
| 8 | NCA 4-Factor |  | Chapter 8C |  | 1.56\% |  | 1.56\% | 8 |
| 9 | Total Allocated to Northern California |  | $\operatorname{Ln} 7 * \operatorname{Ln} 8$ | \$ | 590 | \$ | 590 | 9 |

## State Unemployment Insurance (SUI)

Northern Nevada Division (NND) [1]

| 10 | Tax Base | \$ | 7,000 | $\$ 7,000 *$ Ln 20 | $\$$ | $1,113,000$ | $\$$ | $1,113,000$ |
| :--- | :--- | :--- | ---: | :--- | ---: | ---: | ---: | ---: |
| 11 | SUI Rate |  | $2.30 \%$ | $2.30 \%$ | 11 |  |  |  |
| 12 | Total SUl |  |  |  | 25,599 | $\$$ | 25,599 | 12 |
| 13 | NND Allocation to NCA [2] | $8.23 \%$ |  |  | 2,107 | $\$$ | 2,107 | 13 |

Corporate Staff

| 14 | Tax Base \$ | 30,500 | \$30,500 * Ln 21 | \$ | 27,511,000 | \$ | 27,511,000 | 14 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 15 | SUI Rate |  |  |  | 0.90\% |  | 0.90\% | 15 |
| 16 | Total SUI |  |  | \$ | 247,599 | \$ | 247,599 | 16 |
| 17 | NCA 4-Factor |  | Chapter 8C |  | 1.56\% |  | 1.56\% | 17 |
| 18 | Total Allocated to Northern California |  |  | \$ | 3,854 | \$ | 3,854 | 18 |
| 19 | Total FUI and SUI |  |  | \$ | 7,100 | \$ | 7,100 | 19 |
|  |  |  |  |  | Ch 16, Sh 3 |  | Ch 16, Sh 3 |  |
|  |  |  |  |  | Ln 4(c) |  | Ln 4(d) |  |
|  | Number of Employees [3] |  |  |  |  |  |  |  |
| 20 | Northern Nevada Division [1] |  |  |  | 159 |  | 159 | 20 |
| 21 | Corporate Staff |  |  |  | 902 |  | 902 | 21 |

[^1]
## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA FEDERAL INSURANCE CONTRIBUTIONS ACT (FICA) TAXES


[1] Escalated based on compound labor factor in Chapter 7.
[2] Recorded 2018 percentage of labor charged to Northern California by NND employees calculated on WP Ch 16, Sh 1
[3] Ch 8C, Sh 2, Ln 6

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA INCOME TAXES ON OPERATIONS FOR THE TWELVE MONTHS ENDED DECEMBER 31, 2021 AS ADJUSTED

| Line No. | Description | Reference |  | $\begin{gathered} \text { Test Year } \\ 2021 \\ \hline \end{gathered}$ |  | Adjustments |  | After Rate Relief | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) |  | (c) |  | (d) |  | (e) |  |
|  |  |  |  |  |  |  |  | (c) + (d) |  |
|  | State Income Tax |  |  |  |  |  |  |  |  |
| 1 | Margin | Ch 6, Sh 1 | \$ | 20,792,140 | \$ | 1,469,249 | \$ | 22,261,389 | 1 |
| 2 | Expenses | Ch 6, Sh 1 |  | 12,320,646 |  | 30,418 |  | 12,351,064 | 2 |
| 3 | Taxable Income Before Interest | Ln 1 - Ln 2 | \$ | 8,471,494 | \$ | 1,438,831 | \$ | 9,910,325 | 3 |
| 4 | Interest Expense [1] | Ln 23 |  | 2,195,525 |  | 19 |  | 2,195,543 | 4 |
| 5 | State Taxable Income | Ln 3 - Ln 4 | \$ | 6,275,969 | \$ | 1,438,813 | \$ | 7,714,782 | 5 |
| 6 | Effective State Income Tax Rate | WP Ch 16, Sh 6 |  | 8.84\% |  | 8.84\% |  | 8.84\% | 6 |
| 7 | State Income Tax | $\operatorname{Ln} 5 * \operatorname{Ln} 6$ | \$ 554,796 \$ |  |  | 127,191 | \$ | 681,987 | 7 |
|  |  |  | Ch 6, Sh 1, Ln 18(c) |  | \$ |  |  | Ch 6, Sh 1, Ln 18(e) |  |
|  | Federal Income Tax |  |  |  |  |  |  |  |  |  |
| 8 | Margin | Ln 1 | \$ | 20,792,140 |  | \$ | 1,469,249 | \$ |  | 22,261,389 | 8 |
| 9 | Expenses | Ln 2 |  | 12,320,646 | 30,418 |  | 12,351,064 |  |  |  |
| 10 | Taxable Income Before Interest | Ln 8 - Ln 9 | \$ | 8,471,494 | \$ | 1,438,831 | \$ | 9,910,325 | 10 |  |
| 11 | State Income Tax | Ln 7 |  | 554,796 |  | 127,191 |  | 681,987 | 11 |  |
| 12 | Interest Expense [2] | Ln 26 |  | 2,195,502 |  | 42 |  | 2,195,543 | 12 |  |
| 13 | Federal Taxable Income | Ln $10-\operatorname{Ln} 11-\operatorname{Ln} 12$ | \$ | 5,721,197 | \$ | 1,311,599 | \$ | 7,032,795 | 1314 |  |
| 14 | Effective Federal Income Tax Rate | WP Ch 16, Sh 6 |  | 21.00\% |  | 21.00\% |  | 21.00\% |  |  |
| 15 | Federal Income Tax | Ln 13 * Ln 14 | \$ | 1,201,451 | \$ | $\begin{array}{r} 275,436 \\ (1,048) \end{array}$ | \$ | 1,476,887 | 15 |  |
| 16 | Investment Tax Credit | Ch 16, Sh 9, Ln 16(e) |  | 1,048 |  |  |  | - | 16 |  |
| 17 | Total Federal Income Tax | Ln 15-Ln 16 | \$ | 1,200,403 | \$ | 276,484 | \$ | 1,476,887 | 17 |  |
|  |  |  |  | Ch 6, Sh 1, Ln 19(c) |  |  |  | Ch 6, Sh 1, Ln 19(e) |  |  |
|  |  | $\operatorname{Ln} 7+\operatorname{Ln} 17$ |  |  |  |  |  |  |  |  |  |  |
| 18 | Total Federal and State Income Tax | $\operatorname{Ln} 7+\operatorname{Ln} 17$ | \$ | 1,755,199 | \$ | 403,675 | \$ |  |  |  | 2,158,874 | 18 |
|  | Excess Deferred Income Tax (EDIT) |  |  |  |  |  |  |  |  |  |  |
| 19 | Plant Related EDIT Amortization |  | \$ | $(230,230)$ | \$ | - | \$ | $(230,230)$ | 19 |  |  |
| 20 | Non-Plant Related EDIT Amortization |  |  | 220,545 |  | - |  | 220,545 | 20 |  |  |
| 21 | Total EDIT Amortization |  | \$ | $(9,685)$ | \$ | - | \$ | $(9,685)$ | 21 |  |  |


| [1] Interest Calculation - State |
| :--- |
| Rate Base |
| Deferred ITC |
| Adjusted Rate Base |
| Weighted Cost of Debt |
| Synchronized Interest Expense |

[2] Interest Calculation - Federal
27 Rate Base
28 Weighted Cost of Debt
29 Synchronized Interest Expense
NCA TY2021 vFinal.xlsx

| Ch 6, Sh 1 | \$ | 100,027,409 | \$ | 1,901 | \$ | 100,029,310 | 22 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| n/a |  | 1,048 |  | $(1,048)$ |  | - | 23 |
| Ln $19+\operatorname{Ln} 20$ | \$ | 100,028,457 | \$ | 853 | \$ | 100,029,310 | 24 |
| Ch 6, Sh 2 |  | 2.19\% |  | 2.19\% |  | 2.19\% | 25 |
| $\operatorname{Ln} 21$ * Ln 22 | \$ | 2,195,525 | \$ | 19 | \$ | 2,195,543 | 26 |
| Ln 19 | \$ | 100,027,409 | \$ | 1,901 | \$ | 100,029,310 | 27 |
| Ln 22 |  | 2.19\% |  | 2.19\% |  | 2.19\% | 28 |
| Ln 24 * Ln 25 | \$ | 2,195,502 | \$ | 42 | \$ | 2,195,543 | 29 |

16 Income Tax


## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA ITC AMORTIZATION


[1] ITC annual amortization over the weighted average remaining life for vintages 1975 through 1986.

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA SCHEDULE M'S

| Line |  | Activity For | Projected Activity |  |  | Line |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| No. | Description | 2018 | 2019 | 2020 | 2021 | No. |
|  | (a) | (b) | (c) | (d) | (e) |  |


|  | Federal |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Capitalized Interest | \$ | $(10,057)$ \$ | $(8,924)$ \$ | $(5,362)$ \$ | $(2,438)$ | 1 |
| 2 | Excess Depreciation |  | $(2,260,262)$ | 77,132 | $(2,063,784)$ | $(300,567)$ | 2 |
| 4 | Other Cap. Costs |  | $(680,524)$ | $(516,052)$ | $(534,795)$ | $(466,981)$ | 4 |
| 5 | Relocation Costs |  | 99,105 | 75,914 | 64,638 | 84,405 | 5 |
| 6 | Repairs |  | $(155,452)$ | $(63,329)$ | $(56,771)$ | $(62,048)$ | 6 |
| 7 | Customer Advances |  | 16,043 | $(60,205)$ |  | - | 7 |
| 8 | C-I-A-C |  | $(183,448)$ | $(154,129)$ | $(136,681)$ | $(100,700)$ | 8 |
| 9 | Subtotal | \$ | $(3,174,595)$ \$ | $(649,592)$ \$ | $(2,732,756)$ \$ | $(848,329)$ | 9 |
| 10 | System Allocable [1] |  | 39,573 | $(59,421)$ | $(8,170)$ | $(25,113)$ | 10 |
| 11 | Total Federal | \$ | $(3,135,023)$ \$ | $(709,012)$ \$ | $(2,740,926) \$$ | (873,442) | 11 |
|  | California |  |  |  |  |  |  |
| 12 | Capitalized Interest | \$ | 4,339 \$ | 5,728 \$ | 4,754 \$ | 6,472 | 12 |
| 13 | Excess Depreciation |  | $(561,831)$ | $(1,263,670)$ | $(2,447,477)$ | $(786,786)$ | 13 |
| 15 | Other Cap. Costs |  | $(737,342)$ | $(589,123)$ | $(534,796)$ | $(466,994)$ | 15 |
| 16 | Relocation Costs |  | 99,104 | 75,921 | 64,637 | 84,398 | 16 |
| 17 | Repairs |  | $(155,450)$ | $(63,334)$ | $(56,776)$ | $(62,060)$ | 17 |
| 18 | Customer Advances |  | $(183,444)$ | $(154,133)$ | $(136,677)$ | $(100,707)$ | 18 |
| 19 | C-I-A-C |  | $(14,419)$ | $(14,649)$ | $(10,124)$ | $(8,907)$ | 19 |
| 20 | Subtotal | \$ | $(1,549,043)$ \$ | $(2,003,260)$ \$ | $(3,116,459)$ \$ | $(1,334,584)$ | 20 |
| 21 | System Allocable [2] |  | $(86,519)$ | $(120,067)$ | $(27,406)$ | $(30,613)$ | 21 |
| 22 | Total California | \$ | $(1,635,562)$ \$ | $(2,123,328)$ \$ | $(3,143,865)$ \$ | $(1,365,197)$ | 22 |

[1] Ch 16, Sh 5, Ln 22 divided by the federal tax rate (21.00\%)
[2] Ch 16, Sh 5, Ln 22 divided by the state tax rate ( $08.84 \%$ * (1-21.00\%))

## SOUTHWEST GAS CORPORATION SYSTEM ALLOCABLE

## SCHEDULE M'S




## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA EXCESS DEFERRED INCOME TAXES


[1] Rate Base adjustment associated with plant-related excess deferred income tax
[2] Excess deferred taxes are grossed-up to reflect the future tax savings of reduced future revenue
[3] The 4-factor apportionment percentage used to establish the excess deferred liability is the percentage at 12/31/17

## AMORTIZATION OF EXCESS DEFERRED INCOME TAXES


Total Excess Deferred Taxes

Share of Annual Amortization of Excess Deferred Taxes
Total Annual Amortization of Excess Deferred Taxes
SYSTEM ALLOCABLE

$\stackrel{0}{\square} \stackrel{\circ}{乙}$
$\omega \wedge \infty$

# CHAPTER 17 Rate Base <br> and 

# Depreciation Expenses 

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA RATE BASE CHAPTER 17

Chapter 17 contains the computation of the Northern California (NCA) Gas Plant in Service (GPIS) and Accumulated Depreciation and Amortization (AD\&A) for the historical years 2012 through 2018 (historical period), and projections for years 2019, 2020 and test year 2021. Chapter 17 also contains the computation of average rate base for the years 2012 through 2021.

The NCA GPIS and AD\&A amounts are shown by FERC account. They are also reported by categories of activities (Intangible, Distribution, and General). GPIS is compiled to report a beginning balance, additions, retirements/transfers, and an ending balance. AD\&A is also compiled to report a beginning balance, the provision for depreciation expense, retirements, transfers/costs of removal/salvage value, and an ending balance.

General Information for Gross Plant in Service Projections: The 2019 GPIS computation begins with the year-end 2018 GPIS balance and adds the projected additions through December 2019. There are no projected intangible additions to NCA plant for years 2019 through 2021. Distribution and general plant projections are based on plans developed by Southwest Gas's capital planning and budgeting process. All projected distribution plant additions include escalation and are calculated before overheads which are separately applied based on a seven-year overhead ratio average.

Retirements/transfers: Retirements for both distribution and general plant used in the projected years 2019 and 2020 and the test year 2021 were based on the seven-year average of the historical period 2012 through 2018. Transfers were assumed to be zero in the projected periods.

Salvage/Removal Cost: Salvage and removal costs for both distribution and general plant used in the projected years 2019 and 2020 and the test year 2021 were based on the seven-year average of the historical period 2012 through 2021.

Overheads: The NCA distribution overhead rate applied to projected years 2019 and 2020 and test year 2021 direct distribution plant capital expenditures is based on the seven-year average historical period 2012 through 2018. General plant capital expenditures are not subject to overheads. Overheads consist of division supervision and engineering, Administrative and General, capitalized property tax and Allowance for Funds Used During Construction.

Escalation: Escalation is included in Southwest Gas's capital planning and budgeting process.

Average Rate Base: The NCA average GPIS and AD\&A is computed by using actual, recorded amounts for the historical years 2012 through 2018.

The 2019 GPIS computation begins with the year-end 2018 GPIS balance and adds the forecasted/projected additions for 2019, as summarized in the Chapter 17 Workpapers at Sheet 5. The 2019 retirements/transfers are based on the methods discussed above.

The simple average of the sum of the year-end 2018 and the year-end 2019 GPIS balances is calculated to determine the average 2019 GPIS balance used for rate base.

The 2019 AD\&A computation begins with the year-end 2018 AD\&A balance. An annualized provision for 2019, utilizing the half-year convention for forecasted 2019 additions, is added to that balance. The 2019 retirements, removal costs, and salvage are based on the methods discussed above.

The simple average of the sum of the year-end 2018 and the year-end 2019 AD\&A balances is calculated to determine the average 2019 AD\&A balance used for rate base.

The 2020 GPIS computation begins with the year-end 2019 GPIS balance and adds the forecasted/projected additions for 2020, as summarized in the Chapter 17 Workpapers at Sheet 5. The 2020 retirements/transfers are based on the methods discussed above.

The simple average of the sum of the year-end 2019 and the year-end 2020 GPIS balances is calculated to determine the average 2020 GPIS balance used for rate base.

The 2020 AD\&A computation begins with the year-end 2019 AD\&A balance. An annualized provision for 2020, utilizing the half-year convention for forecasted 2020 additions, is added to that balance. The 2020 retirements, removal costs, and salvage are based on the methods discussed above.

The simple average of the sum of the year-end 2019 and the year-end 2020 AD\&A balances is calculated to determine the average 2020 AD\&A balance used for rate base.

The 2021 GPIS computation begins with the year-end 2020 GPIS balance and adds the forecasted/projected additions for 2021, as summarized in the Chapter 17 Workpapers, Sheet 5. The 2021 retirements/transfers are based on the methods discussed above.

The simple average of the sum of the year-end 2020 and year-end 2021 GPIS balances is calculated to determine the average 2021 GPIS balance used for the test period rate base.

The 2021 AD\&A computation begins with the year-end 2020 AD\&A balance. An annualized provision for 2021, utilizing the half-year convention for forecasted 2021 additions, and the use of proposed depreciation rates, is added to that balance. The 2021 retirements, removal costs, and salvage are based on the methods discussed above.

The simple average of the sum of the year-end 2020 and year-end 2021 AD\&A balances is calculated to determine the average 2021 AD\&A balance used for the test period rate base.

System Allocable GPIS and AD\&A are described in the narrative summary of Chapter 8, Tab B, of this filing.

Customer Advances for Construction for 2019-2021 are calculated utilizing a 13month average of the historical balances from 2012-2018.

Deferred Taxes are computed in Chapter 16 of this filing and include excess deferred taxes as a result of the Tax Cuts and Jobs Act of 2017.

Working capital consists of the Lead-Lag Study plus Materials and Supplies. See Chapter 17, Sheet 25 for the calculation of Materials and Supplies. The LeadLag Study was prepared consistent with the previous Southwest Gas filings and followed the California Standard Practice U-16. The 13-month average balances are listed by account and are adjusted for deferred income taxes, if applicable, to obtain a more accurate amount relating to cash working capital needs or surpluses. All System Allocable/Common balances have the appropriate 4Factor Allocation percentage applied to determine the appropriate amount to allocate to the rate jurisdiction. Details of all subaccounts are also included in the Chapter 17 Lead Lag Workpapers.

Depreciation and Amortization expense for 2019 and 2020 uses the annualized provision as computed in Chapter 17, Sheets 15 and 16. Depreciation and Amortization for 2021 uses annualized provision as computed in Chapter 17, sheet 17 based on the proposed depreciation rates submitted to the Public Advocates Office on August 28, 2019.
SOUTHWEST GAS CORPORATION
AVERAGE RATE BASE
2012 THROUGH 2021

SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA
2012 AVERAGE GAS PLANT AND ACCUMULATED
PROVISION FOR DEPRECIATION PER BOOKS

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
2013 AVERAGE GAS PLANT AND ACCUMLATED
PROVISION FOR DEPRECIATION PER BOOKS

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
2014 AVERAGE GAS PLANT AND ACCUMULATED
PROVISION FOR DEPRECIATION PER BOOKS

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
2015 AVERGE GAS PLANT AND ACCUMULATED
PROVISION FOR DEPRECIATION PER BOOKS


| Line No. | Description |
| :---: | :---: |
|  | (a) |
|  | Intangible Plant |
| 1 | Franchise and Consents |
| 2 | Miscellaneous Intangible Plant |
| 3 | Total Intangible Plant |
|  | Distribution Plant |
| 4 | Land and Land Rights |
| 5 | Rights of Way |
| 6 | Structures \& Improvements |
| 7 | Mains |
| 8 | Measuring \& Reg Station-General |
| 9 | Measuring \& Reg Station-City Gate |
| 10 | Senices |
| 11 | Meters |
| 12 | Industrial Measuring \& Reg Station |
| 13 | Miscellaneous Equipment |
| 14 | Total Distribution Plant |
|  | General Plant |
| 15 | Land and Land Rights |
| 16 | Structures \& Improvements - Owned |
| 17 | Structures \& Improvements - Leasehold |
| 18 | Office Furniture \& Fixtures |
| 19 | Computer Software \& Hardware |
| 20 | Transportation Equip. - Vehicles Light |
| 21 | Transportation Equip. - Vehicles Heavy |
| 22 | Stores Equipment |
| 23 | Tool, Shop \& Garage Equipment |
| 24 | Laboratory Equipment |
| 25 | Power Operated Equipment |
| 26 | Communication Equipment |
| 27 | Communication Equipment - Telemetry |
| 28 | Miscellaneous Equipment |
| 29 | Total General Plant |
| 30 | Total Gas Plant in Service |
| 31 | Annual Average Total Balance |

SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA
2016 AVERAGE GAS PLANT AND ACCUMLATED
PROVISION FOR DEPRECIATION PER BOOKS

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA NORTHERN CALIFORNIA
2017 AVERAGE GAS PLANT AND ACCUMULATED
PROVISION FOR DEPRECIATION PER BOOKS


SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
2018 AVERGE GAS PLANT AND ACCUMULATED
PROVISION FOR DEPRECIATION PER BOOKS

| Account Number |  | Gas Plant <br> in Service 12/31/2017 |  | Net Additions | Retirements | Transfers \& Adjustments | Gas Plant in Service 12/31/2018 | Annual Rate | Accumulated Provision for Depreciation 12/31/2017 | Provision | Retirements | Removal Cost | Salvage | Transfers \& Adjustments | Accumulated Provision for Depreciation 12/31/2018 | $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (b) |  | $\begin{gathered} \text { (c) } \\ \text { Co. Records } \end{gathered}$ |  | (d) Co. Records | (e) <br> Co. Records | $\begin{gathered} \text { (f) } \\ \text { Co. Records } \end{gathered}$ | $\begin{gathered} (\mathrm{g}) \\ (\mathrm{c})+(\mathrm{d})-(\mathrm{e})+(\mathrm{f}) \end{gathered}$ | $\frac{(\mathrm{h})}{\text { A. } 12-12-024}$ | $\begin{gathered} \text { (i) } \\ \text { co. Records } \end{gathered}$ | $\begin{gathered} \text { (j) } \\ \text { Co. Records } \end{gathered}$ | (k) Co. Records | $\begin{gathered} (\mathrm{I}) \\ \text { Co. Records } \end{gathered}$ | $\begin{gathered} (\mathrm{m}) \\ \text { Co. Records } \end{gathered}$ | $\begin{gathered} (n) \\ \text { Co. Records } \end{gathered}$ | (o) <br> (l) $+(k)-(k)-(l)+(m)+(n)$ |  |
| 302 | \$ | 31,415 | \$ | \$ | - \$ | - \$ | 31,415 | 0.00\% \$ | 31,415 \$ | - \$ | - \$ | \$ | - \$ | \$ | 31,415 | 1 |
| 303 | \$ | 31,415 | \$ |  |  |  | 31,415 |  | 31,415 | - \$ | - \$ | - | -\$ | - \$ | 31,415 | 3 |
| 374.1 | \$ | - | \$ | \$ | \$ | \$ | - | 0.00\% \$ | \$ | \$ | - \$ | \$ | \$ | \$ | - | 4 |
| 374.2 |  | 35,968 |  | - | - | - | 35,968 | 1.84\% | 26,603 | 662 | - | - |  | - | 27,265 | 5 |
| 375 |  | 851 |  | . | - | - | 851 | 1.41\% | 791 | 12 | - | . | - | . | 803 | 6 |
| 376 |  | 88,607,061 |  | 223,856 | 621 | - | 88,830,296 | 2.41\% | 22,275,239 | 2,140,999 | 621 |  |  |  | 24,415,618 | 7 |
| 378 |  | 1,410,816 |  | 122,701 | 7,945 | - | 1,525,572 | 3.82\% | 581,888 | 56,489 | 7,945 | - | - | - | 630,431 | 8 |
| 379 |  |  |  |  |  | - |  | n/a |  |  |  |  |  |  |  | 9 |
| 380 |  | 39,720,926 |  | 1,100,004 | 127,894 | - | 40,693,037 | 3.06\% | 20,532,431 | 1,226,653 | 127,894 | 17,248 | - | - | 21,613,942 | 10 |
| 381 |  | 11,489,525 |  | 419,875 | 5,358 | - | 11,904,042 | 2.61\% | 5,586,744 | 303,523 | 5,358 |  |  | - | 5,884,910 | 11 |
| 385 |  | 202,756 |  | . | 4,331 | - | 198,425 | 3.57\% | 48,677 | 7,122 | 4,331 | 20 | - | - | 51,448 | 12 |
| 387 |  | 12,872 |  |  |  |  | 12,872 | 0.00\% | 12,872 |  |  |  |  |  | 12,872 | 13 |
|  |  | 141,480,775 |  | 1,866,436 \$ | 146,149 $\$$ | - \$ | 143,201,063 | \$ | 49,065,245 \$ | 3,735,460 \$ | 146,149 \$ | 17,268 \$ | -\$ | -\$ | 52,637,289 | 14 |
| 389 | \$ | 790,233 | \$ | \$ | \$ | - | 790,233$2,354,735$ | 0.00\% \$ | 991,264 | $68,052{ }^{\text {- }}$ | \$ | \$ | - \$ | - | 1,059,316 | 1516 |
| 390.1 |  | 2,354,735 |  |  | - | - |  | 2.89\% |  |  | - | - |  |  |  |  |
| 390.2 |  |  |  | - | - | - |  | 0.00\% |  |  |  |  |  |  |  | 17 |
| 391 |  | 63,480 |  | - | - | - | 63,480 | 3.88\% | 86,469 | 2,463 | - | - |  | - | 88,932 | 18 |
| 391.1 |  | 22,088 |  | - |  | - | 22,088 | 12.07\% | $(41,850)$ | 2,666 | - |  |  |  | $(39,184)$ | 19 |
| 392.11 |  | 509,444 |  | 131,463 | - | 103,940 | 744,848 | 9.59\% | 370,196 | 58,737 | - | - |  | $(22,767)$ | 406,167 | 20 |
| 392.12 |  | 85,295 |  | - | - | - | 85,295 | 7.83\% | 68,828 | 6,679 |  |  |  |  | 75,507 | 21 |
| 393 |  | 37,166 |  | - | - | - | 37,166 | 0.84\% | 37,353 | 312 | - |  |  | - | 37,665 | 22 |
| 394 |  | 91,569 |  | - | - | - | 91,569 | 4.67\% | 37,936 | 4,276 | - |  |  |  | 42,212 | 23 |
| 395 |  |  |  |  | - | - |  | n/a |  |  | - |  |  |  |  | 24 |
| 396 |  | 162,187 |  | 122,595 | - | - | 284,782 | 5.20\% | 97,827 | 10,559 | - |  | - | - | 108,386 | 25 |
| 397 |  | 14,779 |  |  | - | - | 14,779 | 6.04\% | 18,040 | 893 | - |  | - | - | 18,933 | 26 |
| 397.2 |  |  |  | - | - | - |  | n/a |  |  | - | - | $\cdot$ | $\checkmark$ |  | 27 |
| 398 \$ |  | 9,965 |  | 17,320 |  |  | 27,285 | 1.59\% | 7,483 | 275 |  |  |  | $\stackrel{-}{\square}$ | 7,758 | 28 |
|  |  | 4,140,943 |  | 271,378 \$ | -\$ | 103,940 \$ | 4,516,260 | - \$ | 1,673,546 | 154,912 \$ |  |  | - \$ | (22,767) \$ | 1,805,692 | 29 |
|  |  | \$ 145,653,132 \$ |  | 2,137,814 \$ | 146,149 \$ | 103,940 \$ | 147,748,738 |  | 50,770,206 \$ | 3,890,372 \$ | 146,149 \$ | 17,268 \$ | - \$ | (22,767) \$ | 54,474,395 | 30 |
|  |  |  |  |  | 146,700,935 |  |  |  |  |  |  |  | 52,622,300 | 31 |  |  |


| Line | Description |
| :---: | :---: |
|  | (a) |
|  | Intangible Plant |
| 1 | Franchise and Consents |
| 2 | Miscellaneous Intangible Plant |
| 3 | Total Intangible Plant |
|  | Distribution Plant |
| 4 | Land and Land Rights |
| 5 | Rights of Way |
| 6 | Structures \& Improvements |
| 7 | Mains |
| 8 | Measuring \& Reg Station-General |
| 9 | Measuring \& Reg Station-City Gate |
| 10 | Senices |
| 11 | Meters |
| 12 | Industrial Measuring \& Reg Station |
| 13 | Miscellaneous Equipment |
| 14 | Total Distribution Plant |
|  | General Plant |
| 15 | Land and Land Rights |
| 16 | Structures \& Improvements - Owned |
| 17 | Structures \& Improvements - Leasehold |
| 18 | Office Furniture \& Fixtures |
| 19 | Computer Software \& Hardware |
| 20 | Transportation Equip. - Vehicles Light |
| 21 | Transportation Equip. - Vehicles Heavy |
| 22 | Stores Equipment |
| 23 | Tool, Shop \& Garage Equipment |
| 24 | Laboratory Equipment |
| 25 | Power Operated Equipment |
| 26 | Communication Equipment |
| 27 | Communication Equipment - Telemetry |
| 28 | Miscellaneous Equipment |
| 29 | Total General Plant |
| 30 | Total Gas Plant in Service |
| 31 | Annual Average Total Balance |

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA
2019 AVERAGE GAS PLANT AND ACCUMULATED


| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Description |
| :---: | :---: |
|  | (a) |
|  | Intangible Plant |
| 1 | Franchise and Consents |
| 2 | Miscellaneous Intangible Plant |
| 3 | Total Intangible Plant |
|  | Distribution Plant |
| 4 | Land and Land Rights |
| 5 | Rights of Way |
| 6 | Structures \& Improvements |
| 7 | Mains |
| 8 | Measuring \& Reg Station-General |
| 9 | Measuring \& Reg Station-City Gate |
| 10 | Senvices |
| 11 | Meters |
| 12 | Industrial Measuring \& Reg Station |
| 13 | Miscellaneous Equipment |
| 14 | Total Distribution Plant |
|  | General Plant |
| 15 | Land and Land Rights |
| 16 | Structures \& Improvements - Owned |
| 17 | Structures \& Improvements - Leasehold |
| 18 | Office Furniture \& Fixtures [1] |
| 19 | Computer Software \& Hardware |
| 20 | Transportation Equip. - Vehicles Light |
| 21 | Transportation Equip. - Vehicles Heavy |
| 22 | Stores Equipment [1] |
| 23 | Tool, Shop \& Garage Equipment |
| 24 | Laboratory Equipment |
| 25 | Power Operated Equipment |
| 26 | Communication Equipment [1] |
| 27 | Communication Equipment - Telemetry |
| 28 | Miscellaneous Equipment |
| 29 | Total General Plant |
| 30 | Total Gas Plant in Service |
| 31 | Annual Average Total Balance |
|  |  |

SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA
2020 AVERGE GA PLAN AND ACUMULATED
PROVISION FOR DEPRECIATION PER BOOKS

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA NORTHERN CALIFORNIA
2021 AVERGE GA PLAN AND ACUMULATED
PROVIIION FOR DEPRECIATION PER BOOKS


| Line No. | Description |
| :---: | :---: |
|  | (a) |
|  | Intangible Plant |
| 1 | Franchise and Consents |
| 2 | Miscellaneous Intangible Plant |
| 3 | Total Intangible Plant |
|  | Distribution Plant |
| 4 | Land and Land Rights |
| 5 | Rights of Way |
| 6 | Structures \& Improvements |
| 7 | Mains |
| 8 | Measuring \& Reg Station-General |
| 9 | Measuring \& Reg Station-City Gate |
| 10 | Senices |
| 11 | Meters |
| 12 | Industrial Measuring \& Reg Station |
| 13 | Miscellaneous Equipment |
| 14 | Total Distribution Plant |
|  | General Plant |
| 15 | Land and Land Rights |
| 16 | Structures \& Improvements - Owned |
| 17 | Structures \& Improvements - Leasehold |
| 18 | Office Furniture \& Fixtures [1] |
| 19 | Computer Software \& Hardware |
| 20 | Transportation Equip. - Vehicles Light |
| 21 | Transportation Equip. - Vehicles Heavy |
| 22 | Stores Equipment [1] |
| 23 | Tool, Shop \& Garage Equipment |
| 24 | Laboratory Equipment |
| 25 | Power Operated Equipment |
| 26 | Communication Equipment [1] |
| 27 | Communication Equipment - Telemetry |
| 28 | Miscellaneous Equipment |
| 29 | Total General Plant |
| 30 | Total Gas Plant in Service |
| 31 | Annual Average Total Balance |
|  | [1] Overaccrual of depreciaion reversed in column () |

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA REGULATORY AMORTIZATIONS

| Line No. | Description | Reference |  | Amount | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) |  | (c) |  |
| 1 | Base Year Recorded Amortization Expense | Company Records | \$ | 744,414 | 1 |
| 2 | CARB Implementation Fees | Ch 17, Sh 16, Ln 8(d) |  | 28,033 | 2 |
| 3 | Tax Memorandum Account | Ch 17, Sh 17, Ln 5(c) |  | $(528,330)$ | 3 |
| 4 | Greenhouse Gas Memorandum Account | Ch 17, Sh 18, Ln 8(d) |  | 1,839 | 4 |
| 5 | MHP - To The Meter Deferral Amort. | Ch 17, Sh 19, Ln 4(c) |  | 7,219 | 5 |
| 6 | MHP - Beyond the Meter Deferral Amort. | Ch 17, Sh 20, Ln 4(c) |  | 2,110 | 6 |
| 7 | MHP - Beyond the Meter Asset Amort. | Ch 17, Sh 20, Ln 6(c) |  | 3,593 | 7 |
|  | Pension Balancing Account (PBA) |  |  |  |  |
| 8 | Balance at December 31, 2018 | Company Records | \$ | $(275,565)$ | 8 |
| 9 | Amortization Period |  |  | 5 | 9 |
| 10 | Annual Amortization Expense | Ln $8 / \operatorname{Ln} 9$ | \$ | $(55,113)$ | 10 |
| 11 | Test Year Regulatory Amortization Expense | Sum Ln $2-\operatorname{Ln} 7+\operatorname{Ln} 10$ | \$ | $(540,650)$ | 11 |
|  |  |  |  | , Sh 1, Ln 13(c) |  |
| 12 | Adjustment | Ln $11-\operatorname{Ln} 1$ | \$ | $(1,285,063)$ | 12 |

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> REGULATORY AMORTIZATIONS CALIFORNIA AIR RESOURCES BOARD (CARB)



| [1] CARB amortization is allocated to Northern California based on its weighted 4-Factor relative to the |
| :--- |
| Total California 4-Factor: |
|  |
| Test Year 4-Factor - Total California |
| Southern California |
| Ch 8C, Sh 9, Ln 10 |
| Northern California |
| South Lake Tahoe |
| $\quad$ Total California |

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> REGULATORY AMORTIZATIONS TAX MEMORANDUM ACCOUNT (TMA)

| Line No. | Description | Reference |  | Amount | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) |  | (c) |  |
| 1 | 2019 Reserve Amounts | Company Records | \$ | $(1,302,911)$ | 1 |
| 2 | 2020 Reserve Amounts | Company Records |  | $(1,338,741)$ | 2 |
| 3 | Total TMA Amounts | Ln $1+\operatorname{Ln} 2$ |  | (2,641,652) | 3 |
| 4 | Amortization Period |  |  | 5 | 4 |
| 5 | Annual Amortization Expense | Ln $3 / \operatorname{Ln} 4$ | \$ | $(528,330)$ | 5 |
|  |  |  |  | 7, Sh 15, Ln 3(c) |  |

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> REGULATORY AMORTIZATIONS GREENHOUSE GAS MEMORANDUM ACCOUNT (GHGMA)



| [1] GHGMA amortization is allocated to Northern California based on its weighted 4-Factor relative to the |
| :--- |
| Total California 4-Factor: |
|  |
| Test Year 4-Factor - Total California |
| Southern California |
| Ch 8C, Sh 9, Ln 10 |
| Northern California |
| South Lake Tahoe |
| $\quad$ Total California |

## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> REGULATORY AMORTIZATIONS <br> MASTER METER MOBILE HOME PARK CONVERSION TO THE METER (TTM) COSTS THROUGH DECEMBER 2020



## SOUTHWEST GAS CORPORATION <br> NORTHERN CALIFORNIA <br> REGULATORY AMORTIZATIONS MASTER METER MOBILE HOME PARK CONVERSION BEYOND THE METER (BTM) COSTS THROUGH DECEMBER 2020

| Line <br> No. | Description | Account | Amount |  | Line <br> No. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) | (c) |  |  |
|  |  |  | Company Records |  |  |
|  | Mobile Home Park Conversion Balancing Account (MHPCBA) Balance |  |  |  |  |
| 1 | Kings Beach MHP | 182.3 | \$ | 21,096 | 1 |
| 2 | Projected Total Revenue Requirement |  |  | 21,096 | 2 |
| 3 | Amortization Period |  |  | 10 | 3 |
| 4 | NCA MHP - BTM Deferral Amortization | 407.3 | \$ | 2,110 | 4 |
|  |  |  | Ch 17, Sh 15, Ln 6(c) |  |  |
|  | Annual Amortization Expense |  |  |  |  |
| 5 | Kings Beach MHP |  | \$ | 3,593 | 5 |
| 6 | NCA MHP - BTM Asset Amortization | 407.3 | \$ | 3,593 | 6 |

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA <br> LEAD LAG STUDY TEST YEAR 2021 - BEFORE RATE RELIEF

| Line No. | Description | Reference/ Account |  | Cost | Lag Days |  | Dollar Days | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) |  | (c) | (d) | (e) |  |  |
|  |  |  |  | Ch 6, Sh 1 | [1] |  | (c) * (d) |  |
|  | Operations and Maintainence |  |  |  |  |  |  |  |
| 1 | Cost of Gas |  | \$ | 13,933,322 | 39.56 | \$ | 551,217,845 | 1 |
| 2 | Labor and Labor Loading Cost |  |  | 3,524,769 | 25.41 |  | 89,553,353 | 2 |
| 3 | Prepayments Amortized to O\&M [2] |  |  | 104,762 | 0.00 |  | 0 | 3 |
| 4 | Provision for Uncollected Accounts |  |  | 10,291 | 170.21 |  | 1,751,636 | 4 |
| 5 | Prepaid Insurance [2] |  |  | 335,791 | 0.00 |  | 0 | 5 |
| 6 | Other Amortizations [2] |  |  | 770,380 | 0.00 |  | 0 | 6 |
| 7 | Other O\&M Expense |  |  | 1,758,512 | 23.75 |  | 41,768,322 | 7 |
| 8 | Total O\&M Expenses |  | \$ | 20,437,826 | 33.48 | \$ | 684,291,157 | 8 |
| 9 | Depreciation and Amortization |  |  | 4,328,850 | 0.00 |  | 0 | 9 |
| 10 | Payroll Taxes |  |  | 193,805 | 15.00 |  | 2,906,731 | 10 |
| 11 | Taxes Other Than Income Taxes |  |  | 1,293,488 | 129.08 |  | 166,962,097 | 11 |
| 12 | State Income Taxes |  |  | 554,796 | 21.00 |  | 11,650,712 | 12 |
| 13 | Federal Income Taxes - Current |  |  | 1,200,404 | 38.25 |  | 45,915,438 | 13 |
| 14 | Total Operating Expenses |  | \$ | 28,009,167 | 32.55 | \$ | 911,726,135 | 14 |
| 15 | Number of Days in Test Period |  |  | 365 |  |  |  | 15 |
| 16 | Avg Daily Operating Expenses | Ln 14(c) / Ln 15(c) |  | 76,737 |  |  |  | 16 |
| 17 | Lag in Receipt of Revenue |  |  |  | 33.78 |  |  | 17 |
| 18 | Net Difference: Revenue Lag - Expense Lag | Ln 17(c)-Ln 14(c) |  |  | - |  |  | 18 |
| 19 | Cash Working Capital for Operating Expense | Ln 16(c) * Ln 18(c) | \$ | 94,171 |  |  |  | 19 |
| 20 | Other Working Capital Required | WP Ch 17, Sh 80 |  |  |  |  |  | 20 |
| 21 | Other Special Funds | Acct 128 | \$ | 1,848,731 |  |  |  | 21 |
| 22 | Working Funds | Acct 135 |  | 8,263 |  |  |  | 22 |
| 23 | Prepayments | Acct 165 |  | 210,555 |  |  |  | 23 |
| 24 | Misc. Curr. \& Accru. Assets | Acct 174 |  | 0 |  |  |  | 24 |
| 25 | Other Regulatory Assests | Acct 182.3 |  | 73,907 |  |  |  | 25 |
| 26 | Deferred Debits | Acct 186 |  | 6,924 |  |  |  | 26 |
| 27 | Alternative Minimum Tax | Acct 190 |  | 140,636 |  |  |  | 27 |
| 28 | Injuries and Damages | Acct 228 |  | $(36,767)$ |  |  |  | 28 |
| 29 | Misc. Curr. \& Accru. Liabilities | Acct 242 |  | 688,953 |  |  |  | 29 |
| 30 | Other Deferred Credits | Acct 253 |  | $(310,479)$ |  |  |  | 30 |
| 31 | Other Regulatory Liabilities | Acct 254 |  | $(470,923)$ |  |  |  | 31 |
| 32 | Total Other Working Capital Required |  | \$ | 2,159,801 |  |  |  | 32 |
| 33 | Total Working Capital Requirements |  | \$ | 2,253,972 |  |  |  | 33 |
|  |  |  | Ch 17, Sh 21, Ln 1 |  |  |  |  |  |

[^2]
## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA <br> LEAD LAG STUDY TEST YEAR 2021 - AFTER RATE RELIEF



[^3]SOUTHWEST GAS CORPORATION
DEFERRED TAXES
2012 THROUGH 2021

| Line No. | Description | Recorded [1] |  |  |  |  |  |  |  |  |  |  |  |  |  | Projected <br> 2019 |  | Projected <br> 2020 |  | $\begin{aligned} & \text { Projected } \\ & 2021 \end{aligned}$ |  | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 |  |  |  |  |  |  |  |
|  | (a) |  | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  | (h) |  | (i) |  | (j) |  | (k) |  |
|  | Deferred Income Tax (DIT) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Direct | \$ | 16,287,006 | \$ | 20,915,209 | \$ | 23,885,749 | \$ | 25,140,374 |  | 25,430,164 |  | 15,804,911 | \$ | 16,574,665 | \$ | 16,709,147 | \$ | 17,500,667 | \$ | 17,772,018 | 1 |
| 2 | System Allocable | \$ | 21,831,207 | \$ | 24,697,811 | \$ | 30,020,658 | \$ | 31,159,844 | , | 32,374,504 | , | 19,459,079 | \$ | 18,967,191 | \$ | 26,532,385 | \$ | 26,765,578 | \$ | 27,241,753 | 2 |
| 3 | 4-Factor |  | 1.46\% |  | 1.45\% |  | 1.57\% |  | 1.57\% |  | 1.58\% |  | 1.65\% |  | 1.56\% |  | 1.56\% |  | 1.56\% |  | 1.56\% | 3 |
| 4 | NCA Allocation | \$ | 318,594 | \$ | 358,463 | \$ | 472,605 | \$ | 489,509 | \$ | 512,029 | \$ | 321,235 | \$ | 295,224 | \$ | 412,977 | \$ | 416,606 | \$ | 424,018 | 4 |
| 5 | Total DIT |  | 16,605,600 |  | 21,273,672 |  | 24,358,354 |  | 25,629,883 |  | 25,942,193 |  | 16,126,146 |  | 16,869,889 |  | 17,122,123 |  | 17,917,273 |  | 18,196,036 | 5 |
|  | Excess Deferred Taxes (EDIT) |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 6 | Direct Beginning Period | \$ | - | \$ |  | \$ |  | \$ | - | \$ | - | \$ | - | \$ | 9,442,791 | \$ | 9,442,791 | , | 9,442,791 | \$ | 9,442,791 | 6 |
| 7 | Amortization |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | $(197,665)$ | 7 |
| 8 | Adjustment |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | - |  | - |  | 106,097 | 8 |
| 9 | Direct Ending Period | \$ |  |  |  |  |  |  |  |  |  |  | 9,442,791 |  | 9,442,791 | \$ | 9,442,791 | \$ | 9,442,791 |  | 9,351,223 | 9 |
| 10 | System Alloc. Beginning | \$ | - | \$ | - | \$ |  | \$ |  | \$ | - | \$ | - | \$ | 8,744,231 | \$ | 8,744,231 | \$ | 8,744,231 | \$ | 8,744,231 | 10 |
| 11 | Amortization |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | - |  | $(1,973,614)$ | 11 |
| 12 | Adjustment |  | - |  | - |  | - |  | - |  | - |  | - - |  | , |  | - |  | - |  | 1,901,844 | 12 |
| 13 | System Alloc. Ending | \$ |  | \$ |  | \$ |  | \$ |  | \$ |  | \$ | 8,744,231 | \$ | 8,744,231 | \$ | 8,744,231 | \$ | 8,744,231 |  | 8,672,461 | 13 |
| 14 | 4-Factor |  | 0.00\% |  | 0.00\% |  | 0.00\% |  | 0.00\% |  | 0.00\% |  | 1.65\% |  | 1.65\% |  | 1.65\% |  | 1.65\% |  | 1.65\% | 14 |
| 15 | NCA Allocation | \$ |  | \$ |  | \$ |  | \$ |  | \$ | - |  | 144,280 |  | 144,280 | \$ | 144,280 | \$ | 144,280 |  | 143,096 | 15 |
| 16 | Total EDIT |  | 16,605,600 |  | 21,273,672 |  |  |  | 25,629,883 |  | 25,942,193 |  | 25,713,217 |  | 26,456,960 |  | 9,587,071 |  | 9,587,071 |  | 9,494,319 | 16 |
| 17 | Total DIT and EDIT |  | 33,211,200 |  | 42,547,343 | \$ | 24,358,354 |  | 51,259,766 |  | 51,884,386 |  | 41,839,363 |  | 43,326,849 |  | 26,709,194 |  | 27,504,344 |  | 27,690,354 | 17 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ch 17, Sh 4 |  | Ch 17, Sh 4 |  | Ch 17, Sh 4 |  |
|  | [1] Company Records |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Ln 7-10, Col (i) |  | Ln 7-10, Col (j) |  | Ln 7-10, Col (k) |  |

# CHAPTER 18 <br> Pension and Benefits 

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA PENSIONS AND BENEFITS CHAPTER 18

Chapter 18 contains pensions and benefits (P\&B) for Southwest Gas in nominal dollars and 2018 dollars. Chapter 18, Sheet 3 shows projected employee benefits from 2019 through 2021, as well as the applicable labor loading percentage that carries through to the other chapters where labor loading expense is calculated. Chapter 18 Sheets 4 and 5 show seven years of historical P\&B data (2012 through 2018). Chapter 18, Sheet 6 shows P\&B as recorded, and as adjusted for using the cash method for pension cost recovery, along with the historical labor loading percentages, both with and without payroll taxes.

Southwest Gas allocates its P\&B (also referred to as labor loadings) to each labor account based on a percentage of labor. Southwest Gas' recorded labor loadings include pension accruals, benefits, and paid time off, as well as payroll taxes. For projection purposes, payroll taxes have been removed from the labor loading factor and are included in Chapter 16. Therefore, for comparison purposes Southwest Gas shows the computation of historical labor loadings as recorded, as adjusted for cashbasis pension, and the labor loading percentage with and without payroll taxes.

Several pension and benefits projections are based solely on escalating 2018 benefits, including Life and AD\&D insurance, employee assistance program, pension plan administration fees, dental, long term disability, flex benefits, tuition reimbursements, and employee investment plan, since this best reflects ongoing expenses. The remaining pension and benefit projections were normalized in 2018 dollars over three years (medical and post-employment benefits other than pension) or seven years (supplemental executive retirement plan (SERP), deferred compensation (EDCP), pension, employee communications, and miscellaneous benefits) because the expense has fluctuated from year to year in recent years.

Paid time off, SERP, EDCP, pension, and employee investment plan are escalated by the labor escalation factor in Chapter 7. The remaining $\mathrm{P} \& \mathrm{~B}$ are escalated by the materials and expenses escalation factor in Chapter 7.

Seven years of historical P\&B data by subaccount is provided in WP Chapter 18, Sheet 1. All amounts are rounded to the nearest dollar. Certain miscellaneous benefits, related to employee recognition and employee events, were removed from the cost of service (WP Chapter 18, Sheet 3). Also, since the Commission requires that pensions be requested for recovery on a cash basis, a workpaper has been provided that lists all the payments to the pension plan from 2012 through 2018 (WP Chapter 18, Sheet 2). The labor loading factor is calculated on a total-Company basis, since most P\&B cover all employees, and is then applied to labor charged to or allocated to California. The summary page from the actuarial studies showing results
from 2012 to 2018, along with internal memos supporting additional funding from 2012 through 2018 are included in Chapter 18 Workpapers.

The labor loading factors for the projected years are calculated based on escalated labor loadings divided by escalated labor, as shown on Chapter 18, Sheet 1. The labor loading factor is applied to the requested labor costs to determine labor loading expense within the workpapers of each chapter with charged labor.

The projected periods 2019-2021 reflect a seven-year normalization of 2013 through 2019 pension and supplemental executive retirement plan costs, and a three-year normalization of 2017 through 2019 post-employment benefits other than pension costs for the projected periods as shown in the workpapers to Chapter 8A.
2018 THROUGH 2021


\[

\]

| Line No. | Description |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) |  | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  | (h) |  |
| 1 | SERP | \$ | 2,586,399 | \$ | 2,879,033 | \$ | 2,820,335 | \$ | 3,308,493 | \$ | 3,573,379 | \$ | 3,634,418 | \$ | 3,404,642 | 1 |
| 2 | Deferred Compensation |  | 3,265,808 |  | 3,187,699 |  | 3,319,924 |  | 3,320,262 |  | 3,455,600 |  | 3,423,926 |  | 3,335,953 | 2 |
| 3 | Life and AD\&D Insurance |  | 488,549 |  | 525,372 |  | 395,440 |  | 394,078 |  | 419,263 |  | 406,762 |  | 432,962 | 3 |
| 4 | Medical |  | 11,912,759 |  | 12,363,284 |  | 10,083,635 |  | 11,548,286 |  | 15,726,224 |  | 13,678,973 |  | 14,956,217 | 4 |
| 5 | Employee Assistance Program |  | 115,300 |  | 115,156 |  | - |  | - |  | - |  | - |  | - | 5 |
| 6 | Pension - Cash Basis |  | 48,500,000 |  | 46,000,000 |  | 36,000,000 |  | 36,000,000 |  | 36,000,000 |  | 36,000,000 |  | 44,000,000 | 6 |
| 7 | Pension Plan Administration |  | 68,069 |  | 62,589 |  | 51,815 |  | 145,920 |  | 219,171 |  | 113,241 |  | 106,716 | 7 |
| 8 | PBOP |  | 3,018,050 |  | 2,195,589 |  | 1,021,301 |  | 2,895,714 |  | 3,281,998 |  | 2,768,630 |  | 1,472,649 | 8 |
| 9 | Dental |  | 1,349,906 |  | 1,353,085 |  | 1,359,427 |  | 1,279,088 |  | 1,378,129 |  | 1,366,481 |  | 1,259,225 | 9 |
| 10 | Long Term Disability Insurance |  | 611,495 |  | 659,116 |  | 878,796 |  | 886,847 |  | 886,607 |  | 876,877 |  | 984,921 | 10 |
| 11 | Flex Benefits |  | 1,615,514 |  | 2,404,954 |  | 2,019,640 |  | 2,579,280 |  | 1,313,459 |  | 919,770 |  | 1,049,402 | 11 |
| 12 | Employee Communications |  | 30,274 |  | 25,645 |  | 30,750 |  | 1,361 |  | 13,270 |  | 1,160 |  | 8 | 12 |
| 13 | Tuition Reimbursements |  | 344,090 |  | 318,622 |  | 319,099 |  | 282,575 |  | 265,204 |  | 272,842 |  | 264,573 | 13 |
| 14 | Employee Investment Plan (EIP) |  | 4,709,328 |  | 4,852,224 |  | 4,816,674 |  | 5,073,314 |  | 4,974,267 |  | 5,207,507 |  | 5,526,694 | 14 |
| 15 | Miscellaneous Benefits |  | 575,150 |  | 469,776 |  | 691,355 |  | 529,449 |  | 129,530 |  | 696,721 |  | 912,675 | 15 |
| 16 | Total Account 926 Benefits | \$ | 79,190,690 | \$ | 77,412,145 | \$ | 63,808,191 | \$ | 68,244,668 | \$ | 71,636,101 | \$ | 69,367,308 | \$ | 77,706,636 | 16 |
| 17 | Indirect Time (Account 242) | \$ | 25,085,782 | \$ | 24,855,411 | \$ | 25,311,147 | \$ | 25,032,724 | \$ | 25,027,375 | \$ | 26,465,134 | \$ | 27,396,475 | 17 |

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| $\% 00^{\circ} \mathrm{G}-$ |
| $\% 99 \cdot \varepsilon$ |
| $89 \subseteq 6^{\circ} 0$ |


$\stackrel{0}{\leftrightharpoons} \stackrel{\circ}{3}$

[^4]HISTORICAL LABOR LOADING PERCENTAGES - NOMINAL DOLLARS 2012 THROUGH 2018

| $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ | Description | Reference |  | 2012 |  | 2013 |  | 2014 |  | 2015 |  | 2016 |  | 2017 |  | 2018 | $\begin{aligned} & \text { Line } \\ & \text { No. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  | (g) |  | (h) |  | (i) |  |
| AS RECORDED |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Other Benefits | Ln $10-\operatorname{Ln} 20$ | \$ | 67,378,255 \$ | \$ | 74,496,060 \$ | \$ | 62,139,398 | \$ | 76,531,909 \$ | \$ | 73,204,270 | \$ | 71,648,944 | \$ | 62,262,099 | 1 |
| 2 | Indirect Time | Ch 18, Sh 4, Ln 17 |  | 25,085,782 |  | 24,855,411 |  | 25,311,147 |  | 25,032,724 |  | 25,027,375 |  | 26,465,134 |  | 27,396,475 | 2 |
| 3 | Payroll Taxes | Company Records |  | 13,574,061 |  | 13,457,372 |  | 13,541,144 |  | 15,746,195 |  | 16,353,681 |  | 14,436,755 |  | 14,836,782 | 3 |
| 4 | Total | Sum Lns 1-3 | \$ | 106,038,097 \$ | \$ | 112,808,843 \$ |  | 100,991,690 |  | 117,310,828 |  | 114,585,326 \$ |  | 112,550,833 |  | 104,495,357 | 4 |
| 5 | Total Company Labor | Company Records | \$ | 190,760,559 |  | 191,651,231 |  | 194,341,660 |  | 193,772,491 |  | 198,145,775 |  | 210,907,735 |  | 217,839,433 | 5 |
| 6 | Less: Indirect Time | Ln $2^{*}-1$ |  | $(25,085,782)$ |  | (24,855,411) |  | $(25,311,147)$ |  | $(25,032,724)$ |  | $(25,027,375)$ |  | $(26,465,134)$ |  | $(27,396,475)$ | 6 |
| 7 | Less: Variable Compensation | Company Records |  | (10,929,320) |  | $(11,492,393)$ |  | (12,200,573) |  | $(10,309,151)$ |  | $(9,995,707)$ |  | (16,877,915) |  | $(13,472,508)$ | 7 |
| 8 | Net Labor | Sum Lns 5-7 | \$ | 154,745,457 \$ |  | 155,303,427 \$ |  | 156,829,940 |  | 158,430,616 ${ }^{\text {S }}$ |  | 163,122,694 ${ }^{\text {d }}$ |  | 167,564,685 |  | 176,970,449 | 8 |
| 9 | Labor Loading Percentage | Ln 4/Ln 8 |  | 68.52\% |  | 72.64\% |  | 64.40\% |  | 74.05\% |  | 70.24\% |  | 67.17\% |  | 59.05\% | 9 |
| AS ADJUSTED |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 10 | Other Benefits [1] | Ch 18, Sh 4, Ln 16 | \$ | 79,190,690 \$ | \$ | 77,412,145 \$ | \$ | 63,808,191 | \$ | 68,244,668 | \$ | 71,636,101 | \$ | 69,367,308 | \$ | 77,706,636 | 10 |
| 11 | Indirect Time | Ln 2 |  | 25,085,782 |  | 24,855,411 |  | 25,311,147 |  | 25,032,724 |  | 25,027,375 |  | 26,465,134 |  | 27,396,475 | 11 |
| 12 | Total Excluding Payroll Taxes | $\operatorname{Ln} 10+\operatorname{Ln} 11$ | \$ | 104,276,471 $\$$ | \$ | 102,267,556 \$ |  | 89,119,339 |  | 93,277,391 | \$ | 96,663,476 \$ |  | 95,832,442 | \$ | 105,103,111 | 12 |
| 13 | Payroll Taxes [2] | Ln 3 |  | 13,574,061 |  | 13,457,372 |  | 13,541,144 |  | 15,746,195 |  | 16,353,681 |  | 14,436,755 |  | 14,836,782 | 13 |
| 14 | Total Including Payroll Taxes | $\operatorname{Ln} 12+\operatorname{Ln} 13$ | \$ | 117,850,532 $\$$ | \$ | 115,724,928 ${ }^{\text {d }}$ |  | 102,660,483 |  | 109,023,587 |  | 113,017,157 |  | 110,269,197 |  | 119,939,894 | 14 |
| 15 | Net Labor | Ln 8 | \$ | 154,745,457 \$ | \$ | 155,303,427 \$ | \$ | 156,829,940 | \$ | 158,430,616 \$ | \$ | 163,122,694 | \$ | 167,564,685 | \$ | 176,970,449 | 15 |
| 16 | Labor Loading \%, Excluding Payroll Taxes | Ln $12 / \mathrm{Ln} 15$ |  | 67.39\% |  | 65.85\% |  | 56.83\% |  | 58.88\% |  | 59.26\% |  | 57.19\% |  | 59.39\% | 16 |
| 17 | Labor Loading \%, Including Payroll Taxes | Ln 14/Ln 15 |  | 76.16\% |  | 74.52\% |  | 65.46\% |  | 68.81\% |  | 69.28\% |  | 65.81\% |  | 67.77\% | 17 |
| ${ }^{[1]}$ Recorded pension expense was adjusted to reflect the Commission-accepted cash basis methodology as follows: |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 18 | Per Books Account 926 (Accrual Method) | Company Records | \$ | 36,687,565 \$ | \$ | 43,083,915 \$ | \$ | 34,331,207 | \$ | 44,287,241 \$ | \$ | 37,568,169 | \$ | 38,281,636 | \$ | 28,555,463 | 18 |
| 19 | Cash Method | Ch 18, Sh 4, Ln 6 |  | 48,500,000 |  | 46,000,000 |  | 36,000,000 |  | 36,000,000 |  | 36,000,000 |  | 36,000,000 |  | 44,000,000 | 19 |
| 20 | Difference |  |  | 11,812,435 $\$$ | \$ | 2,916,085 \$ |  | 1,668,793 |  | $(8,287,241)$ |  | $(1,568,169) \$$ |  | $\underline{(2,281,636)}$ |  | 15,444,537 | 20 |

## CHAPTER 19

# Class Cost of Service 

## Company Witness: Timothy S. Lyons

## SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA <br> CHAPTER 19 CLASS COST OF SERVICE STUDY

This chapter sets forth the results of Southwest Gas Corporation's (Southwest Gas') Customer Class Cost of Service Study (CCOSS) used in Southwest Gas' proposed rate design. Southwest Gas used an embedded CCOSS model to allocate its Test Year 2021 rate base, expenses, taxes and miscellaneous items to the various functions and rate classes.

Three (3) Class Cost of Service Summaries are included in this Application:

1. Present Rates at Present Rate Schedules
2. Class Revenues at System Average Rate of Return
3. Proposed Rates at Proposed Rate Schedules

Southwest Gas allocated its Test Year 2021 rate base, expenses, taxes and miscellaneous items utilizing class determinants, special studies and internally generated factors.

The first schedule, Present Rates at Present Rate Schedules, provides a summary of the customer class cost of service for the test year at current rates including the test year FCAM adjustment multiplied by Test Year 2021 bills and volumes for each rate class.

The second schedule, Class Revenues at System Average Rate of Return, sets forth the revenue requirement that would be necessary from each rate class in order for each rate class to provide the overall system rate of return.

The third schedule, Proposed Rates at Proposed Rate Schedules, reflects the results of Southwest Gas' rate design proposals in this general rate case application. This summary incorporates the requested revenue responsibility for each class of customers.
CLASS COST OF SERVICE STUDY SUMMARY - PRESENT RATES AT PRESENT RATE SCHEDULES TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021

| No. | Description | Total Amount |  | Residential |  | Residential |  | Multi- Family |  | Sub |  | Core General |  | $\frac{\text { NGV }}{(\mathrm{h})}$ |  | Gas Engine |  | Small Electric |  | Noncore |  | $\underline{\text { Line No. }}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (a) |  | (b) |  | (c) |  |  |  | (e) |  |  |  | (g) |  |  |  | (i) |  |  |  |  |  |
| Rate Base |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | Total Direct Net Plant | \$ | 122,440,583 | \$ | 66,345,865 | \$ | 40,195,154 | \$ | 25,753 | \$ | 0 | \$ | 14,526,921 | \$ | 199,864 | \$ | 9,285 | \$ | 0 | \$ | 1,137,741 | 1 |
| 2 | Total System Allocable Net Plant | \$ | 2,507,461 | \$ | 1,358,697 | \$ | 823,157 | \$ | 527 | \$ | 0 | \$ | 297,497 | \$ | 4,093 | \$ | 190 | \$ | 0 | \$ | 23,300 | 2 |
| 3 | Cash Working Capital | \$ | 2,253,972 | \$ | 1,221,341 | \$ | 739,941 | \$ | 474 | \$ | 0 | \$ | 267,422 | \$ | 3,679 | \$ | 171 | \$ | 0 | \$ | 20,944 | 3 |
| 4 | Materials \& Supplies | \$ | 623,704 | \$ | 337,962 | \$ | 204,752 | \$ | 131 | \$ | 0 | \$ | 73,999 | \$ | 1,018 | \$ | 47 | \$ | 0 | \$ | 5,796 | 4 |
| 5 | Other Debits and Credits | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | 5 |
| 6 | Customer Deposits | \$ | $(200,963)$ | \$ | $(188,362)$ | \$ | $(5,794)$ | \$ | 0 | \$ | 0 | \$ | $(6,806)$ | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | 6 |
| 7 | Deferred Taxes | \$ | $(27,597,349)$ | \$ | $(14,953,947)$ | \$ | (9,059,739) | \$ | $(5,805)$ | \$ | 0 | \$ | (3,274,278) | \$ | $(45,048)$ | \$ | $(2,093)$ | \$ | 0 | \$ | $(256,440)$ | 7 |
| 8 | Total Rate Base | \$ | 100,027,409 | \$ | 54,121,556 | \$ | 32,897,470 | \$ | 21,081 | \$ | 0 | \$ | 11,884,755 | \$ | 163,606 | \$ | 7,600 | \$ | 0 | \$ | 931,341 | 8 |
|  | Revenue |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | Net Operating Margin | \$ | 20,646,669 | \$ | 10,906,396 | \$ | 6,873,684 | \$ | 9,112 | \$ | 0 | \$ | 2,379,799 | \$ | 5,782 | \$ | 655 | \$ | 0 | \$ | 471,241 | 9 |
| 10 | Special Contracts | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | 10 |
| 11 | Other Revenue | \$ | 145,472 | \$ | 118,290 | \$ | 15,379 | \$ | 0 | \$ | 0 | \$ | 11,801 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 2 | 11 |
| 12 | Total Revenue | \$ | 20,792,141 | \$ | 11,024,686 | \$ | 6,889,063 | \$ | 9,112 | \$ | 0 | \$ | 2,391,600 | \$ | 5,782 | \$ | 655 | \$ | 0 | \$ | 471,243 | 12 |
|  | Operating Deductions |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | Operations \& Maintenance Exps | \$ | $(3,462,823)$ | \$ | $(1,913,932)$ | \$ | $(1,153,170)$ | \$ | (555) | \$ | 0 | \$ | $(364,082)$ | \$ | $(3,852)$ | \$ | (322) | \$ | 0 | \$ | $(26,910)$ | 13 |
| 14 | Administrative \& General Exps | \$ | $(3,041,681)$ | \$ | $(1,681,163)$ | \$ | $(1,012,924)$ | \$ | (487) | \$ | 0 | \$ | $(319,803)$ | \$ | $(3,384)$ | \$ | (283) | \$ | 0 | \$ | $(23,637)$ | 14 |
| 15 | Regulatory Amortization | \$ | 540,650 | \$ | 292,957 | \$ | 177,486 | \$ | 114 | \$ | 0 | \$ | 64,145 | \$ | 883 | \$ | 41 | \$ | 0 | \$ | 5,024 | 15 |
| 16 | Depreciation Expenses | \$ | $(4,869,499)$ | \$ | $(2,638,595)$ | \$ | $(1,598,573)$ | \$ | $(1,024)$ | \$ | 0 | \$ | $(577,740)$ | \$ | $(7,949)$ | \$ | (369) | \$ | 0 | \$ | $(45,248)$ | 16 |
| 17 | Taxes other than Income | \$ | $(1,487,292)$ | \$ | $(805,907)$ | \$ | $(488,253)$ | \$ | (313) | \$ | 0 | \$ | $(176,459)$ | \$ | $(2,428)$ | \$ | (113) | \$ | 0 | \$ | $(13,820)$ | 17 |
| 18 | Total Operating Deductions | \$ | (12,320,646) | \$ | $(6,746,639)$ | \$ | $(4,075,434)$ | \$ | $(2,266)$ | \$ | 0 | \$ | $(1,373,939)$ | \$ | $(16,730)$ | \$ | $(1,046)$ | \$ | 0 | \$ | $(104,592)$ | 18 |
|  | State Income Tax |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 19 | Taxable Income before Interest Exp | \$ | 8,471,496 | \$ | 4,278,047 | \$ | 2,813,630 | \$ | 6,846 | \$ | 0 | \$ | 1,017,661 | \$ | $(10,948)$ | \$ | (391) | \$ | 0 | \$ | 366,651 | 19 |
| 20 | State Interest Expenses | \$ | $(2,195,525)$ | \$ | $(1,189,671)$ | \$ | $(720,753)$ | \$ | (462) | \$ | 0 | \$ | $(260,487)$ | \$ | $(3,584)$ | \$ | (166) | \$ | 0 | \$ | $(20,401)$ | 20 |
| 21 | Total State Taxable Income | \$ | 6,275,971 | \$ | 3,088,376 | \$ | 2,092,876 | \$ | 6,384 | \$ | 0 | \$ | 757,173 | \$ | $(14,532)$ | \$ | (557) | \$ | 0 | \$ | 346,250 | 21 |
| 22 | State Taxable Income | \$ | 554,796 | \$ | 273,012 | \$ | 185,010 | \$ | 564 | \$ | 0 | \$ | 66,934 | \$ | $(1,285)$ | \$ | (49) | \$ | 0 | \$ | 30,608 | 22 |
|  | Federal Income Tax |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 23 | Taxable Income before Interest Exp | \$ | 7,916,700 | \$ | 4,005,034 | \$ | 2,628,619 | \$ | 6,282 | \$ | 0 | \$ | 950,727 | \$ | $(9,663)$ | \$ | (342) | \$ | 0 | \$ | 336,043 | 23 |
| 24 | Federal Interest Expenses | \$ | $(2,195,502)$ | \$ | $(1,189,658)$ | \$ | $(720,746)$ | \$ | (462) | \$ | 0 | \$ | $(260,485)$ | \$ | $(3,584)$ | \$ | (166) | \$ | 0 | \$ | $(20,401)$ | 24 |
| 25 | Federal Taxable Income | \$ | 5,721,198 | \$ | 2,815,376 | \$ | 1,907,874 | \$ | 5,820 | \$ | 0 | \$ | 690,242 | \$ | $(13,247)$ | \$ | (508) | \$ | 0 | \$ | 315,641 | 25 |
| 26 | Federal Income Taxes | \$ | 1,201,452 | \$ | 591,229 | \$ | 400,653 | \$ | 1,222 | \$ | 0 | \$ | 144,951 | \$ | $(2,782)$ | \$ | (107) | \$ | 0 | \$ | 66,285 | 26 |
| 27 | Investment Tax Credit (I.T.C.) | \$ | $(1,048)$ | \$ | (568) | \$ | (344) | \$ | (0) | \$ | 0 | \$ | (124) | \$ | (2) | \$ | (0) | \$ | 0 | \$ | (10) | 27 |
| 28 | Federal Deferred Provision | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | 28 |
| 29 | Total Federal Income Tax | \$ | 1,200,404 | \$ | 590,661 | \$ | 400,309 | \$ | 1,222 | \$ | 0 | \$ | 144,826 | \$ | $(2,784)$ | \$ | (107) | \$ | 0 | \$ | 66,275 | 29 |
| 30 | Excess Deferred Amortization | \$ | $(9,685)$ | \$ | $(5,248)$ | \$ | $(3,179)$ | \$ | (2) | \$ | 0 | \$ | $(1,149)$ | \$ | (16) | \$ | (1) | \$ | 0 | \$ | (90) | 30 |
| 31 | Total Net Income | \$ | 6,725,981 | \$ | 3,419,621 | \$ | 2,231,489 | \$ | 5,062 | \$ | 0 | \$ | 807,049 | \$ | $(6,864)$ | \$ | (234) | \$ | 0 | \$ | 269,858 | 31 |
| 32 | Rate of Return on Rate Base |  | 6.72\% |  | 6.32\% |  | 6.78\% |  | 24.01\% |  |  |  | 6.79\% |  | (4.20\%) |  | (3.08\%) |  |  |  | 28.98\% | 32 |


|  | Total Amount |  | Residential |  | Residential | Multi- Family |  | Sub |  |  | Core General |  | NGV |  | Gas Engine |  | Small Electric |  | Noncore |  | Line No. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | (b) |  | (c) |  | (d) |  | (e) |  | (f) |  |  | (g) |  | (h) |  | (i) |  |  |  | (k) |  |
| \$ | 122,440,583 | \$ | 66,345,865 | \$ | 40,195,154 | \$ | 25,753 | \$ |  | 0 | \$ | 14,526,921 | \$ | 199,864 | \$ | 9,285 | \$ | 0 |  | 1,137,741 | 1 |
| \$ | 2,507,461 | \$ | 1,358,697 | \$ | 823,157 | s | 527 | \$ |  | 0 | \$ | 297,497 | \$ | 4,093 | \$ | 190 | \$ | 0 | \$ | 23,300 | 2 |
| \$ | 2,253,972 | \$ | 1,221,341 | \$ | 739,941 | \$ | 474 | \$ |  | 0 | \$ | 267,422 | \$ | 3,679 | \$ | 171 | \$ | 0 | \$ | 20,944 | 3 |
| \$ | 1,901 | \$ | 1,030 | \$ | 624 | \$ | 0 | \$ |  | 0 | \$ | 226 | \$ | 3 | \$ | 0 | \$ | 0 | \$ | 18 | 4 |
| \$ | 623,704 | \$ | 337,962 | \$ | 204,752 | + | 131 | \$ |  | 0 | \$ | 73,999 | \$ | 1,018 | \$ | 47 | \$ | 0 | \$ | 5,796 | 5 |
| \$ | 0 | \$ | 0 | \$ | 0 | - | 0 | \$ |  | 0 | \$ | 0 | \$ | 0 | \$ | 0 | S | 0 | \$ | 0 | 6 |
| \$ | $(200,963)$ | \$ | $(188,362)$ | \$ | $(5,794)$ | \$ |  | \$ |  | 0 | \$ | $(6,806)$ | \$ | 0 | \$ | 0 | \$ | 0 | \$ | 0 | 7 |
| \$ | $(27,597,349)$ |  | (14,953,947) | \$ | (9,059,739) | s | $(5,805)$ | \$ |  | 0 | \$ | $(3,274,278)$ | \$ | $(45,048)$ | \$ | $(2,093)$ | \$ | 0 | \$ | $(256,440)$ | 8 |
| \$ | 100,029,310 | \$ | 54,122,586 | S | 32,898,094 | \$ | 21,082 | \$ |  | 0 | \$ | 11,884,980 | \$ | 163,609 | \$ | 7,600 | S | 0 | \$ | 931,359 | 9 |

## 

No.


Other Revenue - Parts \& Material
Other Revenue - Returned Item Fee Other Revenue - Returned Item Fee
Other Revenue - Rental Gas Property Late Charges

Service Establishment Charges
Reconnect / Reread Charges Reconnect / Rerea
Total Revenue

| $\stackrel{\sim}{\sim}$ ¢ |  |  |
| :---: | :---: | :---: |






Operating Deductions
Operations \& Maintenance Exps
Incremental O\&M Expenses
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## $\stackrel{\sim}{\sim}$ ~~ <br> 

## 






$\frac{\text { State Income Tax }}{\text { Taxable Income before Interest Exp }}$ State Interest Expenses
State Taxable Incom

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\begin{tabular}{|c|c|}
\hline No. & Description \\
\hline & (a) \\
\hline & Rate Base \\
\hline 1 & Total Direct Net Plant \\
\hline 2 & Total System Allocable Net Plant \\
\hline 3 & Cash Working Capital \\
\hline 4 & Incremental Cash Working Capital Adj \\
\hline 5 & Materials \& Supplies \\
\hline 6 & Other Debits and Credits \\
\hline 7 & Customer Deposits \\
\hline & Deferred Taxes \\
\hline 9 & Total Rate Base \\
\hline & Revenue \\
\hline 10 & Net Operating Margin \\
\hline 11 & Special Contracts \\
\hline 12 & Other Revenue - Labor \\
\hline 13 & Other Revenue - Parts \& Material \\
\hline 14 & Other Revenue - Returned Item Fee \\
\hline 15 & Other Revenue - Rental Gas Property \\
\hline 16 & Late Charges \\
\hline 17 & Service Establishment Charges \\
\hline 18 & Reconnect / Reread Charges \\
\hline 19 & Total Revenue \\
\hline & Operating Deductions \\
\hline 20 & Operations \& Maintenance Exps \\
\hline 21 & Incremental O\&M Expenses \\
\hline 22 & Administrative \& General Exps \\
\hline 23 & Regulatory Amortization \\
\hline 24 & Depreciation Expenses \\
\hline 25 & Incremental O\&M Expense \\
\hline 26 & Taxes other than Income \\
\hline 27 & Total Operating Deductions \\
\hline & State Income Tax \\
\hline 28 & Taxable Income before Interest Exp \\
\hline 29 & State Interest Expenses \\
\hline 30 & State Taxable Income \\
\hline 31 & Total State Income Tax \\
\hline & Federal Income Tax \\
\hline 32 & Taxable Income before Interest Exp \\
\hline 33 & Federal Interest Expenses \\
\hline 34 & Federal Taxable Income \\
\hline 35 & Federal Income Tax \\
\hline 36 & Investment Tax Credit (I.T.C.) \\
\hline 37 & Federal Deferred Provision \\
\hline 38 & Total Federal Income Tax \\
\hline 39 & Excess Deferred Amortization \\
\hline 40 & Net Income \\
\hline 41 & Rate of Return on Rate Base \\
\hline NCA CCOSS and & Rate Design 2021 vFinal. xlsx \\
\hline
\end{tabular}

\section*{NOIIVYOdyOo SVO ISヨMHInOS}
NORTHERN CALIFORNIA RATE JURISDICTION
CLASS COST OF SERVICE STUDY SUMMARY - PROPOSED RATES
TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021




\section*{\(\frac{\text { Revenue }}{\text { Net Operating Margin }}\) \\ Special Contracts \\ Other Revenue - Parts \& Material Other Revenue - Parts \& Malem Fee Other Revenue - Rental Gas Property Late Charges Reconn Revenue}

읃 Operating Deductions Operations \& Maintenance Exps
Incremental O\&M Expenses Administrative \& General Exps Regulatory Amortization Incremental O\&M Expense Total Operating Deductions State Income Tax

Nন N N N N N N Cash Working Capital
Incremental Cash Working Capital Adj
Materials \& Supplies Materials \& Supplies Customer Advances
Deferred Taxes
Total Rate Base
i



\section*{N N্N্ল্ল}




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\begin{aligned}
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\end{aligned}
\]

\title{
CHAPTER 20 \\ Present and Proposed Rates
}

\section*{Company Witness: \\ Timothy S. Lyons}

\section*{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA CHAPTER 20 DEVELOPMENT OF PROPOSED RATES}

This chapter sets forth the development of Southwest's proposed rate design for Northern California. Southwest Gas utilized the results of its embedded customer class cost of service study set forth in Chapter 19 as a guide to allocate its proposed test year margin of \(\$ 22,261,389\) among customer classes. A cap of two (2) times the system average percentage change in margin revenue was employed to mitigate revenue increases among classes.

Southwest Gas proposes to increase the number of Residential baseline seasons from two to three. Presently, Southwest Gas has two seasons: Winter Season and Summer Season. The Winter Season includes six months (November through April) for the three "Warmer" climate zones \({ }^{1}\) and eight months (October through May) for the four "Colder" climate zones. \({ }^{2}\) The Summer Season includes six months (May through October) for the three "Warmer" climate zones and four months (June through September) for the four "Colder" climate zones.

The proposal would create three seasons for Southwest Gas's seven climate zones.
1. Winter (Peak) Season
a. December through February for the three "Warmer" climate zones.
b. December through March for the four "Colder" climate zones.
2. Winter (Off-Peak) Season
a. March, April and November for three "Warmer" climate zones.
b. April, May and November for the four "Colder" climate zones.
3. Summer Season
a. May through October for the three "Warmer" climate zones.
b. June through October for the four "Colder" climate zones.

The proposed changes to the Residential baseline seasons are in response to SB 711, which was approved by Governor Brown in 2017 in response to winter season bill volatility. SB 711 directed the Commission to make efforts to minimize bill volatility for residential customers: "Those methods may include modifying the length of the baseline seasons or defining additional baseline seasons." \({ }^{3}\)

Southwest Gas proposes to set monthly baseline allowances for primary residential service at the maximum levels allowed by statute and to continue setting the difference between Baseline and Tier II rates at the average basic service charge rate per therm.

\footnotetext{
\({ }^{1}\) Warmer climate zones: Barstow, Needles and Victorville's normal annual heating degree days are 2,255, 2,647, 2,255, respectively.
\({ }^{2}\) Colder climate zones: Big Bear, North Lake Tahoe, South Lake Tahoe and Truckee's normal annual heating degree days are \(5,940,7,397,7,876,7,141\), respectively.
\({ }^{3}\) Senate Bill No. 711, See § 739 (a) (1)
}

Southwest Gas proposes to increase the basic service charge from \(\$ 5.00\) per month to \(\$ 5.75\) per month to further stabilize winter bills and better reflect customer-related costs. Southwest Gas proposes to update the IRRAM surcharge in this filing related to the programs derived from the risk-based decision-making process.

Comparisons of present and proposed revenues by customer class and the impact of proposed rates on typical monthly bills, including the proposed change in the Residential baselines, comprise the remainder of this chapter.
SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDICT
COMPARISON OF PRESENT AND PROPOSED MARGIN AND REVENUES BY CLASS TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. } \\
& \hline
\end{aligned}
\]} & \multirow[t]{3}{*}{Description} & \multirow[t]{3}{*}{\[
\begin{gathered}
\text { Schedule } \\
\text { No. } \\
\hline
\end{gathered}
\]} & \multicolumn{7}{|l|}{Margin Revenues} & \multicolumn{7}{|l|}{Total Reven} & \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. } \\
& \hline
\end{aligned}
\]} \\
\hline & & & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Currently Effective [1]}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Proposed [2]}} & \multicolumn{3}{|l|}{Increase / (Decrease)} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Currently Effective [1]}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Proposed [2]}} & \multicolumn{3}{|l|}{Increase / (Decrease)} & \\
\hline & & & & & & & & Dollars & Percent & & & & & & Dollars & Percent & \\
\hline \multirow[t]{4}{*}{1} & (a) & (b) & & (c) & & (d) & & (e) & (f) & & (g) & & (h) & & (i) & (j) & \\
\hline & Primary Residential Gas Service & GN-10/ GN-12 & & & & & & & & & & & & & & & \\
\hline & Basic Service Charge & & \$ & 986,350 & \$ & 1,134,303 & \$ & 147,953 & 15.00\% & \$ & 986,350 & \$ & 1,134,303 & \$ & 147,953 & 15.00\% & 1 \\
\hline & Commodity & & & & & & & & & & & & & & & & \\
\hline 2 & Baseline & & \$ & 6,136,554 & \$ & 6,979,973 & \$ & 843,419 & 13.74\% & \$ & 10,643,501 & \$ & 11,781,163 & & 1,137,662 & 10.69\% & 2 \\
\hline 3 & Tier II & & \$ & 3,783,492 & \$ & 3,591,499 & \$ & \((191,993)\) & (5.07\%) & \$ & 6,203,034 & \$ & 5,716,799 & \$ & \((486,235)\) & (7.84\%) & 3 \\
\hline \multirow[t]{2}{*}{4} & Total Primary Residential Gas Service & & \$ & 10,906,396 & \$ & 11,705,775 & \$ & 799,379 & 7.33\% & \$ & 17,832,885 & \$ & 18,632,265 & \$ & 799,380 & 4.48\% & 4 \\
\hline & Secondary Residential Gas Service & GN-15 & & & & & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{5} & Basic Service Charge & & \$ & 715,830 & \$ & 715,830 & \$ & 0 & 0.00\% & \$ & 715,830 & \$ & 715,830 & \$ & 0 & 0.00\% & 5 \\
\hline & Commodity Charge & & & & & & & & & & & & & & & & \\
\hline 6 & All Usage & & \$ & 6,157,854 & \$ & 6,645,203 & \$ & 487,349 & 7.91\% & \$ & 9,861,650 & & 10,348,999 & \$ & 487,349 & 4.94\% & 6 \\
\hline 7 & Total Secondary Residential Gas Service & & \$ & 6,873,684 & \$ & 7,361,033 & \$ & 487,349 & 7.09\% & \$ & 10,577,480 & \$ & 11,064,829 & \$ & 487,349 & 4.61\% & 7 \\
\hline \multirow[t]{2}{*}{8} & Total Residential Gas Service & & \$ & 17,780,080 & \$ & 19,066,808 & & 1,286,728 & 7.24\% & \$ & 28,410,365 & & 29,697,094 & & 1,286,729 & 4.53\% & 8 \\
\hline & Multi-Family Master Metered Gas Service & GN-20 & & & & & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{9} & Basic Service Charge & & \$ & 600 & \$ & 600 & \$ & 0 & 0.00\% & \$ & 600 & \$ & 600 & \$ & 0 & 0.00\% & 9 \\
\hline & Commodity & & & & & & & & & & & & & & & & \\
\hline 10 & Baseline & & \$ & 8,383 & \$ & 8,950 & S & 567 & 6.76\% & \$ & 14,539 & \$ & 15,106 & \$ & 567 & 3.90\% & 10 \\
\hline 11 & Tier II & & \$ & 129 & \$ & 140 & \$ & 11 & 8.53\% & \$ & 211 & \$ & 222 & \$ & 11 & 5.21\% & 11 \\
\hline \multirow[t]{2}{*}{12} & Total Multi-Family Master Metered Gas Service & & \$ & 9,112 & \$ & 9,690 & \$ & 578 & 6.34\% & \$ & 15,350 & \$ & 15,928 & \$ & 578 & 3.77\% & 12 \\
\hline & Multi-Family Master Metered Gas Service - Submetered & GN-25 & & & & & & & & & & & & & & & \\
\hline 13 & Basic Service Charge & & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & 13 \\
\hline \multirow[t]{2}{*}{14} & Submeter Discount & & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & 14 \\
\hline & Commodity & & & & & & & & & & & & & & & & \\
\hline 15 & Baseline & & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & 15 \\
\hline 16 & Tier II & & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & 16 \\
\hline 17 & Total Multi-Family Submetered & & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & \$ & 0 & \$ & 0 & \$ & 0 & 0.00\% & 17 \\
\hline \multirow[t]{2}{*}{18} & Total Multi-Family Master Metered \& Submetered & & \$ & 9,112 & \$ & 9,690 & \$ & 578 & 6.34\% & \$ & 15,350 & \$ & 15,928 & \$ & 578 & 3.77\% & 18 \\
\hline & Core General Gas Service & GN-35/ GN-40 & & & & & & & & & & & & & & & \\
\hline 19 & Basic Service Charge & & \$ & 209,858 & \$ & 209,858 & \$ & 0 & 0.00\% & \$ & 209,858 & \$ & 209,858 & \$ & 0 & 0.00\% & 19 \\
\hline \multirow[t]{2}{*}{20} & Transportation Service Charge & & \$ & 9,360 & \$ & 9,360 & \$ & 0 & 0.00\% & \$ & 9,360 & \$ & 9,360 & \$ & 0 & 0.00\% & 20 \\
\hline & Commodity Charge & & & & & & & & & & & & & & & & \\
\hline 21 & First 100 & & \$ & 608,929 & \$ & 656,591 & \$ & 47,662 & 7.83\% & \$ & 1,168,638 & \$ & 1,192,889 & \$ & 24,251 & 2.08\% & 21 \\
\hline 22 & Next 500 & & \$ & 849,999 & \$ & 916,530 & \$ & 66,531 & 7.83\% & \$ & 1,865,869 & \$ & 1,925,250 & \$ & 59,381 & 3.18\% & 22 \\
\hline 23 & Next 2400 & & \$ & 532,392 & \$ & 574,063 & \$ & 41,671 & 7.83\% & \$ & 1,431,460 & \$ & 1,470,416 & \$ & 38,956 & 2.72\% & 23 \\
\hline 24 & Over 3000 & & \$ & 169,261 & \$ & 182,509 & \$ & 13,248 & 7.83\% & \$ & 895,256 & \$ & 941,781 & \$ & 46,525 & 5.20\% & 24 \\
\hline 25 & Total Core General Gas Service & & \$ & 2,379,799 & \$ & 2,548,911 & \$ & 169,112 & 7.11\% & \$ & 5,580,441 & \$ & 5,749,554 & \$ & 169,113 & 3.03\% & 25 \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDIC
COMPARISON OF PRESENT AND PROPOSED MARGIN AND REVENUES BY CLASS
TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDICT
NORTHERN CALIFORNIA RATE JURISDICTION
PROPORTIONAL COST RESPONSIBILITY METHODOLOGY
TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Line No. & Description & Total & Residential & & Secondary Residential & & MultiFamily & & \[
\begin{aligned}
& \text { ti- Fam } \\
& \text { Sub } \\
& \hline
\end{aligned}
\] & Core General & NGV & Gas Engine & Small Electric & Noncore & Other Revenue & Line No. \\
\hline & (a) & (b) & (c) & & (e) & & (f) & & (g) & (h) & (i) & (j) & (1) & (m) & ( n ) & \\
\hline 1 & Allocated Margin Revenue [1] & \$ 22,261,389 & \$ 12,005,921 & \$ & 7,330,072 & \$ & 4,368 & \$ & 0 & \$ 2,543,245 & \$32,950 & \$ 1,800 & \$ 0 & \$ 197,560 & \$ 145,472 & 1 \\
\hline 2 & Margin at Present Rates [2] & \$ 20,792,141 & \$10,906,396 & \$ & 6,873,684 & \$ & 9,112 & \$ & 0 & \$ 2,379,799 & \$ 5,782 & \$ 655 & \$ & \$ 471,241 & \$ 145,472 & 2 \\
\hline 3 & Difference (Line 1 - Line 2) & \$ 1,469,247 & & & & & & & & & & & & & & 3 \\
\hline 4 & System Average Percentage Increase (Line 3 / Line 2) & 7.07\% & & & & & & & & & & & & & & 4 \\
\hline 5 & Ratio of Margin at System Return to Margin at Present Rates (Line 1 / Line 2) & 1.0707 & 1.1008 & & 1.0664 & & 0.4794 & & 0.0000 & 1.0687 & 5.6988 & 2.7482 & 0.0000 & 0.4192 & 0.0000 & 5 \\
\hline 6 & Adjusted Percentage Increase (Line 4*2) & 7.57\% & 7.78\% & & 7.54\% & & 3.39\% & & 7.07\% & 7.55\% & 14.13\% & 14.13\% & 7.07\% & 2.96\% & 0.00\% & 6 \\
\hline 7 & Adjusted Dollar Increase (Line \(2 \times\) Line 6) & \$ 1,561,244 & \$ 848,381 & \$ & 517,969 & \$ & 309 & \$ & 0 & \$ 179,715 & \$ 817 & \$ 93 & \$ & \$ 13,960 & \$ & 7 \\
\hline 8 & Adjusted Margin Requirement (Line \(2+\) Line 7) & \$ 22,353,386 & \$11,754,777 & \$ & 7,391,653 & \$ & 9,421 & \$ & 0 & \$ 2,559,514 & \$ 6,599 & \$ 748 & \$ 0 & \$ 485,201 & \$ 145,472 & 8 \\
\hline 9 & (Over) / Under Collection (Line 8 - Line 2 ratio per Line 8) & \$ \((91,997)\) & \$ \((48,694)\) & \$ & \((30,620)\) & \$ & (39) & \$ & 0 & \$ (10,603) & \$ (27) & \$ (3) & \$ 0 & \$ \((2,010)\) & \$ & 9 \\
\hline 10 & Margin Requirement (Greater of Line 9 or \(10+\) Line 11) & \$ 22,261,389 & \$11,706,083 & \$ & 7,361,033 & \$ & 9,382 & \$ & 0 & \$ 2,548,911 & \$ 6,572 & \$ 744 & \$ & \$ 483,191 & \$ 145,472 & 10 \\
\hline 11 & Margin Allocation & \$ 22,261,389 & \$11,706,083 & \$ & 7,361,033 & \$ & 9,382 & \$ & 0 & \$2,548,911 & \$ 6,572 & \$ 744 & \$ & \$ 483,191 & \$145,472 & 11 \\
\hline 12 & Dollar Change From Present Margin & \$ 1,469,247 & \$ 799,687 & \$ & 487,349 & \$ & 270 & \$ & 0 & \$ 169,112 & \$ 790 & \$ 89 & \$ 0 & \$ 11,950 & n/a & 12 \\
\hline 13 & Percent Change From Present Margin & 7.07\% & 7.33\% & & 7.09\% & & 2.96\% & & 0.00\% & 7.11\% & 13.66\% & 13.66\% & 0.00\% & 2.54\% & & 13 \\
\hline 14 & Rate of Return at Present Rates & 6.72\% & 6.32\% & & 6.78\% & & 24.01\% & & 0.00\% & 6.79\% & (4.20\%) & (3.08\%) & 0.00\% & 28.98\% & n/a & 14 \\
\hline 15 & Present Rate of Return Indices & 1.0 & 0.9 & & 1.0 & & 3.6 & & 0.0 & 1.0 & (0.6) & (0.5) & 0.0 & 4.3 & & 15 \\
\hline 16 & Rate of Return at Proposed Rates & 7.76\% & 7.36\% & & 7.83\% & & 25.94\% & & 0.00\% & 7.79\% & (3.85\%) & (2.25\%) & 0.00\% & 29.85\% & n/a & 16 \\
\hline 17 & Proposed Rate of Return Indices & 1.0 & 0.9 & & 1.0 & & 3.3 & & 0.0 & 1.0 & (0.5) & (0.3) & 0.0 & 3.8 & & 17 \\
\hline & \begin{tabular}{l}
[1] Chapter 19, Sheet 3. \\
[2] Chapter 20, Sheets 7-8.
\end{tabular} & & & & & & & & & & & & & & & \\
\hline
\end{tabular}

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDICTION
CALCULATION OF TEST YEAR REVENUES INCLUDING FCAM ADJUSTMENT BY CLASS AT CURRENTLY EFFECTIVE RATES
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{4}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. }
\end{aligned}
\]} & \multirow[t]{3}{*}{Description} & \multirow[t]{3}{*}{\[
\begin{gathered}
\text { Schedule } \\
\text { No. } \\
\hline
\end{gathered}
\]} & \multicolumn{3}{|l|}{Forecasted Billing Units} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Margin [1]}} & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{Upstream Charges}} & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{Gas Cost}} & \multicolumn{2}{|l|}{\multirow[t]{3}{*}{Total Annual Revenues}} & \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. }
\end{aligned}
\]} \\
\hline & & & \multirow[t]{2}{*}{\[
\begin{gathered}
\hline \begin{array}{c}
\text { Number of } \\
\text { Bills } \\
\hline
\end{array}{ }^{2} \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{Volumes} & & & & & & & & & & & \\
\hline & & & & Transport & Sales & Rates & Revenues & Rates & & Revenues & Rates & \multicolumn{2}{|l|}{Revenues} & & & \\
\hline & (a) & (b) & (c) & (d) & (e) & (f) & (g) & (h) & & (i) & () & & (k) & \multicolumn{2}{|l|}{(I)} & \\
\hline \multirow[t]{3}{*}{1} & Primary Residential Gas Service & GN-10/ & & & & & & & & & & & & & & \\
\hline & Basic Service Charge & GN-12 & 197,270 & & & \$ 5.00 & \$ 986,350 & & & & & & & \$ & 986,350 & 1 \\
\hline & Commodity & & & & & & & & & & & & & & & \\
\hline 2 & Baseline Quantities & & & 8,496,300 & 8,496,300 & \$ 0.72226 & \$ 6,136,554 & \$ 0.22707 & & 1,929,255 & \$ 0.30339 & \$ & 2,577,692 & & 0,643,501 & 2 \\
\hline 3 & Tier II & & & 4,561,216 & 4,561,216 & \$ 0.82949 & \$ 3,783,492 & \$ 0.22707 & & 1,035,715 & \$ 0.30339 & \$ & 1,383,827 & & 6,203,034 & 3 \\
\hline \multirow[t]{2}{*}{4} & Total Primary Residential Gas Service & & 197,270 & 13,057,516 & 13,057,516 & & \$10,906,396 & & & 2,964,970 & & \$ & 3,961,519 & & 7,832,885 & 4 \\
\hline & Secondary Residential Gas Service & GN-15 & & & & & & & & & & & & & & \\
\hline 5 & Basic Service Charge & & 119,305 & & & \$ 6.00 & \$ 715,830 & & & & & & & \$ & 715,830 & 5 \\
\hline & Commodity & & & & & & & & & & & & & & & \\
\hline \({ }_{7}^{6}\) & All Usage & & & 6,982,234 & 6,982,234 & \$ 0.88193 & \$ 6,157,854 & \$ 0.22707 & \$ & 1,585,456 & \$ 0.30339 & & 2,118,340 & & 9,861,650 & \({ }_{7}\) \\
\hline 7 & Total Secondary Residential Gas Service & & 119,305 & 6,982,234 & 6,982,234 & & \$ 6,873,684 & & & 1,585,456 & & & 2,118,340 & & 0,577,480 & 7 \\
\hline \multirow[t]{2}{*}{8} & Total Residential Gas Service & & 316,575 & 20,039,750 & 20,039,750 & & \$ 17,780,080 & & & 4,550,426 & & \$ & 6,079,859 & & 28,410,365 & 8 \\
\hline & Multi-Family Master Metered Gas Service & GN-20 & & & & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{9} & Basic Service Charge & & 24 & & & \$ 25.00 & 600 & & & & & & & \$ & 600 & 9 \\
\hline & Commodity & & & & & & & & & & & & & & & \\
\hline 10 & Baseline Quantities & & & 11,606 & 11,606 & \$ 0.72226 & \$ 8,383 & \$ 0.22707 & \$ & 2,635 & \$ 0.30339 & \$ & 3,521 & \$ & 14,539 & 10 \\
\hline 11 & Tier II & & & 156 & 156 & \$ 0.82949 & \$ 129 & \$ 0.22707 & \$ & 35 & \$ 0.30339 & \$ & 47 & \$ & 211 & 11 \\
\hline \multirow[t]{3}{*}{12} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & 9,112 & & \$ & 2,670 & & \$ & 3,568 & \$ & 15,350 & 12 \\
\hline & Multi-Family Master Metered Gas Service - & & & & & & & & & & & & & & & \\
\hline & Submetered & GN-25 & & & & & & & & & & & & & & \\
\hline 13 & Basic Service Charge & & 0 & & & \$ 25.00 & \$ 0 & & & & & & & \$ & 0 & 13 \\
\hline \multirow[t]{2}{*}{14} & Submeter Discount per Occupied Space & & 0 & & & \$ (11.01) & \$ 0 & & & & & & & \$ & 0 & 14 \\
\hline & Commodity & & & & & & & & & & & & & & & \\
\hline 15 & Baseline Quantities & & & 0 & 0 & \$ 0.72226 & \$ & \$ 0.22707 & \$ & 0 & \$ 0.30339 & \$ & 0 & \$ & 0 & 15 \\
\hline 16 & Tier II & & & 0 & 0 & \$ 0.82949 & \$ & \$ 0.22707 & \$ & 0 & \$ 0.30339 & \$ & 0 & \$ & 0 & 16 \\
\hline 17 & Total Muti- Fam Sub & & 0 & 0 & 0 & & \$ 0 & & \$ & 0 & & \$ & 0 & \$ & 0 & 17 \\
\hline \multirow[t]{2}{*}{18} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & \$ 9,112 & & \$ & 2,670 & & \$ & 3,568 & \$ & 15,350 & 18 \\
\hline & Core General Gas Service & GN-35/ & & & & & & & & & & & & & & \\
\hline 19 & Basic Service Charge & GN-40 & 19,078 & & & \$ 11.00 & \$ 209,858 & & & & & & & \$ & 209,858 & 19 \\
\hline \multirow[t]{3}{*}{20} & Transporation Service Charge & & 12 & & & \$ 780.00 & \$ 9,360 & & & & & & & \$ & 9,360 & 20 \\
\hline & Commodity & & & & & & & & & & & & & & & \\
\hline & Annual & & & & & & & & & & & & & & & \\
\hline 20 & First 100 & & & 1,055,139 & 1,055,139 & \$ 0.57711 & \$ 608,929 & \$ 0.22707 & \$ & 239,590 & \$ 0.30339 & \$ & 320,119 & \$ & 1,168,638 & 20 \\
\hline 21 & Next 500 & & & 1,915,073 & 1,915,073 & \$ 0.44385 & \$ 849,999 & \$ 0.22707 & \$ & 434,856 & \$ 0.30339 & \$ & 581,014 & \$ & 1,865,869 & 21 \\
\hline 22 & Next 2400 & & & 1,694,884 & 1,694,884 & \$ 0.31412 & \$ 532,392 & \$ 0.22707 & \$ & 384,857 & \$ 0.30339 & \$ & 514,211 & \$ & 1,431,460 & 22 \\
\hline 23 & Over 3000 & & & 1,368,615 & 1,368,615 & \$ 0.12367 & \$ 169,261 & \$ 0.22707 & \$ & 310,771 & \$ 0.30339 & \$ & 415,224 & \$ & 895,256 & 23 \\
\hline 24 & Total Core General & & 19,078 & 6,033,711 & 6,033,711 & & \$ 2,379,799 & & & 1,370,074 & & \$ & 1,830,568 & \$ & 5,580,441 & 24 \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION
NORTHERN CALIFONIA RATE JURISICTION
CALCULATION OF TEST YEAR REVENUES INCLUDING FCAM ADJUSTMENT BY CLAS

SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDIC
CALCULATION OF TEST YEAR REVENUES BY CLASS AND FCAM ADJUSTMENT AT CURRENTLY EFFECTIVE RATES
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. } \\
& \hline
\end{aligned}
\]} & \multirow[t]{3}{*}{Description} & \multirow[t]{3}{*}{\[
\begin{gathered}
\text { Schedule } \\
\text { No. } \\
\hline
\end{gathered}
\]} & \multicolumn{3}{|l|}{Forecasted Billing Units} & \multicolumn{3}{|l|}{\multirow[t]{2}{*}{Margin [1]}} & \multirow[t]{3}{*}{\begin{tabular}{l}
Line \\
No.
\end{tabular}} \\
\hline & & & \multirow[t]{2}{*}{Number of Bills} & \multicolumn{2}{|l|}{Volumes} & & & & \\
\hline & & & & Transport & Sales & Rates & \multicolumn{2}{|l|}{Revenues} & \\
\hline \multirow[t]{4}{*}{1} & (a) & (b) & (c) & (d) & (e) & (f) & & (g) & \\
\hline & Primary Residential Gas Service & GN-10/ & & & & & & & \\
\hline & Basic Service Charge & GN-12 & 197,270 & & & \$ 5.00 & \$ & 986,350 & 1 \\
\hline & Commodity & & & & & & & & \\
\hline 2 & Baseline Quantities & & & 8,496,300 & 8,496,300 & \$ 0.80559 & \$ & 6,844,548 & 2 \\
\hline 3 & Tier II & & & 4,561,216 & 4,561,216 & \$ 0.91282 & \$ & 4,163,577 & 3 \\
\hline \multirow[t]{2}{*}{4} & Total Primary Residential Gas Service & & 197,270 & 13,057,516 & 13,057,516 & & & 11,994,475 & 4 \\
\hline & Secondary Residential Gas Service & GN-15 & & & & & & & \\
\hline \multirow[t]{2}{*}{5} & Basic Service Charge & & 119,305 & & & \$ 6.00 & \$ & 715,830 & 5 \\
\hline & Commodity & & & & & & & & \\
\hline 6 & All Usage & & & 6,982,234 & 6,982,234 & \$ 0.96526 & \$ & 6,739,681 & 6 \\
\hline 7 & Total Secondary Residential Gas Service & & 119,305 & 6,982,234 & 6,982,234 & & \$ & 7,455,511 & 7 \\
\hline \multirow[t]{2}{*}{8} & Total Residential Gas Service & & 316,575 & 20,039,750 & 20,039,750 & & & 19,449,986 & 8 \\
\hline & Multi-Family Master Metered Gas Service & GN-20 & & & & & & & \\
\hline \multirow[t]{2}{*}{9} & Basic Service Charge & & 24 & & & \$ 25.00 & \$ & 600 & 9 \\
\hline & Commodity & & & & & & & & \\
\hline 10 & Baseline Quantities & & & 11,606 & 11,606 & \$ 0.80559 & \$ & 9,350 & 10 \\
\hline 11 & Tier II & & & 156 & 156 & \$ 0.91282 & \$ & 142 & 11 \\
\hline \multirow[t]{3}{*}{12} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & \$ & 10,092 & 12 \\
\hline & Multi-Family Master Metered Gas Service - & & & & & & & & \\
\hline & Submetered & GN-25 & & & & & & & \\
\hline 13 & Basic Service Charge & & 0 & & & \$ 25.00 & \$ & 0 & 13 \\
\hline \multirow[t]{2}{*}{14} & Submeter Discount per Occupied Space & & 0 & & & \$ (11.01) & \$ & 0 & 14 \\
\hline & Commodity & & & & & & & & \\
\hline 15 & Baseline Quantities & & & 0 & 0 & \$ 0.80559 & \$ & 0 & 15 \\
\hline 16 & Tier II & & & 0 & 0 & \$ 0.91282 & \$ & 0 & 16 \\
\hline 17 & Total Muti- Fam Sub & & 0 & 0 & 0 & & \$ & 0 & 17 \\
\hline \multirow[t]{2}{*}{18} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & \$ & 10,092 & 18 \\
\hline & Core General Gas Service & GN-35/ & & & & & & & \\
\hline 19 & Basic Service Charge & GN-40 & 19,078 & & & \$ 11.00 & \$ & 209,858 & 19 \\
\hline \multirow[t]{3}{*}{20} & Transporation Service Charge & & 12 & & & \$ 780.00 & \$ & 9,360 & 20 \\
\hline & Commodity & & & & & & & & \\
\hline & Annual & & & & & & & & \\
\hline 20 & First 100 & & & 1,055,139 & 1,055,139 & \$ 0.66044 & \$ & 696,853 & 20 \\
\hline 21 & Next 500 & & & 1,915,073 & 1,915,073 & \$ 0.52718 & \$ & 1,009,581 & 21 \\
\hline 22 & Next 2400 & & & 1,694,884 & 1,694,884 & \$ 0.39745 & \$ & 673,626 & 22 \\
\hline 23 & Over 3000 & & & 1,368,615 & 1,368,615 & \$ 0.20700 & \$ & 283,307 & 23 \\
\hline 24 & Total Core General & & 19,078 & 6,033,711 & 6,033,711 & & \$ & 2,882,585 & 24 \\
\hline
\end{tabular}


\section*{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA RATE JURISDICTION TYPICAL MONTHLY BILL COMPARISON - PRIMARY RESIDENTIAL GAS SERVICE TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{Line No.} & \multirow[b]{3}{*}{Monthly Therms} & & \multicolumn{4}{|c|}{North Lake Tahoe} & \multicolumn{5}{|c|}{Truckee} & \multirow[b]{3}{*}{Line No.} \\
\hline & & & \multirow[t]{2}{*}{Present Rates [1]} & \multirow[t]{2}{*}{\begin{tabular}{l}
Proposed \\
Rates [2]
\end{tabular}} & \multicolumn{2}{|l|}{Increase/(Decrease)} & \multirow[t]{2}{*}{\begin{tabular}{l}
Present \\
Rates [1]
\end{tabular}} & \multirow[t]{2}{*}{\[
\begin{aligned}
& \hline \text { Proposed } \\
& \text { Rates [2] } \\
& \hline
\end{aligned}
\]} & \multicolumn{3}{|r|}{Increase/(Decrease)} & \\
\hline & & & & & Dollars & Percent & & & & Dollars & Percent & \\
\hline & (a) & & (b) & (c) & (d) & (e) & (f) & (g) & & (h) & (i) & \\
\hline \multicolumn{13}{|c|}{Winter Comparison} \\
\hline 1 & 5 & & \$ 11.59 & \$ 12.93 & \$ 1.33 & 11.50\% & \$ 11.59 & \$ 12.93 & \$ & 1.33 & 11.50\% & 1 \\
\hline 2 & 15 & & \$ 24.78 & \$ 27.28 & \$ 2.50 & 10.08\% & \$ 24.78 & \$ 27.28 & \$ & 2.50 & 10.08\% & 2 \\
\hline 3 & 50 & & \$ 70.93 & \$ 77.51 & \$ 6.58 & 9.28\% & \$ 70.93 & \$ 77.51 & \$ & 6.58 & 9.28\% & 3 \\
\hline 4 & 108 & [3] & \$ 150.40 & \$ 162.50 & \$ 12.09 & 8.04\% & \$ 150.19 & \$ 160.74 & \$ & 10.55 & 7.03\% & 4 \\
\hline 5 & 124 & [4] & \$ 173.22 & \$ 187.46 & \$ 14.25 & 8.22\% & \$ 173.00 & \$ 185.71 & \$ & 12.71 & 7.35\% & 5 \\
\hline 6 & 150 & & \$ 210.29 & \$ 228.03 & \$ 17.75 & 8.44\% & \$ 210.07 & \$ 226.28 & \$ & 16.21 & 7.71\% & 6 \\
\hline 7 & 200 & & \$ 281.58 & \$ 306.05 & \$ 24.48 & 8.69\% & \$ 281.36 & \$ 304.30 & \$ & 22.94 & 8.15\% & 7 \\
\hline \multicolumn{13}{|c|}{Winter Off-Peak} \\
\hline 2 & 10 & & \$ 18.19 & \$ 20.10 & \$ 1.92 & 10.54\% & \$ 18.19 & \$ 20.10 & \$ & 1.92 & 10.54\% & 2 \\
\hline 3 & 20 & & \$ 31.37 & \$ 34.45 & \$ 3.08 & 9.82\% & \$ 31.37 & \$ 34.45 & \$ & 3.08 & 9.82\% & 3 \\
\hline 4 & 45 & & \$ 64.33 & \$ 70.33 & \$ 6.00 & 9.32\% & \$ 64.33 & \$ 70.33 & \$ & 6.00 & 9.32\% & 4 \\
\hline 5 & 66 & [4] & \$ 92.02 & \$ 100.72 & \$ 8.70 & 9.45\% & \$ 92.02 & \$ 100.47 & \$ & 8.45 & 9.18\% & 5 \\
\hline 6 & 69 & [3] & \$ 95.98 & \$ 105.40 & \$ 9.42 & 9.82\% & \$ 95.98 & \$ 105.15 & \$ & 9.17 & 9.55\% & 6 \\
\hline 7 & 100 & & \$ 139.00 & \$ 153.77 & \$ 14.77 & 10.63\% & \$ 138.78 & \$ 153.52 & \$ & 14.74 & 10.62\% & 7 \\
\hline 8 & 125 & & \$ 174.64 & \$ 192.78 & \$ 18.14 & 10.39\% & \$ 174.43 & \$ 192.53 & \$ & 18.10 & 10.38\% & 8 \\
\hline \multicolumn{13}{|c|}{Summer Comparison} \\
\hline 8 & 5 & & \$ 11.59 & \$ 12.93 & \$ 1.33 & 11.50\% & \$ 11.59 & \$ 12.93 & \$ & 1.33 & 11.50\% & 8 \\
\hline 9 & 15 & & \$ 24.78 & \$ 27.28 & \$ 2.50 & 10.08\% & \$ 24.78 & \$ 27.28 & \$ & 2.50 & 10.08\% & 9 \\
\hline 10 & 24 & [4] & \$ 36.64 & \$ 40.69 & \$ 4.05 & 11.05\% & \$ 37.07 & \$ 40.44 & \$ & 3.37 & 9.09\% & 10 \\
\hline 11 & 26 & [3] & \$ 39.28 & \$ 43.81 & \$ 4.53 & 11.54\% & \$ 39.93 & \$ 43.56 & \$ & 3.64 & 9.11\% & 11 \\
\hline 12 & 50 & & \$ 70.93 & \$ 81.26 & \$ 10.34 & 14.57\% & \$ 74.14 & \$ 81.01 & \$ & 6.87 & 9.26\% & 12 \\
\hline
\end{tabular}

\begin{tabular}{|c|c|c|c|c|}
\hline Proposed Rates [2] & & \multicolumn{3}{|l|}{Winter Off-Peak Baseline Allowances} \\
\hline Basic Service Charge & \$ 5.75 & & Present & Proposed \\
\hline Charge per Therm & & North Lake Tahoe & 80 & 64 \\
\hline Baseline Quantities & \$ 1.43513 & Truckee & 82 & 66 \\
\hline
\end{tabular}
\begin{tabular}{|ccc|}
\hline \multicolumn{3}{|c|}{ Summer Baseline Allowances } \\
\hline & Present & \\
\hline & Proposed \\
\cline { 2 - 2 } North Lake Tahoe & 20 & 20 \\
Truckee & 20 & \\
\hline
\end{tabular}
[1] Includes all applicable surcharges.
[2] Chapter 21, Sheets 11-13.
[3] Average Summer and Winter use for North Lake Tahoe.
[4] Average Summer and Winter use for Truckee.

SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA RATE JURISDICTION
TYPICAL MONTHLY BILL COMPARISON - SECONDARY RESIDENTIAL GAS SERVICE TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021


SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDICTION
TYPICAL MONTHLY BILL COMPARISON - CORE GENERAL GAS SERVICE
TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Line No.} & \multirow[t]{2}{*}{Monthly Therms} & & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{Present Rates}} & & roposed & \multicolumn{3}{|l|}{Increase/(Decrease)} & \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. } \\
& \hline
\end{aligned}
\]} \\
\hline & & & & & & Rates & & Dollars & Percent & \\
\hline & (a) & & & (b) & & (c) & & (d) & (e) & \\
\hline 1 & 146 & [3] & \$ & 175.84 & \$ & 177.92 & \$ & 2.09 & 1.19\% & 1 \\
\hline 2 & 248 & [4] & \$ & 282.50 & \$ & 295.44 & \$ & 12.94 & 4.58\% & 2 \\
\hline 3 & 403 & [5] & \$ & 443.21 & \$ & 472.49 & \$ & 29.28 & 6.61\% & 3 \\
\hline 4 & 600 & & \$ & 648.40 & \$ & 698.56 & \$ & 50.16 & 7.74\% & 4 \\
\hline 5 & 1500 & & & 1,467.76 & & 1,618.62 & & 150.86 & 10.28\% & 5 \\
\hline 6 & 3000 & & & 2,833.35 & & 3,124.13 & & 290.78 & 10.26\% & 6 \\
\hline 7 & 4000 & & & 3,553.31 & & 3,915.59 & & 362.29 & 10.20\% & 7 \\
\hline
\end{tabular}

Present Rates [1]
\begin{tabular}{llll}
\cline { 2 - 4 } \begin{tabular}{lll} 
Basic Service Charge \\
Charge per Therm
\end{tabular} & \(\$\) & 11.00 \\
First & 100 & \(\$\) & 1.17339 \\
Next & 500 & \(\$\) & 1.04013 \\
Next & 2400 & \(\$\) & 0.91040 \\
Over & 3000 & \(\$\) & 0.71995
\end{tabular}

Proposed Rates [2]
\begin{tabular}{cccc}
\hline \multicolumn{2}{c}{ Basic Service Charge } & \(\$\) & 11.00 \\
Charge per Therm & & \\
First & 100 & \(\$\) & 1.31339 \\
Next & 500 & \(\$\) & 1.14593 \\
Next & 2400 & \(\$\) & 1.00368 \\
Over & 3000 & \(\$\) & 0.79146 \\
&
\end{tabular}
[1] Includes all applicable surcharges.
[2] Chapter 21, Sheets 11-13.
[3] Average summer usage.
[4] Average winter Off-Peak usage.
[5] Average winter usage.

\section*{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA RATE JURISDICTION CALCULATION OF MASTER METER WITH SUBMETER DISCOUNT PER SPACE TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Line No. & Description & Account Number & & Totals & Line No. \\
\hline & (a) & (b) & & (c) & \\
\hline & \multicolumn{5}{|l|}{Capital Investment} \\
\hline 1 & Distribution Services & 380 & \$ & 873,302 & 1 \\
\hline 2 & Distribution Metering Equipment & 381 & \$ & 224,773 & 2 \\
\hline 3 & Total Capital Investment & & \$ & 1,098,075 & 3 \\
\hline & \multicolumn{5}{|l|}{Operation and Maintenance Expenses} \\
\hline 4 & Meter and House Regulator Expense & 878 & \$ & 141,703 & 4 \\
\hline 5 & Customer Installation Expenses & 879 & \$ & 179,977 & 5 \\
\hline 6 & Maintenance of Services & 892 & \$ & 41,398 & 6 \\
\hline 7 & Maintenance of Meters \& House Regulators & 893 & \$ & 43,454 & 7 \\
\hline 8 & Total Operation and Maintenance Expenses & & \$ & 406,533 & 8 \\
\hline & \multicolumn{5}{|l|}{Customer Account Expenses} \\
\hline 9 & Supervision of Customer Accounts & 901 & \$ & 23,520 & 9 \\
\hline 10 & Meter Reading Expense & 902 & \$ & 71,634 & 10 \\
\hline 11 & Customer Records and Collection Expenses & 903 & \$ & 290,052 & 11 \\
\hline 12 & Uncollectible Expenses & 904 & \$ & 492 & 12 \\
\hline 13 & Miscellaneous Customer Expenses & 905 & \$ & 0 & 13 \\
\hline 14 & Total Supervision of Customer Accounts & & \$ & 385,697 & 14 \\
\hline 15 & Total & & \$ & 1,890,305 & 15 \\
\hline 16 & Total Number of Residential Bills & & & 197,270 & 16 \\
\hline 17 & Cost-Based Submetered Discount per Month & & \$ & 9.58 & 17 \\
\hline 18 & Total Submetered Spaces & & & 0 & 18 \\
\hline 19 & Total Cost-Based Submetered Discount & & \$ & 0 & 19 \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDIC NORTHERN CALIFORNIA RATE JURISDICTION
CUSTOMER-OWNED YARD LINE (COYL)
TEST YEAR TWELVE MONTHS ENDED DECEMBER 31,
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Line No. & Description & & 2021 & & \[
\begin{aligned}
& \text { Estimated } \\
& 2022 \\
& \hline
\end{aligned}
\] & & \[
\begin{gathered}
\text { Estimated } \\
2023 \\
\hline
\end{gathered}
\] & & \[
\begin{gathered}
\text { Estimated } \\
2024 \\
\hline
\end{gathered}
\] & & \[
\begin{aligned}
& \text { Estimated } \\
& 2025
\end{aligned}
\] & \begin{tabular}{l}
Line \\
No.
\end{tabular} \\
\hline & (a) & & (b) & & (c) & & (d) & & (e) & & (f) & \\
\hline 1 & COYLs Replaced & \$ & 1,352,375 & \$ & 1,352,375 & \$ & 1,352,375 & \$ & 1,352,375 & \$ & 1,352,375 & 1 \\
\hline 2 & Gross COYL Plant Replaced & \$ & 1,352,375 & \$ & 2,704,750 & \$ & 4,057,125 & \$ & 5,409,500 & \$ & 6,761,875 & 2 \\
\hline 3 & Accumulated Depreciation & \$ & \((15,195)\) & \$ & \((60,779)\) & \$ & \((136,752)\) & \$ & \((243,114)\) & \$ & \((379,866)\) & 3 \\
\hline 4 & Net COYL Plant (Line \(2+\) Line 3) & \$ & 1,337,180 & \$ & 2,643,972 & \$ & 3,920,373 & \$ & 5,166,386 & \$ & 6,382,009 & 4 \\
\hline 5 & Accumulated Deferred Income Tax & \$ & \((5,688)\) & \$ & \((30,191)\) & \$ & \((71,459)\) & \$ & \((127,599)\) & \$ & \((196,856)\) & 5 \\
\hline 6 & COYL Rate Base (Line 4 + Line 5) & \$ & 1,331,493 & \$ & 2,613,781 & \$ & 3,848,914 & \$ & 5,038,786 & \$ & 6,185,153 & 6 \\
\hline 7 & Rate of Return & & 7.76\% & & 7.76\% & & 7.76\% & & 7.76\% & & 7.76\% & 7 \\
\hline 8 & Rate of Return Revenue (Line 6 * Line 7) & \$ & 103,323 & \$ & 202,827 & \$ & 298,672 & \$ & 391,005 & \$ & 479,962 & 8 \\
\hline 9 & Revenue Conversion Factor & & 1.42 & & 1.42 & & 1.42 & & 1.42 & & 1.42 & 9 \\
\hline 10 & Revenue Requirement (Line 8 * Line 9) & \$ & 146,504 & \$ & 287,594 & \$ & 423,495 & \$ & 554,417 & \$ & 680,551 & 10 \\
\hline 11 & Revenue Requirement & \$ & 146,504 & \$ & 287,594 & \$ & 423,495 & \$ & 554,417 & \$ & 680,551 & 11 \\
\hline 12 & Depreciation Expense (2.25\% per year) & \$ & 15,195 & \$ & 45,584 & \$ & 75,973 & \$ & 106,363 & \$ & 136,752 & 12 \\
\hline 13 & Property Tax & \$ & 9,822 & \$ & 29,168 & \$ & 47,971 & \$ & 66,404 & \$ & 84,393 & 13 \\
\hline 14 & Total Revenue Requirement & \$ & 171,521 & \$ & 362,346 & \$ & 547,439 & \$ & 727,183 & \$ & 901,696 & 14 \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA RATE JURISDICTION METER PROTECTION - METERS
TEST YEAR TWELVE MONTHS ENDED DECEMB
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Line No. & Description & \multicolumn{2}{|l|}{2021} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Estimated } \\
2022 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Estimated } \\
2023 \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\[
\begin{aligned}
& \text { Estimated } \\
& 2024 \\
& \hline
\end{aligned}
\]} & \multicolumn{2}{|l|}{\[
\begin{gathered}
\text { Estimated } \\
2025 \\
\hline
\end{gathered}
\]} & \begin{tabular}{l}
Line \\
No.
\end{tabular} \\
\hline & (a) & & (b) & & (c) & & (d) & & (e) & & (f) & \\
\hline 1 & Meters Replaced & \$ & 699,840 & \$ & 699,840 & \$ & 699,840 & \$ & 699,840 & \$ & 699,840 & 1 \\
\hline 2 & Gross Meter Plant Replaced & \$ & 699,840 & \$ & 1,399,680 & \$ & 2,099,520 & \$ & 2,799,360 & \$ & 3,499,200 & 2 \\
\hline 3 & Accumulated Depreciation & \$ & \((13,248)\) & \$ & \((52,992)\) & \$ & \((119,232)\) & \$ & \((211,968)\) & \$ & \((331,200)\) & 3 \\
\hline 4 & Net Meter Plant (Line \(2+\) Line 3) & \$ & 686,592 & \$ & 1,346,688 & \$ & 1,980,288 & \$ & 2,587,392 & \$ & 3,168,000 & 4 \\
\hline 5 & Accumulated Deferred Income Tax & \$ & 71 & \$ & \((6,582)\) & \$ & \((18,897)\) & \$ & \((35,893)\) & \$ & \((56,664)\) & 5 \\
\hline 6 & Meter Rate Base (Line 4 + Line 5) & \$ & 686,663 & \$ & 1,340,106 & \$ & 1,961,391 & \$ & 2,551,498 & \$ & 3,111,336 & 6 \\
\hline 7 & Rate of Return & & 7.76\% & & 7.76\% & & 7.76\% & & 7.76\% & & 7.76\% & 7 \\
\hline 8 & Rate of Return Revenue (Line 6 * Line 7) & \$ & 53,284 & \$ & 103,991 & \$ & 152,202 & \$ & 197,994 & \$ & 241,437 & 8 \\
\hline 9 & Revenue Conversion Factor & & 1.42 & & 1.42 & & 1.42 & & 1.42 & & 1.42 & 9 \\
\hline 10 & Revenue Requirement (Line 8 * Line 9) & \$ & 75,553 & \$ & 147,452 & \$ & 215,811 & \$ & 280,741 & \$ & 342,340 & 10 \\
\hline 11 & Revenue Requirement & \$ & 75,553 & \$ & 147,452 & \$ & 215,811 & \$ & 280,741 & \$ & 342,340 & 11 \\
\hline 12 & Depreciation Expense (3.79\% per year) & \$ & 13,248 & \$ & 39,744 & \$ & 66,240 & \$ & 92,736 & \$ & 119,232 & 12 \\
\hline 13 & Property Tax & \$ & 5,043 & \$ & 14,897 & \$ & 24,313 & \$ & 33,380 & \$ & 42,059 & 13 \\
\hline 14 & Total Revenue Requirement & \$ & 93,845 & \$ & 202,093 & \$ & 306,364 & \$ & 406,856 & \$ & 503,631 & 14 \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION
NORTHERN CALIFORNIA RATE JURISDIC
METER PROTECTION - SERVICES
TEST YEAR TWELVE MONTHS ENDED DECEMB
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \begin{tabular}{l}
Line \\
No.
\end{tabular} & Description & & 2021 & & Estimated
\[
2022
\] & & \[
\begin{aligned}
& \text { Estimated } \\
& 2023 \\
& \hline
\end{aligned}
\] & & \[
\begin{aligned}
& \text { Estimated } \\
& 2024 \\
& \hline
\end{aligned}
\] & & \[
\begin{aligned}
& \text { Estimated } \\
& 2025 \\
& \hline
\end{aligned}
\] & \begin{tabular}{l}
Line \\
No.
\end{tabular} \\
\hline & (a) & & (b) & & (c) & & (d) & & (e) & & (f) & \\
\hline 1 & Services Replaced & \$ & 591,840 & \$ & 591,840 & \$ & 591,840 & \$ & 591,840 & \$ & 591,840 & 1 \\
\hline 2 & Gross Services Plant Replaced & \$ & 591,840 & \$ & 1,183,680 & \$ & 1,775,520 & \$ & 2,367,360 & \$ & 2,959,200 & 2 \\
\hline 3 & Accumulated Depreciation & \$ & \((6,650)\) & \$ & \((26,599)\) & \$ & \((59,847)\) & \$ & \((106,394)\) & \$ & \((166,241)\) & 3 \\
\hline 4 & Net Services Plant (Line \(2+\) Line 3) & \$ & 585,190 & \$ & 1,157,081 & \$ & 1,715,673 & \$ & 2,260,966 & \$ & 2,792,959 & 4 \\
\hline 5 & Accumulated Deferred Income Tax & \$ & \((2,489)\) & \$ & \((13,212)\) & \$ & \((31,273)\) & \$ & \((55,841)\) & \$ & \((86,150)\) & 5 \\
\hline 6 & Services Rate Base (Line 4 + Line 5) & \$ & 582,701 & \$ & 1,143,869 & \$ & 1,684,401 & \$ & 2,205,124 & \$ & 2,706,809 & 6 \\
\hline 7 & Rate of Return & & 7.76\% & & 7.76\% & & 7.76\% & & 7.76\% & & 7.76\% & 7 \\
\hline 8 & Rate of Return Revenue (Line 6 * Line 7) & \$ & 45,217 & \$ & 88,763 & \$ & 130,708 & \$ & 171,115 & \$ & 210,046 & 8 \\
\hline 9 & Revenue Conversion Factor & & 1.42 & & 1.42 & & 1.42 & & 1.42 & & 1.42 & 9 \\
\hline 10 & Revenue Requirement (Line 8 * Line 9) & \$ & 64,114 & \$ & 125,860 & \$ & 185,334 & \$ & 242,629 & \$ & 297,830 & 10 \\
\hline 11 & Revenue Requirement & \$ & 64,114 & \$ & 125,860 & \$ & 185,334 & \$ & 242,629 & \$ & 297,830 & 11 \\
\hline 12 & Depreciation Expense (2.25\% per year) & \$ & 6,650 & \$ & 19,949 & \$ & 33,248 & \$ & 46,547 & \$ & 59,847 & 12 \\
\hline 13 & Property Tax & \$ & 4,298 & \$ & 12,765 & \$ & 20,993 & \$ & 29,060 & \$ & 36,933 & 13 \\
\hline 14 & Total Revenue Requirement & \$ & 75,063 & \$ & 158,573 & \$ & 239,576 & \$ & 318,237 & \$ & 394,609 & 14 \\
\hline
\end{tabular}

SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA RATE JURISDICTION CALCULATION OF FRANCHISE AND UNCOLLECTIBLES FACTOR TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021
\begin{tabular}{|c|c|c|c|}
\hline Line No. & Description & Percentage & Line No. \\
\hline & (a) & (b) & \\
\hline \multicolumn{4}{|c|}{Percentage Rates} \\
\hline 1 & Franchise & 2.022\% & 1 \\
\hline 2 & Uncollectible & 0.049\% & 2 \\
\hline \multicolumn{4}{|c|}{Gross Up Factors} \\
\hline 3 & Franchises ( Line 1 / ( 1 - Line 2 )/( 1 - Line 1 ) ) & 2.065\% & 3 \\
\hline 4 & Uncollectibles ( Line 2 / ( 1 - Line 2 ) ) & 0.050\% & 4 \\
\hline 5 & Franchise and Uncollectible & 2.114\% & 5 \\
\hline
\end{tabular}

\title{
CHAPTER 21 \\ Proposed Tariff Sheets
}

\section*{Company Witness: \\ Valerie J. Ontiveroz}

\section*{Proposed Tariff Sheets Clean}
\begin{tabular}{lrl} 
& 2nd Revised & Cal. P.U.C. Sheet No. \\
Canceling & 3 \\
& Cal. P.U.C. Sheet No. & 3 \\
\hline
\end{tabular}

\section*{TABLE OF CONTENTS} (Continued)

RATE SCHEDULE

GS-10/GN-10/SLT-10
GS-11
GS-12/GN-12/SLT-12
GS-15/GN-15/SLT-15
GS-20/GN-20/SLT-20
GS-25/GN-25/SLT-25

GS-35/GN-35/SLT-35

GS-40/GN-40/SLT-40
GS-50/GN-50/SLT-50
GS-60/GN-60/SLT-60
GS-66/GN-66/SLT-66
GS-70/GN-70/SLT-70
GS-VIC
City of Victorville Natural Gas Service
\(118-120\)
Held for Future Use
Surcharge to Fund Public Purpose Programs
120.1 - 120.2
\(121-122\)
Rate to Fund Infrastructure Reliability and Replacement Programs

Advice Letter No. A.19-08-
Decision No.
\(\qquad\)
9. FIXED COST ADJUSTMENT MECHANISM (FCAM) (Continued) 9F. ACCOUNTING PROCEDURE (Continued)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|c|}{ANNUAL 2021 MARGIN} \\
\hline & \multicolumn{2}{|l|}{Southern California} & \multicolumn{2}{|l|}{Northern California} & \multicolumn{2}{|l|}{South Lake Tahoe} \\
\hline January & \$ & 10,735,981 & \$ & 3,051,849 & \$ & 1,953,422 \\
\hline February & \$ & 9,346,316 & \$ & 2,628,694 & \$ & 1,746,422 \\
\hline March & \$ & 8,475,635 & \$ & 2,525,275 & \$ & 1,649,630 \\
\hline April & \$ & 6,995,351 & \$ & 2,101,095 & \$ & 1,382,774 \\
\hline May & \$ & 6,185,840 & \$ & 1,653,517 & \$ & 1,122,303 \\
\hline June & \$ & 5,790,416 & \$ & 1,392,607 & \$ & 917,080 \\
\hline July & \$ & 5,448,739 & \$ & 1,166,939 & \$ & 784,311 \\
\hline August & \$ & 3,837,412 & \$ & 734,566 & \$ & 503,343 \\
\hline September & \$ & 5,451,251 & \$ & 1,186,471 & \$ & 798,584 \\
\hline October & \$ & 5,682,562 & \$ & 1,396,269 & \$ & 974,985 \\
\hline November & \$ & 6,698,363 & \$ & 1,833,574 & \$ & 1,326,173 \\
\hline December & \$ & 9,098,152 & \$ & 2,590,530 & \$ & 1,740,466 \\
\hline Total & \$ & 83,746,018 & \$ & 22,261,386 & \$ & 14,899,493 \\
\hline
\end{tabular}
2. An entry to record interest on the Fixed Cost Balancing Account balance after entry (1) above, calculated as set forth in Section 12B of this Preliminary Statement.

Advice Letter No. A-19-08Decision No. \(\qquad\)

Issued by Justin Lee Brown Senior Vice President

Date Filed August 30, 2019 Effective Resolution No. \(\qquad\)
\begin{tabular}{llll} 
& 2nd Revised & Cal. P.U.C. Sheet No. & 39 \\
\cline { 2 - 4 } Canceling & 1st Revised & Cal. P.U.C. Sheet No. & 39 \\
\hline
\end{tabular}

\section*{PRELIMINARY STATEMENT} (Continued)
18. ENVIRONMENTAL COMPLIANCE COST MEMORANDUM ACCOUNT (ECCMA)

18A. PURPOSE
The purpose of the ECCMA is to record the Company's allocated portion of California Air Resources Board (ARB) administrative fees associated with the implementation of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006.

18B. APPLICABILITY
Costs recorded in the EECMA will apply to all customer classes, excluding the Company's "self-reporting" customers that are directly billed by the ARB.

18C. ACCOUNTING PROCEDURES
The Company shall make the following entries to the ECCMA:
1. Debit entries equal to the cost of the Company's allocation of the ARB administrative fees;
2. Credit entries for the recovery of any ECCMA amounts that may be authorized by the Commission; and
3. An entry to record interest on the ECCMA balance after entries (1) and (2) above are calculated as set forth in Section 12B of these Preliminary Statements.

18D. DISPOSITION
The ECCMA December 31 balance, at the end of the last estimated calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.

Advice Letter No. A. 19-08Decision No. \(\qquad\)

Date Filed \(\qquad\) August 30, 2019 Effective \(\qquad\) Resolution No.

6th Revised
5th Revised
Cal. P.U.C. Sheet No. \(\qquad\)
41
Cal. P.U.C. Sheet No. \(\qquad\) 41

\section*{PRELIMINARY STATEMENT (Continued)}

\section*{20. INFRASTRUCTURE RELIABILITY AND REPLACEMENT ADJUSTMENT MECHANISM (IRRAM)}

20A. PURPOSE
The purpose of the IRRAM is to balance the difference between the revenue requirements associated with Commission-approved programs with recorded revenues to recover these costs. The IRRAM will allow the Company to establish rates to recover the revenue requirement on these programs between general rate cases.

20B. APPLICABILITY
This IRRAM provision applies to bills for service under the rate schedules in the Company's California service areas excluding service provided under a Special Contract or any other exclusion provided for by the Commission.

20C. REVISION DATE
The Company will file an advice letter with the proposed IRRAM Adjustments by November 30 of each year, with a requested effective date of January 1 of the following year.

20D. FORECAST PERIOD VOLUMES
The volumes of gas, expressed in therms, to be utilized hereunder shall be the volumes estimated to be delivered during the 12 calendar-month period immediately following the Revision date.

20E. INFRASTRUCTURE RELIABILITY AND REPLACEMENT BALANCING ACCOUNT ADJUSTMENT

The Infrastructure Reliability and Replacement Balancing Account (IRRBA) Adjustment shall consist of a rate per therm to recover or return the amounts accumulated in the IRRBA plus an amount to recover the estimated annual revenue requirement, for each Commission-approved program included in the IRRAM.

Advice Letter No. A.19-08-
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed August 30, 2019
Effective
Resolution No. \(\qquad\) \(T\)
\(\qquad\)
\(\qquad\)

\section*{PRELIMINARY STATEMENT} (Continued)

\section*{21. PENSION BALANCING ACCOUNT (PBA)}

\section*{21A. PURPOSE}

The PBA is a two-way balancing account recorded in the general ledger of the Company. The purpose of this account is to balance the difference between authorized and actual amounts associated with the Company pension fund that are allocable to California. The PBA was established pursuant to D.14-06-028.

21B. ACCOUNTING PROCEDURES
Debit and or credit entries will be made at the end of each calendar year equal to the difference between pension amounts that were allocated to California and embedded in authorized rates, and actual pension amounts allocable to California, using the same allocation methodology approved in the Company's most recent general rate case.

21C. DISPOSITION
The PBA December 31 balance, at the end of the most recently recorded calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.

Advice Letter No.
A.19-08-

Decision No. \(\qquad\)

Issued by Justin Lee Brown
Senior Vice President

Date Filed \(\qquad\) August 30, 2019
Effective
Resolution No. \(\qquad\) \(T\)
\(\qquad\)

\section*{PRELIMINARY STATEMENT}
(Continued)

\section*{22. MOBILE HOME PARK CONVERSION BALANCING ACCOUNT (MHPCBA)}

22A. PURPOSE
The MHPCBA is a two-way balancing account for the purpose of recording and recovering the incremental revenue requirement associated with converting submetered residents at mobile home parks from master-metered natural gas service to direct utility service. The Company is authorized to establish the MHPCBA pursuant to Decision (D.) 14-03-021. A separate MHPCBA will be maintained for each of the Company's California rate jurisdictions.

22B. APPLICABILITY
The MHPCBA provision applies to all rate schedules, excluding customers served under a Special Contract or any other exclusion provided for by the Commission.

\section*{22C. REVISION DATE}

Annually, the Company shall file a Tier I Advice Letter to update the MHPCBA adjustment rates using the month ended September 30 MHPCBA balance.

\section*{22D. FORECAST PERIOD VOLUMES}

The volumes of gas, expressed in therms, to be utilized hereunder shall be the volumes estimated to be delivered during the 12 calendar-month period immediately following the Revision Date.

\section*{22E. ACCOUNTING}

The Company will maintain separate subaccounts in the MHPCBA for its costs up to and including the customer's meter ("to the meter" costs) and for the reimbursable costs for work performed beyond the Company's meter ("beyond the meter" costs).
1. The Company shall make the following entries to the "to the meter" MHPCBA subaccount at the end of each month:
a. A debit entry for incremental O\&M start-up costs, such as program development, customer outreach and administration expenses, not otherwise recovered in rates;

Advice Letter No. A.19-08-
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed
August 30, 2019
Effective
Resolution No. \(\qquad\) T
\(\qquad\) 45

\section*{PRELIMINARY STATEMENT \\ (Continued)}

\section*{22. MOBILE HOME PARK CONVERSION BALANCING ACCOUNT (MHPCBA) (Continued)}
b. A debit entry equal to the revenue requirement associated with the Company's actual "to the meter" facilities cost. The revenue requirement is defined as an amount equal to the depreciation expense, property tax and return on plant in service. Depreciation expense will be calculated using the Company's authorized depreciation rates. Property tax will be calculated at the Company's authorized effective tax rates. Return on investment will be calculated at the Company's authorized pre-tax return on rate base;
c. A credit entry equal to the MHPCBA Adjustment Rate, excluding franchise taxes and uncollectible accounts expense, multiplied by the applicable volumes delivered during the month;
d. An entry to record interest on the balance calculated as set forth in Section 12B of this Preliminary Statements.
2. The Company will make the following entries to the "beyond the meter" MHPCBA subaccount at the end of each month:
a. A debit entry equal to the revenue requirement related to the "beyond the meter" costs incurred, which includes amortization expense, all related taxes, and authorized return on investment at the Company's authorized pre-tax return on rate base. "Beyond the meter" costs are recorded as a regulatory asset and will be amortized over a period of ten years;
b. A credit entry equal to the ten year straight line amortization of the "beyond the meter" subaccount, as established in the Company's next general rate case;
c. An entry to record interest on the balance calculated as set forth in Section 12B of this Preliminary Statements.

\section*{22F. MHPCBA ADJUSTMENT RATES}

A MHPCBA Adjustment Rate will be established for each of the Company's rate jurisdictions. The MHPCBA Adjustment Rates will be determined by dividing the September 30 balances recorded in the "to the meter" MHPCBA subaccounts by the total Forecast Period volumes. The MHPCBA Adjustment Rates shall be set forth in the currently-effective Statement of Rates of this California Gas Tariff. "Beyond the meter" balances will be amortized over a ten-year period beginning with the Company's first general rate case after the MHPs is cutover to direct service through the Company's gas distribution system.

Advice Letter No. A.19-08Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed
August 30, 2019
Effective
Resolution No.
\begin{tabular}{|c|c|c|c|}
\hline & 3rd Revised & Cal. P.U.C. Sheet No. & 45.3 \\
\hline Canceling & 2nd Revised & al. P.U.C. Sheet & 45.3 \\
\hline
\end{tabular}

\section*{PRELIMINARY STATEMENT}
(Continued)

\section*{24. GREENHOUSE GAS MEMORANDUM ACCOUNT (GHGMA)}

24A. PURPOSE
The purpose of the GHGMA is to track the Company's administrative and outreach costs incurred to comply with the California Air Resources Board's (ARB) natural gas supplier Cap-and-Trade Program. The Company is authorized to establish the GHGMA pursuant to Decisions 14-12-040 and 15-10-032.

24B. APPLICABILITY
Costs recorded in the GHGMA will apply to all customer classes excluding enduse customers who emit 25,000 metric tons of CO2e or more per year and are directly regulated by the ARB and any other customers who elect to opt-in to direct regulation under ARB's rules.

24C. ACCOUNTING
The Company shall make the following entries to the GHGMA:
1. Debit entries equal to the Company's associated administrative and outreach costs that are directly associated with its Cap-and-Trade Program; and
2. An entry to record interest on the balance calculated as set forth in Section 12B of this Preliminary Statement.

24D. DISPOSITION
The GHGMA December 31 balance, at the end of the last estimated calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general case or other ratesetting application.

Advice Letter No. A.19-08Decision No. \(\qquad\)

Effective
Resolution No. T

\section*{26. NEW ENVIRONMENTAL REGULATORY BALANCING ACCOUNT (NERBA)} (Continued)

\section*{26D. NERBA ADJUSTMENT RATE}

The Company shall annually file a Tier 2 Advice Letter to update the NERBA rate with a requested effective date of January 1 of the following year. The NERBA rate shall be calculated by using the year end NERBA balance divided by the volumes of gas estimated to be delivered during the 12 calendar-month period immediately following the adjustment date. The NERBA rate shall be set forth in the currently-effective Statement of Rates of this California Gas Tariff.

\section*{27. NATURAL GAS LEAK ABATEMENT PROGRAM MEMORANDUM ACCOUNT} (NGLAPMA)

27A. PURPOSE
The purpose of the NGLAPMA is to track the Company's incremental administrative costs associated with the implementation of the Natural Gas Leak Abatement Program. The Company is authorized to establish the NGLAPMA pursuant to Decision 17-06-015.

27B. TRACKING PROCEDURES
The Company shall maintain the NGLAPMA by tracking the incremental administrative costs associated with the Natural Gas Leak Abatement Program. Separate accounts will be maintained for each of the Company's three California rate jurisdictions. Interest on the tracked balance will be calculated as set forth in Section 12B of this Preliminary Statement.

27C. DISPOSITION
The NGLAPMA December 31 balance of incremental administrative costs, at the end of the most recently recorded calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.

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Decision No.

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August 30, 2019
Effective
Resolution No. \(\qquad\)

1st Revised
Cal. P.U.C. Sheet No. \(\qquad\)
Canceling Original Cal. P.U.C. Sheet No.

\section*{PRELIMINARY STATEMENT (Continued)}

\section*{29. TAX MEMORANDUM ACCOUNT (TMA)}

\section*{29A. PURPOSE}

The purpose of the TMA is to track any revenue difference resulting from differences between the Company's authorized income tax expenses and its actually-incurred income tax expenses, including repair deductions and bonus depreciation. The account shall have separate line items detailing the differences resulting from (1) net revenue changes, (2) mandatory tax law changes, tax accounting changes, tax procedural changes, tax policy changes, and (3) elective tax law changes, tax accounting changes, tax procedural changes, or tax policy changes. The TMA is established in accordance with Decision (D.) 17-06-006.

\section*{29B. TRACKING PROCEDURES}

The Company shall maintain the TMA by separately tracking the calendar year difference between authorized income tax expenses and actually-incurred income tax expenses. The TMA shall include separate line items detailing the differences resulting from:
1. Net revenue changes,
2. Mandatory tax law changes, tax accounting changes, tax procedural changes, or tax policy changes, and
3. Elective tax law changes, tax accounting changes, tax procedural changes, or tax policy changes.

Interest on the tracked balance will be calculated as set forth in Section 12B of this Preliminary Statement.

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Issued by
Justin Lee Brown Senior Vice President

Date Filed \(\qquad\) August 30, 2019
Effective
Resolution No. \(\qquad\) T
\begin{tabular}{lrl} 
& 1st Revised & Cal. P.U.C. Sheet No. 45.10 \\
\cline { 2 - 2 } Canceling & Original & Cal.P.U.C. Sheet No. 45.10 \\
\hline
\end{tabular}

\section*{PRELIMINARY STATEMENT} (Continued)

\section*{29. TAX MEMORANDUM ACCOUNT (TMA)}

\section*{29C. DISPOSITION}

The TMA shall be reviewed in the Company's GRC proceedings until a Commission decision closes the account. The TMA December 31 balance, at the end of the last estimated calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.

29D. REPORTING
The Company will timely notify the Commission of any tax-related changes, including tax-related accounting changes, or tax-related procedural changes that materially affect, or may materially affect, revenues and any revenue differences if applicable. A "material affect" means a potential increase or decrease of \(\$ 3\) million or more to the Company's California jurisdictions.

Advice Letter No. A.19-08Decision No. \(\qquad\)
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\(\qquad\)

Date Filed
August 30, 2019
Effective
Resolution No. \(\qquad\) T

\section*{HELD FOR FUTURE USE}
\(\qquad\) Decision No. \(\qquad\) — Justin Lee Brown Senior Vice President

Date Filed
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Effective
Resolution No. \(\qquad\) T

\section*{PRELIMINARY STATEMENT \\ (Continued)}
31. OFFICER COMPENSATION MEMORANDUM ACCOUNT - 2019 (OCMA-2019)

31C. ACCOUNTING PROCEDURE (Continued)
The Company shall maintain this account by making quarterly entries (or annual entries where applicable when quarterly data is not available) as follows:
1. Authorized Compensation Subaccount

A credit entry equal to the salaries, bonuses, benefits, and all other consideration of any value set aside to be paid to its officers as authorized in D.14-06-28 and modified by D.17-06-006.
2. Total Compensation Subaccount

A debit entry equal to the salaries, bonuses, benefits, and all other consideration of any value paid to its officers.

\section*{31D. DISPOSITION}

The OCMA-2019 December 31 balance, at the end of the most recently recorded calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.
\(\qquad\)
\(\qquad\)

2nd Revised
Canceling
1st Revised
Cal. P.U.C. Sheet No. 45.14
California Gas Tariff
Cal. P.U.C. Sheet No. 45.14

\section*{HELD FOR FUTURE USE}
\(\qquad\)
P.O. Box 98510

Las Vegas, Nevada 89193-8510
Canceling
Cal. P.U.C. Sheet No. \(\qquad\)
California Gas Tariff
STATEMENT OF RATES
RATES APPLICABLE TO SOUTHERN CALIFORNIA SERVICE AREA [1]
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Schedule No. and Type of Charge} & \multirow[b]{2}{*}{Margin} & \multirow[t]{2}{*}{Charges [2] and Adjustments} & \multirow[t]{2}{*}{Subtotal Gas Usage Rate} & \multicolumn{4}{|r|}{Other Surcharges} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Gas Cost}} & \multirow[b]{2}{*}{Effective Sales Rate} \\
\hline & & & & & CPUC & & PPP & & & \\
\hline \multicolumn{11}{|l|}{GS-10-Residential Gas Service} \\
\hline Basic Service Charge & \$5.75 & & & & & & & & & \$ 5.75 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 84394 & \$ . 35966 & \$ 1.20360 & \$ & . 00247 & \$ & . 11166 & \$ & . 22812 & \$ 1.54585 \\
\hline Tier II & \$ 1.05802 & . 35966 & 1.41768 & & . 00247 & & . 11166 & & . 22812 & 1.75993 \\
\hline \multicolumn{11}{|l|}{GS-11-Residential Air-Conditioning Gas Service} \\
\hline Basic Service Charge & \$5.00 & & & & & & & & & \$5.00 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Tier I & \$ . 84394 & \$ . 35966 & \$ 1.20360 & \$ & . 00247 & \$ & . 11166 & \$ & . 22812 & \$ 1.54585 \\
\hline Tier II & 1.05802 & . 35966 & 1.41768 & & . 00247 & & . 11166 & & . 22812 & 1.75993 \\
\hline Air-Conditioning & \$ . 45180 & . 35966 & . 81146 & & . 00247 & & . 11166 & & . 22812 & 1.15371 \\
\hline \multicolumn{11}{|l|}{GS-12-CARE Residential Gas Service} \\
\hline Basic Service Charge & \$4.00 & & & & & & & & & \$4.00 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 55760 & \$ . 35966 & \$ . 91726 & \$ & . 00247 & \$ & . 05199 & \$ & . 22812 & \$1.19984 \\
\hline Tier II & . 72886 & . 35966 & 1.08852 & & . 00247 & & . 05199 & & . 22812 & \$1.37110 \\
\hline \multicolumn{11}{|l|}{GS-15-Secondary Residential Gas Service} \\
\hline Basic Service Charge & \$6.00 & & & & & & & & & \$6.00 \\
\hline Cost per Therm & \$ 1.29795 & \$ . 35966 & \$ 1.65761 & \$ & . 00247 & \$ & . 11166 & \$ & . 22812 & \$ 1.99986 \\
\hline \multicolumn{11}{|l|}{GS-20-Multi-Family Master-Metered Gas Service} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & \$25.00 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 84394 & \$ . 35966 & \$ 1.20360 & \$ & . 00247 & \$ & . 11166 & \$ & . 22812 & \$ 1.54585 \\
\hline Tier II & 1.05802 & . 35966 & 1.41768 & & . 00247 & & . 11166 & & . 22812 & 1.75993 \\
\hline \multicolumn{11}{|l|}{GS-25-Multi-Family Master-Metered Gas Service-Submetered} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & \$25.00 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 84394 & \$ . 35966 & \$ 1.20360 & \$ & . 00247 & \$ & . 11166 & \$ & . 22812 & \$1.54585 \\
\hline Tier II & 1.05802 & . 35966 & 1.41768 & & . 00247 & & . 11166 & & . 22812 & 1.75993 \\
\hline Submetered Discount per Occupied Space & (\$8.68) & & & & & & & & & (\$8.68) \\
\hline \multicolumn{11}{|l|}{GS-35-Agriculture Employee Housing \& Nonprofit Group Living Facility Gas Service} \\
\hline Basic Service Charge & \$8.80 & & & & & & & & & \$8.80 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 48067 & \$ . 35966 & \$ . 84033 & \$ & . 00247 & \$ & . 05199 & \$ & . 22812 & \$1.12291 \\
\hline Next 500 & . 32835 & . 35966 & . 68801 & & . 00247 & & . 05199 & & . 22812 & . 97059 \\
\hline Next 2,400 & . 20649 & . 35966 & . 56615 & & . 00247 & & . 05199 & & . 22812 & . 84873 \\
\hline Over 3,000 & . 07292 & . 35966 & . 43258 & & . 00247 & & . 05199 & & . 22812 & . 71516 \\
\hline \multicolumn{11}{|l|}{GS-40-Core General Gas Service (non-Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & \$11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & \$780.00 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 74778 & \$ . 35966 & \$ 1.10744 & \$ & . 00247 \$ & & . 11166 & \$ & . 22812 & \$1.44969 \\
\hline Next 500 & \$ . 55738 & . 35966 & . 91704 & & . 00247 & & . 11166 & & . 22812 & 1.25929 \\
\hline Next 2,400 & \$ . 40506 & . 35966 & . 76472 & & . 00247 & & . 11166 & & . 22812 & 1.10697 \\
\hline Over 3,000 & \$ . 23809 & . 35966 & . 59775 & & . 00247 & & . 11166 & & . 22812 & . 94000 \\
\hline
\end{tabular}

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P.O. Box 98510

Las Vegas, Nevada 89193-8510
Canceling
Cal. P.U.C. Sheet No. \(\qquad\)
California Gas Tariff

\section*{STATEMENT OF RATES}

RATES APPLICABLE TO SOUTHERN CALIFORNIA SERVICE AREA [1]
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline Schedule No. and Type of Charge & Margin & Charges [2] and Adjustments & Subtotal Gas
Usage Rate & \multicolumn{4}{|r|}{Other Surcharges} & \multicolumn{2}{|r|}{Gas Cost} & Effective Sales Rate \\
\hline \multicolumn{11}{|l|}{GS-40-Core General Gas Service (Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & \$11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & \$780.00 \\
\hline Cost per Therm & & & & & & & & & & \\
\hline First 100 & \$ . 74778 & \$ . 30689 & \$ 1.05467 & \$ & . 00247 & \$ & . 11166 & \$ & . 22812 & \$ 1.39692 \\
\hline Next 500 & \$ . 55738 & . 30689 & . 86427 & & . 00247 & & . 11166 & & . 22812 & 1.20652 \\
\hline Next 2,400 & \$ . 40506 & . 30689 & . 71195 & & . 00247 & & . 11166 & & . 22812 & 1.05420 \\
\hline Over 3,000 & \$ . 23809 & . 30689 & . 54498 & & . 00247 & & . 11166 & & . 22812 & . 88723 \\
\hline \multicolumn{11}{|l|}{GS-50-Core Natural Gas Service for Motor Vehicles} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & \$25.00 \\
\hline Cost per Therm & \$ . 16371 & \$ . 35966 & \$ . 52337 & & . 00247 & \$ & . 11166 & \$ & . 22812 & \$ . 86562 \\
\hline \multicolumn{11}{|l|}{GS-60-Core Internal Combustion Engine Gas Service} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & \$25.00 \\
\hline Cost per Therm & \$ . 26227 & \$ . 35966 & \$ . 62193 & & . 00247 & & . 11166 & \$ & . 22812 & \$ . 96418 \\
\hline \multicolumn{11}{|l|}{GS-66-Core Small Electric Power Generation Gas Service} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & \$25.00 \\
\hline Cost per Therm & \$ . 35418 & \$ . 35966 & \$ . 71384 & & . 00247 & & & \$ & . 22812 & \$ . 94443 \\
\hline \multicolumn{11}{|l|}{GS-70-Noncore General Gas Transportation Service} \\
\hline Basic Service Charge & \$100.00 & & & & & & & & & \$100.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & \$780.00 \\
\hline Cost per Therm & \$ . 18001 & \$ . 28424 & \$ . 46425 & & . 00247 & & . 11166 & & & \$ . 57838 \\
\hline GS-VIC City of Victorville Gas Service & & & & & & & & & & \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & \$ 11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & \$780.00 \\
\hline Cost per Therm & \$ . 22888 & \$ . 35966 & \$ . 58854 & & . 00247 & & & \$ & . 22812 & \$ . 81913 \\
\hline \multicolumn{11}{|l|}{TFF-Transportation Franchise Fee Surcharge Provision} \\
\hline TFF Surcharge per Therm & & & & & & & & & & \$ . 00331 \\
\hline \multicolumn{11}{|l|}{TDS - Transportation Distribution System Shrinkage Charge} \\
\hline TDS Charge per Therm & & & & & & & & & & \$ . 00116 \\
\hline \multicolumn{11}{|l|}{MHPS-Master-Metered Mobile Home Park Safety Inspection Provision} \\
\hline MHPS Surcharge per Space per Month & & & & & & & & & & \$ . 21000 \\
\hline
\end{tabular}

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Justin Lee Brown Senior Vice President

Date Filed August 30, 2019 Effective
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\(\qquad\)
[1] Customers taking only transportation service will pay the Effective Sales Rate less the Interstate Reservation and Gas Cost components of the Effective Sales Rate, plus a Transportation Service Charge of \(\$ 780\) per month and an amount for distribution shrinkage calculated by multiplying the currently effective Gas Cost rate per therm by the Lost and Unaccounted For Gas percentage of \(0.51 \%\). The PGA Balancing Account Adjustment is applicable to customers converting from sales service to transportation service for a period of 12 months. The volume charge for customer-secured natural gas transportation will also be subject to the TFF Surcharge.
[2] The Charges and Adjustments applicable to each tariff rate schedule includes the following components:
\begin{tabular}{|c|c|c|c|c|c|}
\hline Charges and Adjustments Description & \begin{tabular}{l}
GS-10, \\
GS-11 \\
GS-12, \\
GS-15, \\
GS-20, \\
GS-25, \\
GS-35,
\end{tabular} & \begin{tabular}{l}
GS-40
(non- \\
Covered \\
Entities), GS-50, \\
GS-60, \\
GS-66
\end{tabular} & \begin{tabular}{l}
GS-40, \\
(Covered Entities)
\end{tabular} & GS-70 & GS-VIC \\
\hline \multicolumn{6}{|l|}{Upstream Intrastate Charges} \\
\hline Storage & \$ & . 01586 & \$ 01586 & & \$ . 01586 \\
\hline Variable & & . 07520 & . 07520 & \$ . 07520 & . 07520 \\
\hline Upstream Interstate Reservation Charges & & . 05394 & . 05394 & & . 05394 \\
\hline IRRAM Surcharge & & . 03888 & . 03888 & . 03888 & . 03888 \\
\hline \multicolumn{6}{|l|}{Balancing Account Adjustments} \\
\hline FCAM* & & . 11098 & . 11098 & . 10536 & . 11098 \\
\hline ITCAM & & . 00890 & . 00890 & . 00890 & . 00890 \\
\hline \multicolumn{6}{|l|}{GHGBA**} \\
\hline Non-Covered Entities [a] & & . 05353 & & . 05353 & . 05353 \\
\hline Covered Entities [a] & & & . 00076 & & \\
\hline NERBA & & . 00057 & . 00057 & . 00057 & . 00057 \\
\hline NGLAPBA & & . 00180 & . 00180 & . 00180 & . 00180 \\
\hline Total Rate Adjustment & \$ & . 35966 & \$ . 30689 & \$ . 28424 & \$ . 35966 \\
\hline
\end{tabular}
* The FCAM surcharge includes an amount of \(\$ .10536\) per therm related to the difference between Southwest Gas' authorized margin and recorded revenues intended to recover these costs.
** Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Cap-and-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).
[a] Pursuant to D.18-03-017, Covered and non-Covered entities have a component to recover the 2015-2017 net compliance costs and proceeds amortized over a twelve month period. Also included are the 2018 GHG costs which are amortized over an eighteen month period.

Issued by Justin Lee Brown Senior Vice President

Advice Letter No. A.19-08Decision No.
\(\qquad\)

\section*{Effective}

Resolution No.
\(\qquad\)

\section*{STATEMENT OF RATES}

\section*{RATES APPLICABLE TO NORTHERN CALIFORNIA SERVICE AREA [1] [2]}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & & \multirow[t]{2}{*}{Charges [3]
and
Adjustments} & \multirow[b]{2}{*}{Subtotal Gas Usage Rate} & \multicolumn{4}{|r|}{Other Surcharges} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Gas Cost}} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Effective Sales Rate}} \\
\hline Schedule No. and Type of Charge & Margin & & & & CPUC & & PPP & & & & \\
\hline \multicolumn{12}{|l|}{GN-10-Residential Gas Service} \\
\hline Basic Service Charge & \$5.75 & & & & & & & & & \$ 5.75 & \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 77118 & \$ . 15668 & \$ . 92786 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.29662 & \\
\hline Tier II & . 89641 & . 15668 & 1.05309 & & . 00247 & & . 06290 & & . 30339 & 1.42185 & \\
\hline \multicolumn{12}{|l|}{GN-12-CARE Residential Gas Service} \\
\hline Basic Service Charge & \$4.60 & & & & & & & & & \$4.60 & \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 52493 & \$ . 15668 & \$ . 68161 & \$ & . 00247 & \$ & . 05199 & \$ & . 30339 & \$ 1.03946 & \\
\hline Tier II & . 62511 & . 15668 & . 78179 & & . 00247 & & . 05199 & & . 30339 & 1.13964 & \\
\hline \multicolumn{12}{|l|}{GN-15-Secondary Residential Gas Service} \\
\hline Basic Service Charge & \$6.00 & & & & & & & & & \$ 6.00 & \\
\hline Cost per Therm & \$ . 95173 & \$ . 15668 & \$1.10841 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$1.47717 & \\
\hline \multicolumn{12}{|l|}{GN-20-Multi-Family Master-Metered Gas} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & \$25.00 & \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 77118 & \$ . 15668 & \$ . 92786 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.29662 & \\
\hline Tier II & . 89641 & . 15668 & 1.05309 & & . 00247 & & . 06290 & & . 30339 & 1.42185 & \\
\hline \multicolumn{12}{|l|}{GN-25-Multi-Family Master-Metered Gas Service-Submetered} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & \$25.00 & \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 77118 & \$ . 15668 & \$ . 92786 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.29662 & \\
\hline Tier II & . 89641 & . 15668 & 1.05309 & & . 00247 & & . 06290 & & . 30339 & 1.42185 & \\
\hline Submetered Discount per Occupied Space & (\$9.58) & & & & & & & & & (\$ 9.58) & \\
\hline \multicolumn{12}{|l|}{GN-35-Agriculture Employee Housing \& Nonprofit Group Living Facility Gas Service} \\
\hline Basic Service Charge & \$ 8.80 & & & & & & & & & \$ 8.80 & \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 42107 & \$ . 15668 & \$ . 57775 & \$ & . 00247 & \$ & . 05199 & \$ & . 30339 & \$ . 94207 & \\
\hline Next 500 & . 31754 & . 15668 & . 47422 & & . 00247 & & . 05199 & & . 30339 & . 80810 & \\
\hline Next 2,400 & . 21675 & . 15668 & . 37343 & & . 00247 & & . 05199 & & . 30339 & . 69430 & \\
\hline Over 3,000 & . 06880 & . 15668 & . 22548 & & . 00247 & & . 05199 & & . 30339 & . 52452 & \\
\hline \multicolumn{12}{|l|}{GN-40-Core General Gas Service (non-Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & \$11.00 & \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & \$780.00 & \\
\hline Cost per Therm & & & & & & & & & & & \\
\hline First 100 & \$ . 64944 & \$ . 15668 & \$ . 80612 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.17488 & \\
\hline Next 500 & . 48198 & . 15668 & . 63866 & & . 00247 & & . 06290 & & . 30339 & 1.00742 & \\
\hline Next 2,400 & . 33973 & . 15668 & . 49641 & & . 00247 & & . 06290 & & . 30339 & . 86517 & \\
\hline Over 3,000 & . 12751 & . 15668 & . 28419 & & . 00247 & & . 06290 & & . 30339 & . 65295 & \\
\hline
\end{tabular}

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Advice Letter No. A.19-08-
Decision No. \(\qquad\) Justin Lee Brown Senior Vice President

Date Filed August 30, 2019 Effective \(\qquad\)

Cal. P.U.C. Sheet No. \(\qquad\)
STATEMENT OF RATES

\section*{RATES APPLICABLE TO NORTHERN CALIFORNIA SERVICE AREA [1] [2]}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multirow[b]{2}{*}{Margin} & \multirow[t]{2}{*}{Charges [3] and Adjustments} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Subtotal Gas Usage Rate}} & \multicolumn{4}{|r|}{Other Surcharges} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Gas Cost}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Effective Sales Rate}} \\
\hline & & & & & & CPUC & & PPP & & & & \\
\hline \multicolumn{13}{|l|}{GN-40-Core General Gas Service (Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & & \$ 11.00 & \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & & \$780.00 & \\
\hline Cost per Therm & & & & & & & & & & & & \\
\hline First 100 & \$ . 64944 & \$ . 10391 & \$ & . 75335 & \$ & . 00247 & \$ & . 06290 & & \$ . 30339 & \$ 1.12211 & \\
\hline Next 500 & . 48198 & . 10391 & & . 58589 & & . 00247 & & . 06290 & & . 30339 & . 95465 & \\
\hline Next 2,400 & . 33973 & . 10391 & & . 44364 & & . 00247 & & . 06290 & & . 30339 & . 81240 & \\
\hline Over 3,000 & . 12751 & . 10391 & & . 23142 & & . 00247 & & . 06290 & & . 30339 & . 60018 & \\
\hline \multicolumn{13}{|l|}{GN-50-Core Natural Gas Service for Motor Vehicles} \\
\hline Basic Service Charge & \$ 25.00 & & & & & & & & & & \$ 25.00 & \\
\hline Cost per Therm & \$ . 03132 & \$ . 15668 & \$ & . 18800 & & . 00247 & \$ & . 06290 & & . 30339 & \$ . 55676 & \\
\hline \multicolumn{13}{|l|}{GN-60-Core Internal Combustion Engine Gas
Service} \\
\hline Basic Service Charge & \$ 25.00 & & & & & & & & & & \$ 25.00 & \\
\hline Cost per Therm & \$ . 71521 & \$ . 15668 & & . 87189 & & \$ . 00247 & \$ & . 06290 & & . 30339 & \$ 1.24065 & \\
\hline \multicolumn{13}{|l|}{GN-66-Core Small Electric Power Generation
Gas Service} \\
\hline Basic Service Charge & \$ 25.00 & & & & & & & & & & \$ 25.00 & \\
\hline Cost per Therm & \$ . 71521 & \$ . 15668 & & . 87189 & & \$ . 00247 & & & & . 30339 & \$ 1.17775 & \\
\hline \multicolumn{13}{|l|}{GN-70-Noncore General Gas Transportation
Service} \\
\hline Basic Service Charge & \$ 100.00 & & & & & & & & & & \$ 100.00 & \\
\hline Transportation Service Charge & \$ 780.00 & & & & & & & & & & \$ 780.00 & \\
\hline Cost per Therm & \$ . 12545 & (\$ .00327) & \$ & . 12218 & & \$ . 00247 & \$ & . 06290 & & & \$ . 18755 & \\
\hline \multicolumn{13}{|l|}{TFF-Transportation Franchise Fee Surcharge
Provision} \\
\hline TFF Surcharge per Therm & & & & & & & & & & & \$ . 00448 & \\
\hline \multicolumn{13}{|l|}{TDS - Transportation Distribution System Shrinkage Charge} \\
\hline TDS Charge per Therm & & & & & & & & & & & \$ . 00228 & \\
\hline \multicolumn{13}{|l|}{MHPS-Master-Metered Mobile Home Park Safety Inspection Provision} \\
\hline MHPS Surcharge per Space per Month & & & & & & & & & & & \$ . 21000 & \\
\hline
\end{tabular}

Issued by
Advice Letter No. A. 19-08Decision No. \(\qquad\)
Justin Lee Brown Senior Vice President
\(\qquad\)

\section*{STATEMENT OF RATES}

\section*{RATES APPLICABLE TO NORTHERN CALIFORNIA SERVICE AREA [1] [2]}
[1] Customers taking only transportation service will pay the Effective Sales Rate less the Interstate Reservation and Gas Cost components of the Effective Sales Rate, plus a Transportation Service Charge of \(\$ 780\) per month and an amount for distribution shrinkage calculated by multiplying the currently effective Gas Cost rate per therm by the Lost and Unaccounted For Gas percentage of \(0.75 \%\). The PGA Balancing Account Adjustment is applicable to customers converting from sales service to transportation service for a period of 12 months. The volume charge for customer-secured natural gas transportation will also be subject to the TFF Surcharge.
[2] A Franchise Fee differential of \(2.5 \%\) will be applied to monthly billings calculated for all rate schedules for all customers within the limits of the Town of Truckee.
[3] The Charges and Adjustments applicable to each tariff rate schedule includes the following components:
\begin{tabular}{|c|c|c|c|c|c|}
\hline Charges and Adjustments Description & \begin{tabular}{l}
GN-10 \\
GN-12 \\
GN-15 \\
GN-20 \\
GN-25 \\
GN-35
\end{tabular} & & \begin{tabular}{l}
GN-40, \\
(Covered Entities)
\end{tabular} & & GN-70 \\
\hline Upstream Intrastate Charges & & & & & \\
\hline Storage & \multirow[t]{3}{*}{\$} & . 02174 & \$ . 02174 & & \\
\hline Variable & & . 20533 & . 20533 & & \\
\hline IRRAM Surcharge & & . 01249 & . 01249 & & . 01249 \\
\hline \multicolumn{6}{|l|}{Balancing Account Adjustments} \\
\hline FCAM* & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{( .13851)}} & ( .13851) & & .07139) \\
\hline \multicolumn{4}{|l|}{GHGBA**} & & \\
\hline Non-Covered Entities [a] & \multicolumn{2}{|r|}{. 05353} & & & . 05353 \\
\hline Covered Entities [a] & & & . 00076 & & \\
\hline NERBA & \multicolumn{2}{|r|}{. 00051} & . 00051 & & . 00051 \\
\hline NGLAPBA & \multicolumn{2}{|r|}{. 00159} & . 00159 & & . 00159 \\
\hline Total Rate Adjustment & \$ & . 15668 & \$ . 10391 & & .00327) \\
\hline
\end{tabular}
* The FCAM surcharge includes an amount of (\$.07139) per therm related to the difference between Southwest Gas' authorized margin and recorded revenues intended to recover these costs.
** Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Cap- and-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).
[a] Pursuant to D.18-03-017, Covered and non-Covered entities have a component to recover the 2015-2017 net compliance costs and proceeds amortized over a twelve month period. Also included are the 2018 GHG costs which are amortized over an eighteen month period.
\(\qquad\)
Decision No.
Issued by Justin Lee Brown Senior Vice President

Date Filed
August 30, 2019

\section*{Effective}

Resolution No.
\(\qquad\)

\section*{STATEMENT OF RATES}

\section*{RATES APPLICABLE TO SOUTH LAKE TAHOE SERVICE AREA [1]}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline & \multirow[b]{2}{*}{Margin} & \multirow[t]{2}{*}{Charges [2] and Adjustments} & \multirow[t]{2}{*}{Subtotal Gas Usage Rate} & \multicolumn{4}{|r|}{Other Surcharges} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Gas Cost}} & \multirow[t]{2}{*}{Effective Sales Rate} \\
\hline Schedule No. and Type of Charge & & & & & CPUC & & PPP & & & \\
\hline \multicolumn{11}{|l|}{SLT-10-Residential Gas Service} \\
\hline Basic Service Charge & \$5.75 & & & & & & & & & \$5.75 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 60458 & \$ . 24752 & \$ . 85210 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.22086 \\
\hline Tier II & . 71473 & . 24752 & . 96225 & & . 00247 & & . 06290 & & . 30339 & 1.33101 \\
\hline \multicolumn{11}{|l|}{SLT-12-CARE Residential Gas Service} \\
\hline Basic Service Charge & \$4.60 & & & & & & & & & \$4.60 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 37348 & \$ . 24752 & \$ . 62100 & \$ & . 00247 & \$ & . 05199 & & . 30339 & \$ . 97885 \\
\hline Tier II & . 46160 & . 24752 & . 70912 & & . 00247 & & . 05199 & & . 30339 & 1.06697 \\
\hline \multicolumn{11}{|l|}{SLT-15-Secondary Residential Gas Service} \\
\hline Basic Service Charge & \$6.00 & & & & & & & & & \$6.00 \\
\hline Cost per Therm & \$ . 80400 & \$ . 24752 & \$1.05152 & \$ & . 00247 & \$ & . 06290 & & . 30339 & \$ 1.42028 \\
\hline \multicolumn{11}{|l|}{SLT-20-Multi-Family Master-Metered Gas Service} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & \$11.00 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 60458 & \$ . 24752 & \$ . 85210 & \$ & . 00247 & \$ & . 06290 & & . 30339 & \$ 1.22086 \\
\hline Tier II & . 71473 & . 24752 & . 96225 & & . 00247 & & . 06290 & & . 30339 & 1.33101 \\
\hline \multicolumn{11}{|l|}{SLT-25-Multi-Family Master-Metered Gas Service-Submetered} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & \$11.00 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 60458 & \$ . 24752 & \$ . 85210 & \$ & . 00247 & \$ & . 06290 & & . 30339 & \$1.22086 \\
\hline Tier II & . 71473 & . 24752 & . 96225 & & . 00247 & & . 06290 & & . 30339 & 1.33101 \\
\hline Submetered Discount per Occupied Space & (\$11.28) & & & & & & & & & (\$11.28) \\
\hline \multicolumn{11}{|l|}{SLT-35-Agriculture Employee Housing \& Nonprofit Group Living Facility Gas Service} \\
\hline Basic Service Charge & \$ 8.80 & & & & & & & & & \$ 8.80 \\
\hline \multicolumn{11}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 36367 & \$ . 24752 & \$ 61119 & \$ & . 00247 & \$ & . 05199 & & . 30339 & \$ . 96904 \\
\hline Next 500 & . 29470 & . 24752 & . 54222 & & . 00247 & & . 05199 & & . 30339 & . 90007 \\
\hline Next 2,400 & . 22574 & . 24752 & . 47326 & & . 00247 & & . 05199 & & . 30339 & . 83111 \\
\hline Over 3,000 & . 10709 & . 24752 & . 35461 & & . 00247 & & . 05199 & & . 30339 & . 71246 \\
\hline \multicolumn{11}{|l|}{SLT-40-Core General Gas Service (non-Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & \$11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & \$780.00 \\
\hline Cost per Therm & & & & & & & & & & \\
\hline First 100 & \$ . 59231 & \$ . 24752 & \$ . 83983 & \$ & . 00247 & \$ & . 06290 & & . 30339 & \$ 1.20859 \\
\hline Next 500 & . 50610 & . 24752 & . 75362 & & . 00247 & & . 06290 & & . 30339 & 1.12238 \\
\hline Next 2,400 & . 41990 & . 24752 & . 66742 & & . 00247 & & . 06290 & & . 30339 & 1.03618 \\
\hline Over 3,000 & . 27159 & . 24752 & . 51911 & & . 00247 & & . 06290 & & . 30339 & . 88787 \\
\hline
\end{tabular}

Issued by
Advice Letter No. A. 19-08-
Decision No. \(\qquad\)
\(\qquad\) Justin Lee Brown Senior Vice President

Date Filed August 30, 2019 Effective
Resolution No.
\(\qquad\) California Gas Tariff

Canceling Cal. P.U.C. Sheet No. 72
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Schedule No. and Type of Charge} & \multicolumn{5}{|l|}{STATEMENT OF RATES} & EA [1] & \multirow[b]{2}{*}{Effective Sales Rate} \\
\hline & Margin & Charges [2] and Adjustments & Subtotal Gas Usage Rate & Other Sur & \[
\frac{\text { rrcharges }}{\text { PPP }}
\] & Gas Cost & \\
\hline \multicolumn{8}{|l|}{SLT-40-Core General Gas Service (Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & \$11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & \$780.00 \\
\hline \multicolumn{8}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 59231 & \$ . 19475 & \$ . 78706 & \$ . 00247 & \$ . 06290 & \$ . 30339 & \$ 1.15582 \\
\hline Next 500 & . 50610 & . 19475 & . 70085 & . 00247 & . 06290 & . 30339 & 1.06961 \\
\hline Next 2,400 & . 41990 & . 19475 & . 61465 & . 00247 & . 06290 & . 30339 & . 98341 \\
\hline Over 3,000 & . 20246 & . 19475 & . 39721 & . 00247 & . 06290 & . 30339 & . 76597 \\
\hline \multicolumn{8}{|l|}{SLT-50-Core Natural Gas Service for Motor Vehicles} \\
\hline Basic Service Charge & \$11.00 & & & & & & \$11.00 \\
\hline Cost per Therm & \$ . 48769 & \$ . 24752 & \$ . 73521 & \$ . 00247 & \$ . 06290 & \$ . 30339 & \$ 1.10397 \\
\hline \multicolumn{8}{|l|}{SLT-60-Core Internal Combustion Engine Gas Service} \\
\hline Basic Service Charge & \$ 11.00 & & & & & & \$ 11.00 \\
\hline Cost per Therm & \$ . 34236 & \$ . 24752 & \$ . 58988 & \$ . 00247 & \$ . 06290 & \$ . 30339 & \$ . 95864 \\
\hline \multicolumn{8}{|l|}{SLT-66-Core Small Electric Power Generation Gas Service} \\
\hline Basic Service Charge & \$ 11.00
\(\$ 834236\) & \$ 24752 & \$ 58988 & \$ 00247 & & \$ 30339 & \[
\begin{array}{ll}
\$ 11.00 \\
\$ & 89574
\end{array}
\] \\
\hline \multicolumn{8}{|l|}{SLT-70-Noncore General Gas Transportation Service} \\
\hline Basic Service Charge & \$ 100.00 & & & & & & \$ 100.00 \\
\hline Transportation Service Charge & \$ 780.00 & & & & & & \$ 780.00 \\
\hline Cost per Therm & \$ . 35270 & \$ . 08757 & \$ . 44027 & \$ . 00247 & \$ . 06290 & & \$ . 50564 \\
\hline \multicolumn{8}{|l|}{TFF-Transportation Franchise Fee Surcharge Provision} \\
\hline TFF Surcharge per Therm & & & & & & & \$ . 00448 \\
\hline \multicolumn{8}{|l|}{TDS-Transportation Distribution System Shrinkage Charge} \\
\hline TDS Charge per Therm & & & & & & & \$ . 00228 \\
\hline \multicolumn{8}{|l|}{MHPS-Master-Metered Mobile Home Park Safety Inspection Provision} \\
\hline MHPS Surcharge per Space per Month & & & & & & & \$ . 21000 \\
\hline
\end{tabular}

Advice Letter No. A. 19-08-
Decision No.
\(\qquad\)
\(\qquad\) Justin Lee Brown Senior Vice President
\(\qquad\) Effective
Resolution No.
\(\qquad\)

\section*{STATEMENT OF RATES}

\section*{RATES APPLICABLE TO SOUTH LAKE TAHOE SERVICE AREA [1]}
[1] Customers taking only transportation service will pay the Effective Sales Rate less the Interstate Reservation and Gas Cost components of the Effective Sales Rate, plus a Transportation Service Charge of \(\$ 780\) per month and an amount for distribution shrinkage calculated by multiplying the currently effective Gas Cost rate per therm by the Lost and Unaccounted For Gas percentage of \(0.75 \%\). The PGA Balancing Account Adjustment is applicable to customers converting from sales service to transportation service for a period of 12 months. The volume charge for customer-secured natural gas transportation service will also be subject to the TFF Surcharge.
[2] The Charges and Adjustments applicable to each tariff rate schedule includes the following components:
\begin{tabular}{|c|c|c|c|c|c|}
\hline Charges and Adjustments Description & \[
\begin{aligned}
& \text { SLT-10, } \\
& \text { SLT-1, }, \\
& \text { SLT-15, } \\
& \text { SLT-20, } \\
& \text { SLT-25, } \\
& \text { SLT-35, }
\end{aligned}
\] & & \begin{tabular}{l}
SLT-40, \\
(Covered \\
Entities)
\end{tabular} & & LT-70 \\
\hline \multicolumn{6}{|l|}{Upstream Interstate Charges} \\
\hline Storage & \multirow[t]{2}{*}{} & \multirow[t]{2}{*}{\$ . 02174} & \$ . 02174 & & \\
\hline Reservation & & & . 20533 & & \\
\hline IRRAM Surcharge & & . 02206 & . 02206 & \$ & . 02206 \\
\hline \multicolumn{6}{|l|}{Balancing Account Adjustments} \\
\hline FCAM* & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{( .05694)}} & ( .05694) & & . 01018 \\
\hline GHGBA** & & & & & \\
\hline Non-Covered Entities [a] & \multicolumn{2}{|r|}{. 05353} & & & . 05353 \\
\hline Covered Entities [a] & & & . 00076 & & \\
\hline NERBA & \multicolumn{2}{|r|}{. 00062} & . 00062 & & . 00062 \\
\hline NGLAPBA & \multicolumn{2}{|r|}{. 00118} & . 00118 & & . 00118 \\
\hline Total Rate Adjustment & \multicolumn{2}{|l|}{\$ . 24752} & \$ . 19475 & \$ & . 08757 \\
\hline
\end{tabular}
* The FCAM surcharge includes an amount of \(\$ .01018\) per therm related to the difference between Southwest Gas' authorized margin and recorded revenues intended to recover these costs.
** Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Cap- and-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).
[a] Pursuant to D.18-03-017, Covered and non-Covered entities have a component to recover the 2015-2017 net compliance costs and proceeds amortized over a twelve month period. Also included are the 2018 GHG costs which are amortized over an eighteen month period.
\(\qquad\)
Decision No.

Date Filed
August 30, 2019

\section*{Effective}

Resolution No.
\(\qquad\)

\section*{Schedule Nos. GS-10/GN-10/SLT-10}

RESIDENTIAL GAS SERVICE

\section*{APPLICABILITY}

Applicable to gas service to customers which consists of direct domestic gas usage in a residential dwelling for space heating, air conditioning, cooking, water heating, and other residential uses. This schedule is available only to primary residences.

\section*{TERRITORY}

Throughout the Company's certificated California service areas, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The credit will display as a line item on the customer's bill. The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given.

The baseline daily quantity in therms for all individually-metered residential uses are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (May - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & Summer Season (June - Oct.) & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commissinon Decision18-03-017, the 2018 CA Climate Credit will be distributed in October.

Advice Letter No. A.19-08-
Decision No.

Issued by
Justin Lee Brown Senior Vice President

Date Filed \(\qquad\)
August 30, 2019
Effective
Resolution No.

Schedule No. GS-11

\section*{RESIDENTIAL AIR-CONDITIONING GAS SERVICE}

\section*{APPLICABILITY}

Applicable to gas service to customers which consists of direct domestic gas usage in a residential dwelling for air conditioning in conjunction with space heating, cooking, water heating, and other residential uses. This schedule is available as an option only to primary residences with installed natural gas air-conditioning systems for customers who would otherwise receive service pursuant to Schedule No. GS-10, Residential Gas Service of this California Gas Tariff.

\section*{TERRITORY}

Throughout the Company's certificated gas service areas in its Southern California Division, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The credit will display as a line item on the customer's bill. The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given.

The Tier I and summer season Tier II daily quantities in therms for all individually-metered residential uses are:
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
Climate \\
Zone
\end{tabular} & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (May - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & Summer Season (June - Oct.) & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline
\end{tabular}

For billing purposes all summer season quantities sold each month in excess of the Tier II quantities shall be billed at the Gas Air-Conditioning rate, and all winter season quantities sold each month in excess of the Tier I quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commission Decision 18-03-017, the 2018 CA Climate Credit will be distributed in October.

Advice Letter No. A.19-08-
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed \(\qquad\)
August 30, 2019
Effective
Resolution No.
\begin{tabular}{|c|c|c|c|}
\hline & Issued by & Date Filed & August 30, 2019 \\
\hline Advice Letter No. A.19-08- & Justin Lee Brown & Effective & \\
\hline Decision No. & Senior Vice President & Resolution & \\
\hline
\end{tabular}

\section*{Schedule Nos. GS-12/GN-12/SLT-12 \\ CARE RESIDENTIAL GAS SERVICE}

\section*{APPLICABILITY}

Applicable to gas service to customers whose qualifying income does not exceed 200 percent of the Federal poverty level, pursuant to California Alternate Rates for Energy (CARE) program eligibility requirements. This service is available only to primary residences.

\section*{TERRITORY}

Throughout the Company's certificated California service areas, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The credit will display as a line item on the customer's bill. The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given. The CA Climate Credit will be applied after the California Alternate Rates for Energy (CARE) is applied to the customer's bill to ensure the customer receives the maximum benefit of the CARE program.
The baseline daily quantity in therms for all individually-metered residential uses are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (May - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & Summer Season (June - Oct.) & \begin{tabular}{l}
Winter Off-Peak \\
(Apr., May \& Nov.)
\end{tabular} & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commission Decision18-03-017, the 2018 CA Climate Credit will be distributed in October.
\(\qquad\)
Issued by Justin Lee Brown Senior Vice President

Date Filed \(\qquad\) August 30, 2019
\(\qquad\)

Resolut

Cal. P.U.C. Sheet No. \(\qquad\) California Gas Tariff

Cal. P.U.C. Sheet No. \(\qquad\)
Schedule Nos. GS-20/GN-20/SLT-20
MULTI-FAMILY MASTER-METERED GAS SERVICE

\section*{APPLICABILITY}

Applicable to gas service for cooking, water heating, space heating, and other residential usages supplied to multi-family accommodations through one meter on a single premise in accordance with Rule No. 18 of this California Gas Tariff. This schedule is closed to new installations.

\section*{TERRITORY}

Throughout the Company's certificated California service areas, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given. The master-metered customer will receive one credit for each resident being served through the master-meter. It is the responsibility of the master-metered customer to pass the CA Climate Credit on to the resident.
The baseline daily quantity in therms per residential unit are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & Summer Season (May - Oct.) & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (June - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commission Decision18-03-017, the 2018 CA Climate Credit will be distributed in October.

Advice Letter No. A.19-08Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed \(\qquad\)
August 30. 2019
Effective
Resolution No.

Schedule Nos. GS-20/GN-20/SLT-20

\section*{MULTI-FAMILY MASTER-METERED GAS SERVICE \\ (Continued)}

\section*{RATES (Continued)}

Upon completion of an application and verification by a state licensed physician, surgeon or osteopath, an additional monthly medical allowance of 25 therms will be provided for hemiplegic/paraplegic/quadriplegic persons, multiple sclerosis/scleroderma patients and persons who are being treated for a life-threatening illness and have a compromised immune system who are full-time residents in a household served under this schedule.
If the customer qualifying for the standard medical allowance can demonstrate to the Company's satisfaction that the 25 -therm allowance is insufficient to meet the life-support and comfort requirements of the eligible resident, the Company shall make a determination as to the additional quantity required and round such quantity to the next higher 25 therms.

The number of therms shall be determined in accordance with the provisions of Rule No. 2C of this California Gas Tariff.

For billing purposes, the baseline quantity shall be determined by multiplying the allowable baseline quantity per residential unit by the number of qualifying residential units.
Minimum Charge:
The minimum charge per meter per month is the basic service charge.

\section*{SPECIAL CONDITIONS}
1. Residential service under this schedule includes service to residential units and mobile home units, but does not include enterprises such as rooming houses, boarding houses, dormitories, rest homes, military barracks, stores, restaurants, service stations, and other similar establishments.
2. As a condition to service under this schedule, a master-meter customer must attach to his application for such service a Declaration of Eligibility for Baseline Rates stating the number of occupied units to be billed. The total baseline allowance will be determined on this declaration.
3. It is the responsibility of the customer to advise the Company within 15 days following any change in the number of residential dwelling units and mobile home spaces utilizing gas service. Failure to do so may result in the loss of baseline rates.
The number of residential units eligible for baseline allowances is subject to verification by the Company. In the event the Company ascertains a customer's ineligibility of a baseline allowance, an appropriate adjusted bill may be rendered to the customer.

Advice Letter No. A.19-08-
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed
August 30, 2019
Effective
Resolution No

\section*{SOUTHWEST GAS CORPORATION}
\begin{tabular}{ccc} 
& 1st Revised & Cal. P.U.C. Sheet No. \\
\cline { 2 - 4 } & Original & 90 \\
\hline & Cal. P.U.C. Sheet No. \\
\hline
\end{tabular}

\section*{HELD FOR FUTURE USE}
\(\qquad\) Decision No. \(\qquad\) A. 19-08-
\(\qquad\) -

Justin Lee Brown Senior Vice President

Date Filed \(\qquad\) Effective August 30, 2019 Resolution No.
\(\qquad\)

\title{
Canceling Cal. P.U.C. Sheet No. \\ Schedule Nos. GS-25/GN-25/SLT-25 \\ MULTI-FAMILY MASTER-METERED GAS SERVICE - SUBMETERED \\ (Continued)
}

92
92

\section*{RATES (Continued)}

The baseline daily quantity in therms per residential unit are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & Summer Season (May - Oct.) & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (June - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.

Upon completion of an application and verification by a state licensed physician, surgeon or osteopath, an additional monthly medical allowance of 25 therms will be provided for hemiplegic/paraplegic/quadriplegic persons, multiple sclerosis/scleroderma patients and persons who are being treated for a life-threatening illness and have a compromised immune system who are full-time residents in a household served under this schedule.

If the customer qualifying for the standard medical allowance can demonstrate to the Company's satisfaction that the 25 -therm allowance is insufficient to meet the life-support and comfort requirements of the eligible resident, the Company shall make a determination as to the additional quantity required and round such quantity to the next higher 25 therms.

The number of therms shall be determined in accordance with the provisions of Rule No. 2C of this California Gas Tariff.

For billing purposes, the baseline quantity shall be determined by multiplying the allowable baseline quantity per residential unit by the number of qualifying residential units.

Advice Letter No. A. 19-08Decision No. \(\qquad\)
Issued by Justin Lee Brown Senior Vice President
\(\qquad\)

Date Filed \(\qquad\) August 30, 2019 Effective
Resolution No. \(\qquad\) T
\begin{tabular}{lll} 
& 2nd Revised & Cal. P.U.C. Sheet No. \(\frac{118}{118}\) \\
\cline { 2 - 2 } Canceling & 1st Revised \\
\cline { 2 - 4 } & Cal. P.U.C. Sheet No. \(\frac{118}{}\)
\end{tabular}

Schedule No. GS-VIC

\section*{CITY OF VICTORVILLE NATURAL GAS SERVICE}

\section*{APPLICABILITY}

Applicable for natural gas service for resale to the City of Victorville Municipal Utility Services at the Southern California Logistics Airport.

\section*{RATES}

The Customer shall pay the following charges to receive natural gas service under this schedule:
1. Basic Service Charge: The Basic Service Charge per month is the charge per meter as set forth in the currently effective Statement of Rates of this California Gas Tariff.
2. Transportation Service Charge: The Transportation Service Charge per month is the charge as set forth in the currently-effective Statement of Rates of this California Gas Tariff.
3. Volume Charge: An amount equal to the applicable Volume Charge per therm of gas received by the Company for the account of the Customer. These charges are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

\section*{Minimum Charge}

The minimum charge per month is the Basic Service Charge plus the Transportation Service Charge, if applicable.

Advice Letter No.
A. 19-08-

Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed \(\qquad\)
Effective
Resolution No. \(\qquad\) T

1st Revised Cal. P.U.C. Sheet No. 120.1

\section*{HELD FOR FUTURE USE}

1st Revised Cal. P.U.C. Sheet No. 120.2

HELD FOR FUTURE USE

Issued by Justin Lee Brown Senior Vice President

Date Filed \(\qquad\) August 30, 2019
\(\qquad\) T

\section*{LIST OF SPECIAL CONTRACTS AND DEVIATIONS}
\begin{tabular}{|c|c|c|c|c|c|}
\hline & & & Commission Authorization & Most Com Regula & \begin{tabular}{l}
parable \\
Tariff
\end{tabular} \\
\hline Name and Location of Customer & Type or Class of Service & Execution Date & Number and Date & Schedule No. & Contract Differences \\
\hline
\end{tabular}
\(\qquad\) -

\section*{Justin Lee Brown}

Senior Vice President

Date Filed \(\qquad\) August 30, 2019 Effective Resolution No. \(\qquad\) T
\(\qquad\)

\section*{RULE NO. 3}

\section*{APPLICATION FOR SERVICE}

\section*{A. CUSTOMER APPLICATION}
1. In addition to the information the Company may require each applicant for gas service to establish credit in accordance with Rule No. 6, Establishment and Reestablishment of Credit of this California tariff and to establish the identity of the applicant, all applicants shall provide such other information as the Company may reasonably require for gas service. This information includes, but is not limited to:
a. Legal name of applicant(s).
b. Name of applicant's spouse or co-applicant.
c. Date of birth.
d. Date and place of application.
e. Location of premises to be served.
f. Address to which bills are to be mailed or delivered.
g. Date applicant will be ready for gas service.
h. Whether the premises have been previously supplied with gas.
i. Purposes for which gas service is to be used.
j. Rate schedule desired (if optional schedules are available).
k. Telephone number.
I. Whether applicant is owner, agent or tenant of premises.
m . Whether applicant or other permanent resident is elderly and/or disabled.
2. Third party notification:

If an applicant or customer who is elderly and/or disabled lists a third party whom they wish notified in the event that their service is scheduled for discontinuance in accordance with Rule No. 11 of this California Gas Tariff, such third party's name, address, and telephone number shall be noted on the application for service.
The Company shall establish procedures to ensure that third parties consent to receive a copy of the termination notice. The Company shall inform all customers at least once annually of the availability of this service.

Adssued by
Advice Letter No. A.19-08-
Decision No. \(\qquad\)

Justin Lee Brown Senior Vice President
\(\qquad\)

\section*{RULE NO. 6}

\section*{ESTABLISHMENT AND REESTABLISHMENT OF CREDIT}

Each applicant for service will be required to establish credit to the satisfaction of the Company before service will be rendered.

\section*{A. ESTABLISHMENT OF CREDIT}
1. The applicant's credit will be deemed established:
a. If applicant makes a deposit with the Company to secure the payment of any bills for service to be furnished by the Company under the application as provided in Rule No. 7 of this California Gas Tariff; or
b. If applicant furnishes a guarantor satisfactory to the Company to secure payment of bills for the service requested; or
c. If applicant has previously been a customer of the Company, and has paid all bills for gas service on the average within a period as set forth in Rule No. 11, Section A. 1 of this California Gas Tariff for a period of 12 consecutive months immediately prior to the date when the applicant for service previously ceased to take service from the Company, provided such service occurred within two years from the date of the new application for service; or
d. If applicant can otherwise establish credit to the satisfaction of the
2. In the case of a master-metered establishment which is subject to termination for nonpayment of bills by the landlord, the residential tenants may become customers of the Company by establishing credit as set forth above in Sections A.1.c. and A.1.d. Where prior service is being considered as a condition for establishing credit, proof of prompt payment while residing at condition for establishing credit, proof of prompt payment while residing at
such master-metered establishment for the immediately preceding 12 months shall be acceptable to the Company as a satisfactory equivalent.

Advice Letter No. A.19-08-
Decision No.
\(\qquad\)

Issued by Justin Lee Brown Senior Vice President

Date Filed August 30, 2019
Effective Resolution No. Company.

California Gas Tariff

\section*{RULE NO. 7}

\section*{DEPOSITS}
A. AMOUNT TO ESTABLISH CREDIT

The amount of deposit required to establish credit is twice the estimated maximum monthly bill, or for Small Business Customers, twice the estimated monthly average bill.
B. AMOUNT TO REESTABLISH CREDIT
1. Former Customers

Where an applicant is a former customer whose service was discontinued during the last 12 months of their former service for nonpayment of bills, such applicant may be required to pay such former bills and reestablish credit by depositing an amount equal to twice the estimated maximum monthly bill, or for Small Business Customers, twice the estimated monthly average bill.
2. Present Customers
a. A customer whose service has been discontinued for nonpayment of bills may be required to pay such bills and deposit an amount equal to twice the estimated maximum monthly bill or for Small Business Customers, twice the estimated monthly average bill.
b. If a customer receives a bill that is two months past due or becomes delinquent in the payment of a total of six monthly bills within a 12 consecutive month period, such customer may be required to reestablish credit by depositing an amount not to exceed twice the estimated maximum monthly bill. Unless the delinquency in payment is due to nonpayment of all or a portion of a backbill, which occurred as a result of a billing or metering error, Small Business Customers may be required to reestablish credit by depositing an amount not to exceed twice the estimated average monthly bill. A Small Business Customer may enroll in the Company's Automatic Payment Program once within a twelve month consecutive period, in lieu of a cash deposit for reestablishing service.

\section*{C. APPLICABILITY TO UNPAID ACCOUNTS}

Deposits prescribed herein are applicable to unpaid bills for gas service when such service has been discontinued. Deposits will not be applied as payment for past due bills to avoid discontinuance of service.


Issued by Justin Lee Brown Senior Vice President
\(\qquad\) August 30, 2019 Effective \(\qquad\) Resolution No.

\section*{Canceling \\ RULE NO. 8 \\ NOTICES}
A. NOTICES TO CUSTOMERS
1. Any notice the Company may give to any customer supplied with gas by the Company, under and pursuant to the effective Rules of the Company, may be given by written notice, either delivered at the address specified in the customer's application for gas service or in the customer's contract in case such customer has a contract for said service, or properly enclosed in a sealed envelope and deposited in any United States Post Office postage prepaid, addressed to the customer as above stated.
2. Customers electing Electronic Billing will receive notices regarding their electronic bill or other informational bill inserts through electronic mail.
B. NOTICES FROM CUSTOMERS

Any notice a customer may give to the Company, under and pursuant to the effective Rules of the Company, may be given by written notice, addressed to any of the Company's offices, postage prepaid, and deposited for delivery by the United State Postal Service.

Advice Letter No.
A. 19-08Decision No. \(\qquad\)

Issued by Justin Lee Brown
Senior Vice President

Date Filed \(\qquad\) Effective August 30, 2019 Resolution No.

Rule No. 16
GAS SERVICE EXTENSIONS
(Continued)
A. GENERAL (Continued)
5. Private Lines

The Company shall not be required to connect Service Facilities to or serve any Applicant from gas facilities that are not owned, operated and maintained by the Company.
6. Special or Added Facilities

Any special or added facilities the Company agrees to install at the request of Applicant will be installed at Applicant's expense.
7. Temporary Service Facilities

Facilities installed for temporary service or for operations of speculative character or questionable permanency shall be made in accordance with the fundamental installation and ownership provisions of this Rule, except that all charges and refunds shall be made under the provisions of Rule No. 13, Temporary Service of this California Gas Tariff.
8. Contracts

Each Applicant requesting service may be required to execute written contracts prior to the Company performing its work to establish service. Such contracts shall be in the form on file with the Commission.

Advice Letter No. A. 19-08Decision No. \(\qquad\)

Issued by Justin Lee Brown Senior Vice President

Date Filed__ August 30, 2019
Effective \(\qquad\)
Resolution No.

RULE NO. 16

\section*{GAS SERVICE EXTENSIONS \\ (Continued)}

\section*{G. EXCESS FLOW VALVE AND SERVICE LATERAL SHUT-OFF VALVE INSTALLATION}

The installation of an Excess Flow Valve or Service Lateral Shut-Off Valve shall be performed on all newly installed or replaced Service Laterals connected to the Company's distribution system before the service is activated as provided by this Rule. Nothing in this Rule prevents the Company from installing or specifying, in its sole discretion, the installation of an Excess Flow Valve or a Service Lateral Shut-Off Valve in additional service types.

\section*{1. Applicable Service Lateral types}
a. A single Service Lateral to one single-family residence (SFR);
b. A Branch Service to a SFR installed concurrently with the primary SFR

Service Lateral (i.e. a single Excess Flow Valve may be installed to protect both the Service Lateral and the Branch Service);
c. A Branch Service to a SFR installed off a previously installed SFR Service Lateral that does not contain an Excess Flow Valve;
d. Multifamily residences with known customer loads not exceeding 5,500
d. Multifamily residences with known customer loads not exceeding 5,500
SCFH per service at time of service installation based on installed meter capacity;
e. A single, small commercial customer served by a single Service Lateral with a known customer load not exceeding 5,500 SCFH, at the time of meter installation, based on installed meter capacity; and,
f. For Service Laterals with meter capacity that exceeds 5,500 SCFH, a Service Lateral Shut-Off Valve or, if possible, based on sound engineering analysis and availability, an Excess Flow Valve, shall be installed.

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Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed \(\qquad\)
August 30, 2019
Effective Resolution No.
\(\qquad\)
RULE NO. 16

\section*{GAS SERVICE EXTENSIONS \\ (Continued)}

\section*{G. EXCESS FLOW VALVE AND SERVICE LATERAL SHUT-OFF VALVE INSTALLATION (Continued)}
2. The Company is not required to install an Excess Flow Valve if one or more of the following conditions are present:
a. The Service Lateral does not operate at a pressure of 10 psig or greater throughout the year;
b. The Company has prior experience with contaminants in the gas stream that could interfere with the Excess Flow Valve's operation or cause loss of service to a customer;
c. An Excess Flow Valve could interfere with the necessary operation or maintenance activities such as blowing liquids from the Service Lateral; or
d. An Excess Flow Valve meeting the performance standards in 49 C.F.R. § 192.381 is not commercially available to the Company.
3. The Applicant shall provide the Company information concerning the gas usage and demand requirements. The Excess Flow Valve or Service Lateral Shut-Off Valve will be designed and constructed so that suitable gas capacity is available and satisfactory to the Company.
4. The Company will construct, own, operate and maintain the Excess Flow Valve or Service Lateral Shut-Off Valve in connection with the Branch Service and/or Service Lateral installation.
5. The Company shall pay for all costs associated with the installation, replacement or maintenance of the Excess Flow Valve or Service Lateral ShutOff Valve unless that work is made necessary by the relocation of a main or Service Lateral that is either: due solely to meet the Applicant's convenience as provided by Rule \(16(\mathrm{~F})(2)(\mathrm{b})\); performed to redress a Customer's noncompliance with any of these tariff schedules; or is due solely to the addition of any special or added facilities that the Company agrees to install at the request of Applicant.

Advice Letter No. A.19-08-
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed
August 30, 2019
Effective
Resolution No.

RULE NO. 16

\section*{GAS SERVICE EXTENSIONS (Continued)}

\section*{G. EXCESS FLOW VALVE AND SERVICE LATERAL SHUT-OFF VALVE} INSTALLATION (Continued)
6. The Customer has the right to request that an Excess Flow Valve be installed on their existing Service Lateral if the load does not exceed 5,500 SCFH and the conditions in Rule 16(G)(2) are not present. In such instances, the Company shall notify the Customer of the following:
a. Any costs associated with the installation that shall be paid by the Customer.
b. The Company shall install the Excess Flow Valve at a mutually agreeable date.
7. If a Customer requests the installation of an Excess Flow Valve on their existing Service Lateral, the Company shall perform the installation subject to the practicability of the installation at a mutually agreeable date.
\(\qquad\)

Justin Lee Brown
Senior Vice President

Date Filed \(\qquad\)
Effective Resolution No.

August 30, 2019

\section*{GAS SERVICE EXTENSIONS \\ (Continued)}

\section*{H. EXCEPTIONAL CASES}

When the application of this Rule appears impractical or unjust to either party or the ratepayers, the Company or Applicant may refer the matter to the Commission for a special ruling or for the approval of special conditions which may be mutually agreed upon.
I. DEFINITIONS FOR RULE NO. 16

Advance: Cash payment made to the Company prior to the initiation of any work done by the Company which is not covered by allowances.
Applicant: A person or agency requesting the Company to supply gas service.
Contribution: In-kind services and/or the value of all property conveyed to the Company at any time during the Company's work on an extension which is part of the Company's total estimated installed cost of its facilities or cash payments not covered by Applicant's allowances.
Distribution Main: The Company's gas facilities, which are operated at distribution pressure and which are designed to supply three or more services.
Excavation: All necessary trenching, backfilling and other digging as required to install extension facilities, including furnishing of any imported backfill material and disposal of spoil as required, surface repair and replacement, landscape repair and replacement.
Excess Flow Valve: A device designed to restrict the flow of gas in a Service Lateral by automatically closing in the event of a Service Lateral break, thus mitigating the consequences of Service Lateral failures.
Franchise Area: Public streets, roads, highways and other public ways and places where the Company has a legal right to occupy under franchise agreements with governmental bodies having jurisdiction.
Insignificant Loads: Small operating loads, such as log lighters, barbecues, outdoor lighting, etc.
Intermittent Loads: Loads which, in the opinion of the Company, are subject to discontinuance for a time or at intervals.

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Date Filed \(\qquad\) A Effective August 30, 2019 Resolution No.

RULE NO. 16

\section*{GAS SERVICE EXTENSIONS}
(Continued)

\section*{I. DEFINITIONS FOR RULE NO. 16 (Continued)}

Meter Set Assembly: Consists of the customer meter, service pressure regulator and associated pipe and fittings.
Permanent Service: Service which, in the opinion of the Company, is of a permanent and established character. This may be continuous, intermittent or seasonal in nature.

Premises: All of the real property and apparatus employed in a single enterprise on an integral parcel of land undivided (except in the case of industrial, agricultural, oil field, resort enterprises and public or quasi-public institutions), by a dedicated street, highway or other public thoroughfare, or a railway. Automobile parking lots constituting a part of and adjacent to a single enterprise may be separated by an alley from the remainder of the premises served.

Protective Structures: Fences, retaining walls (in lieu of grading), barriers, posts, barricades and other structures as required by the Company.
Residential Development: Five or more dwelling units in two or more buildings located on a single parcel of land.

Residential Subdivision: An area of five or more lots for residential dwelling units which may be identified by filed subdivision plans or an area in which a group of dwellings may be constructed about the same time, either by a builder or several builders working on a coordinated basis.
Seasonal Service: Gas service to establishments which are occupied seasonally or intermittently, such as seasonal resorts, cottages or other part-time establishments.

Service Delivery Point: Where the Company's Service Lateral is connected to Applicant's pipe (house line), normally adjacent to the location of the Meter Set Assembly.
Service Lateral: The pipe, valves, Meter Set Assemblies and associated equipment extending from the point of connection at the Distribution Main to the Service Delivery Point, which is normally on Applicant's Premises.
Service Lateral Shut-Off Valve: A curb valve or other valve or manually operated valve located near the Service Lateral that is safely accessible to the personnel authorized by the Company to manually shut off gas flow to the Service Lateral.

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August 30, 2019
Effective
Resolution No.

\section*{Proposed Tariff Sheets Redlined}
\(\qquad\)
1st-Revised
Original
Cal. P.U.C. Sheet No. \(\qquad\) 3
3 TABLE OF CONTENTS (Continued)

Justin Lee Brown Senior Vice President

\footnotetext{
Advice Letter No. 944 A. 19-08-
Decision No.

944 A.19-08-
\(14-06-028\)
\(\qquad\)
}

Date Fidere 18, 2014 August 30, 2019
Effective
Resolution No.

RATE SCHEDULE
GS-10/GN-10/SLT-10
GS-11
GS-12/GN-12/SLT-12
GS-15/GN-15/SLT-15
GS-20/GN-20/SLT-20
\begin{tabular}{llr} 
& \multicolumn{1}{l}{ Held for Future Use } & 90 \\
\hline GS-25/GN-25/SLT-25 & \begin{tabular}{l} 
Multi-Family Master-Metered Gas Service - \\
Submetered
\end{tabular} & \(91-93\) \\
GS-35/GN-35/SLT-35 & \begin{tabular}{l} 
Agricultural Employee Housing and Nonprofit \\
Group Living Facility Gas Service
\end{tabular} & \(94-103\) \\
GS-40/GN-40/SLT-40 & Core Commercial General Gas Service & 104 \\
GS-50/GN-50/SLT-50 & Core Natural Gas Service for Motor Vehicles & \(105-106\) \\
GS-60/GN-60/SLT-60 & Core Internal Combustion Engine Gas Service & 107 \\
GS-66/GN-66/SLT-66 & Core Small Electric Power Generation Gas Service & 108 \\
GS-70/GN-70/SLT-70 & Noncore General Gas Transportation Service & \(109-117\) \\
GS-VIC & City of Victorville Natural Gas Service & \(118-120\) \\
GS-LUZ & LuZ Solar Partners Ltd. Natural Gas Service & \(120.1-120.3\) \\
\hline & Held for Future Use & \(120.1-120.2\) \\
G-PPPS & Surcharge to Fund Public Purpose Programs & \(121-122\) \\
G-IRRAM & Rate to Fund Infrastructure Reliability and & 122.1
\end{tabular}

CAL. P.U.C. SHEET NOS.
\(79-80\)
Residential Gas Service
\(81-82\)
CARE Residential Gas Service \(83-86\)

Secondary Residential Gas Service
Multi-Family Master-Metered Gas Service
\(88-9089\)
Held for Future Use 90
\(\begin{array}{cc}\text { GS-25/GN-25/SLT-25 } & \begin{array}{c}\text { Multi-Family Master-Metered Gas Service - } \\ \text { Submetered }\end{array}\end{array}\)
Agricultural Employee Housing and Nonprofit Group Living Facility Gas Service \(94-103\)

GS-40/GN-40/SLT-40 Core Commercial General Gas Service 104
GS-50/GN-50/SLT-50 Core Natural Gas Service for Motor Vehicles 105 - 106
GS-60/GN-60/SLT-60 Core Internal Combustion Engine Gas Service 107
GS-66/GN-66/SLT-66 Core Small Electric Power Generation Gas Service 108
GS-70/GN-70/SLT-70 Noncore General Gas Transportation Service 109 - 117
GS-VIC City of Victorville Natural Gas Service 118 - 120 Replacement Programs

10th-Revised Cal. P.U.C. Sheet No. \(\qquad\) 18
Canceling
9th-Revised Cal. P.U.C. Sheet No. \(\qquad\) 18

\section*{PRELIMINARY STATEMENT}
(Continued)
9. FIXED COST ADJUSTMENT MECHANISM (FCAM) (Continued) 9F. ACCOUNTING PROCEDURE (Continued)
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline \multicolumn{7}{|c|}{ANNUAL 2019 MARGIN} \\
\hline & \multicolumn{2}{|l|}{Southern California} & \multicolumn{2}{|l|}{Northern California} & \multicolumn{2}{|l|}{South Lake Tahoe} \\
\hline January & \$ & 10,536,839 & \$ & 3,058,364 & \$ & 1,295,802 \\
\hline February & \$ & 9,181,094 & \$ & 2,682,587 & \$ & 1,202,878 \\
\hline March & \$ & 7,928,940 & \$ & 2,458,069 & \$ & 1,123,212 \\
\hline April & \$ & 5,893,755 & \$ & 2,041,785 & \$ & 956,015 \\
\hline May & \$ & 4,745,155 & \$ & 1,484,429 & \$ & 772,079 \\
\hline June & \$ & 5,117,956 & \$ & 1,133,746 & \$ & 638,228 \\
\hline July & \$ & 4,587,021 & \$ & 807,902 & \$ & 514,870 \\
\hline August & \$ & 4,675,775 & \$ & 717,601 & \$ & 481,607 \\
\hline September & \$ & 4,975,853 & \$ & 764,380 & \$ & 502,944 \\
\hline October & \$ & 3,688,419 & \$ & 957,477 & \$ & 617,512 \\
\hline November & \$ & 5,106,129 & \$ & 1,580,674 & \$ & 860,012 \\
\hline December & \$ & 8,473,760 & \$ & 2,549,107 & \$ & 1,143,044 \\
\hline Total & \$ & 74,910,696 & \$ & 20,236,121 & \$ & 10,108,203 \\
\hline
\end{tabular}
2. An entry to record interest on the Fixed Cost Balancing Account balance after entry (1) above, calculated as set forth in Section 12B of this Preliminary Statement.

Advice Letter No. Decision No. \(\qquad\) 1086

Issued by Justin Lee Brown Senior Vice President

Namerlile, 2018August 30, 2019 Effective Resolutiomandaary 1, 2019
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& 1st Revised & Cal. P.U.C. Sheet No. \\
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\end{tabular}

\section*{PRELIMINARY STATEMENT} (Continued)
18. ENVIRONMENTAL COMPLIANCE COST MEMORANDUM ACCOUNT (ECCMA)

18A. PURPOSE
The purpose of the ECCMA is to record the Company's allocated portion of California Air Resources Board (ARB) administrative fees associated with the implementation of Assembly Bill (AB) 32, the California Global Warming Solutions Act of 2006.

18B. APPLICABILITY
Costs recorded in the EECMA will apply to all customer classes, excluding the Company's "self-reporting" customers that are directly billed by the ARB.

18C. ACCOUNTING PROCEDURES
The Company shall make the following entries to the ECCMA:
1. Debit entries equal to the cost of the Company's allocation of the ARB administrative fees;
2. Credit entries for the recovery of any ECCMA amounts that may be authorized by the Commission; and
3. An entry to record interest on the ECCMA balance after entries (1) and (2) above are calculated as set forth in Section 12B of these Preliminary Statements.

18D. DISPOSITION
Gosts recorded in the account may be recovered in rates only after request by the Company and approval by the Commission. The ECCMA December 31 balance, at the end of the last estimated calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.
\(\qquad\) John P. HesterJustin Lee BrownEffective January 17, 2013 Senior Vice President Resolution No. \(\qquad\)

\section*{PRELIMINARY STATEMENT (Continued)}

\section*{20. INFRASTRUCTURE RELIABILITY AND REPLACEMENT ADJUSTMENT MECHANISM (IRRAM)}

20A. PURPOSE
The purpose of the IRRAM is to balance the difference between the revenue requirements associated with Commission-approved programs with recorded revenues to recover these costs. The IRRAM will allow the Company to establish rates to recover the revenue requirement on these programs between general rate cases.

20B. APPLICABILITY
This IRRAM provision applies to bills for service under the rate schedules in the Company's California service areas excluding service provided under a Special Contract or any other exclusion provided for by the Commission.

20C. REVISION DATE
The Company will file an advice letter with the proposed IRRAM Adjustments by October 31November 30 of each year, with a requested effective date of January 1 of the following year.

20D. FORECAST PERIOD VOLUMES
The volumes of gas, expressed in therms, to be utilized hereunder shall be the volumes estimated to be delivered during the 12 calendar-month period immediately following the Revision date.

20E. INFRASTRUCTURE RELIABILITY AND REPLACEMENT BALANCING ACCOUNT ADJUSTMENT

The Infrastructure Reliability and Replacement Balancing Account (IRRBA) Adjustment shall consist of a rate per therm to recover or return the amounts accumulated in the IRRBA plus an amount to recover the estimated annual revenue requirement, for each Commission-approved program included in the IRRAM.

Issued by Justin Lee Brown Senior Vice President

Datebrileav 15, 2017August 30, 2019
Effective March 13, 2017 Resolution No.

Advice Letter No. 1033 A. 19-08Decision No. \(\qquad\)

\section*{PRELIMINARY STATEMENT (Continued)}

\section*{21. PENSION BALANCING ACCOUNT (PBA)}

\section*{21A. PURPOSE}

The PBA is a two-way balancing account recorded in the general ledger of the Company. The purpose of this account is to balance the difference between authorized and actual amounts associated with the Company pension fund that are allocable to California. The PBA was established Pursuant pursuant to D.14-06-028, effective June 12, 2014, the PBA will continue through the effective date of rates approved in the Company's next general rate-case.

21B. ACCOUNTING PROCEDURES
Debit and or credit entries will be made at the end of each calendar year equal to the difference between pension amounts that were allocated to California and embedded in authorized rates, and actual pension amounts allocable to California, using the same allocation methodology approved in D.14-06-028the Company's most recent general rate case.

21C. DISPOSITION
The PBA December 31 balance, at the end of the most recently recorded calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.

Issued by Justin Lee Brown Senior Vice President

DFarbriag 15, 2017August 30, 2019

Effective Resolution No.

March 13, 2017
\(\qquad\)

\section*{PRELIMINARY STATEMENT}
(Continued)

\section*{22. MOBILE HOME PARK CONVERSION BALANCING ACCOUNT (MHPCBA)}

22A. PURPOSE
The MHPCBA is a two-way balancing account for the purpose of recording and recovering the incremental revenue requirement associated with converting submetered residents at mobile home parks from master-metered natural gas service to direct utility service. The Company is authorized to establish the MHPCBA pursuant to Decision (D.) 14-03-021. A separate MHPCBA will be maintained for each of the Company's California rate jurisdictions.

22B. APPLICABILITY
The MHPCBA provision applies to all rate schedules, excluding customers served under a Special Contract or any other exclusion provided for by the Commission.

\section*{22C. REVISION DATE}

Annually, the Company shall file a Tier I Advice Letter to update the MHPCBA adjustment rates using the month ended December 31September 30 MHPCBA balance.

22D. FORECAST PERIOD VOLUMES
The volumes of gas, expressed in therms, to be utilized hereunder shall be the volumes estimated to be delivered during the 12 calendar-month period immediately following the Revision Date.

\section*{22E. ACCOUNTING}

The Company will maintain separate subaccounts in the MHPCBA for its costs up to and including the customer's meter ("to the meter" costs) and for the reimbursable costs for work performed beyond the Company's meter ("beyond the meter" costs).
1. The Company shall make the following entries to the "to the meter" MHPCBA subaccount at the end of each month:
a. A debit entry for incremental O\&M start-up costs, such as program development, customer outreach and administration expenses, not otherwise recovered in rates;

Advice Letter No. 1033A. 19-08Decision No.

Issued by
Justin Lee Brown Senior Vice President

Featerway 15, 2017August 30, 2019
Effective \(\qquad\) Resolution No.
\(\qquad\)

\section*{PRELIMINARY STATEMENT}
(Continued)

\section*{22. MOBILE HOME PARK CONVERSION BALANCING ACCOUNT (MHPCBA) (Continued)}
b. A debit entry equal to the revenue requirement associated with the Company's actual "to the meter" facilities cost. The revenue requirement is defined as an amount equal to the depreciation expense, property tax and return on plant in service. Depreciation expense will be calculated using the Company's authorized depreciation rates. Property tax will be calculated at the Company's authorized effective tax rates. Return on investment will be calculated at the Company's authorized pre-tax return on rate base;
c. A credit entry equal to the MHPCBA Adjustment Rate, excluding franchise taxes and uncollectible accounts expense, multiplied by the applicable volumes delivered during the month;
d. An entry to record interest on the balance calculated as set forth in Section 12B of this Preliminary Statements.
2. The Company will make the following entries to the "beyond the meter" MHPCBA subaccount at the end of each month:
a. A debit entry equal to the revenue requirement related to the "beyond the meter" costs incurred, which includes amortization expense, all related taxes, and authorized return on investment at the Company's authorized pre-tax return on rate base. "Beyond the meter" costs are recorded as a regulatory asset and will be amortized over a period of ten years;
b. A credit entry equal to the ten year straight line amortization of the "beyond the meter" subaccount, as established in the Company's next general rate case;
c. An entry to record interest on the balance calculated as set forth in Section 12B of this Preliminary Statements.

\section*{22F. MHPCBA ADJUSTMENT RATES}

A MHPCBA Adjustment Rate will be established for each of the Company's rate jurisdictions. The MHPCBA Adjustment Rates will be determined by dividing the December 31September 30 balances recorded in the "to the meter" MHPCBA subaccounts by the total Forecast Period volumes. The MHPCBA Adjustment Rates shall be set forth in the currently-effective Statement of Rates of this California Gas Tariff. "Beyond the meter" balances will be amortized over a ten-

Advice Letter No. 1033 A. 19-08Decision No.

Justin Lee Brown Senior Vice President

FFatery fry 15, 2017August 301, 2019
Effective March 13, 2017 Resolution No.

\section*{24. GREENHOUSE GAS MEMORANDUM ACCOUNT (GHGMA)}

24A. PURPOSE
The purpose of the GHGMA is to track the Company's administrative and outreach costs incurred to comply with the California Air Resources Board's (ARB) natural gas supplier Cap-and-Trade Program. The Company is authorized to establish the GHGMA pursuant to Decisions 14-12-040 and 15-10-032.

24B. APPLICABILITY
Costs recorded in the GHGMA will apply to all customer classes excluding end-use customers who emit 25,000 metric tons of CO2e or more per year and are directly regulated by the ARB and any other customers who elect to opt-in to direct regulation under ARB's rules.

24C. ACCOUNTING
The Company shall make the following entries to the GHGMA:
1. Debit entries equal to the Company's associated administrative and outreach costs that are directly associated with its Cap-and-Trade Program; and
2. An entry to record interest on the balance calculated as set forth in Section 12B of this Preliminary Statement.

24D. DISPOSITION
Costs recorded in the account may be recovered in rates only after request by the Company and approval by the Commission. The GHGMA December 31 balance, at the end of the last estimated calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general case or other ratesetting application.

Issued by Justin Lee Brown Senior Vice President

DEathfueav 15, 2017 August 30, 2019
Effective_March 13, 2017
Resolution No. \(\qquad\)
\begin{tabular}{|c|c|c|}
\hline & 1st-Revised & Cal. P.U.C. Sheet No. 45.7 \\
\hline Canceling & Originat & Cal. P.U.C. Sheet No. 45.7 \\
\hline
\end{tabular}

PRELIMINARY STATEMENT
(Continued)
26. NEW ENVIRONMENTAL REGULATORY BALANCING ACCOUNT (NERBA) (Continued)

\section*{26D. NERBA ADJUSTMENT RATE}

The Company shall annually file a Tier 2 Advice Letter to update the NERBA rate with a requested effective date of January 1 of the following year. The NERBA rate shall be calculated by using the year end NERBA balance divided by the volumes of gas estimated to be delivered during the 12 calendar-month period immediately following the adjustment date. The NERBA rate shall be set forth in the currently-effective Statement of Rates of this California Gas Tariff.
27. NATURAL GAS LEAK ABATEMENT PROGRAM MEMORANDUM ACCOUNT (NGLAPMA)

27A. PURPOSE
The purpose of the NGLAPMA is to track the Company's incremental administrative costs associated with the implementation of the Natural Gas Leak Abatement Program. The Company is authorized to establish the NGLAPMA pursuant to Decision 17-06-015.

27B. TRACKING PROCEDURES
The Company shall maintain the NGLAPMA by tracking the incremental administrative costs associated with the Natural Gas Leak Abatement Program. Separate accounts will be maintained for each of the Company's three California rate jurisdictions. Interest on the tracked balance will be calculated as set forth in Section 12B of this Preliminary Statement.

27C. DISPOSITION
The NGLAPMA December 31 balance of tincremental administrative costs, at the end of the most recently recorded calendar year, tracked in the NGLAPMA may be recovered in rates only after a request by the Company and approval by the Commission will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.

Advice Letter No. 1042-AA. 19-08Decision No. \(\qquad\) D.17-06-015

Fattemar 1, 2017August 30, 2019
Effective July 14, 2017 Resolution No.

\section*{PRELIMINARY STATEMENT \\ (Continued)}

\section*{29. TAX MEMORANDUM ACCOUNT (TMA)}

\section*{29A. PURPOSE}

The purpose of the TMA is to track any revenue difference resulting from differences between the Company's authorized income tax expenses and its actually-incurred income tax expenses, including repair deductions and bonus depreciation. The account shall have separate line items detailing the differences resulting from (1) net revenue changes, (2) mandatory tax law changes, tax accounting changes, tax procedural changes, tax policy changes, and (3) elective tax law changes, tax accounting changes, tax procedural changes, or tax policy changes. The TMA is established in accordance with Decision (D.) 17-06-006.

Pursuant to D. 17-06-006, authorized income tax expenses for 2019 and 2020, shall be calculated by first escalating the 2014 tax expenses authorized in D.14-06-028 by the post-test year margin (PTYM) annual adjustments authorized from 2015 through 2018 and then annually escalating the 2.75 percent annual PTYM adjustments through 2019 and 2020. The Company's ealculated authorized income tax expenses for 2019 and 2020 are \(\$ 11,479,459\) and \(\$ 11,795,144\), respectively.

\section*{29B. TRACKING PROCEDURES}

The Company shall maintain the TMA by separately tracking the calendar year difference between authorized income tax expenses and actually-incurred income tax expenses. The TMA shall include separate line items detailing the differences resulting from:
1. Net revenue changes,
2. Mandatory tax law changes, tax accounting changes, tax procedural changes, or tax policy changes, and
3. Elective tax law changes, tax accounting changes, tax procedural changes, or tax policy changes.

Interest on the tracked balance will be calculated as set forth in Section 12B of this Preliminary Statement.

Advice Letter No. 1043A.19-08Decision No.

Date Fthe 14, 2017 August 30, 2019
Effective_July 14, 2017 Resolution No.

\section*{PRELIMINARY STATEMENT} (Continued)

\section*{29. TAX MEMORANDUM ACCOUNT (TMA)}

\section*{29C. DISPOSITION}

The TMA shall be reviewed in the Company's GRC proceedings until a Commission decision closes the account. Amounts tracked in the TMA may be recovered or refunded in rates only after a request by the Company and approval by the Commission.The TMA December 31 balance, at the end of the last estimated calendar year, will be amortized beginning with the effective date of rates approved in the Company's next general rate case or other ratesetting application.

29D. REPORTING
The Company will timely notify the Commission of any tax-related changes, including tax-related accounting changes, or tax-related procedural changes that materially affect, or may materially affect, revenues and any revenue differences if applicable. A "material affect" means a potential increase or decrease of \(\$ 3\) million or more to the Company's California jurisdictions.

Date Filedy 14, 2017August 30, 2019
Effective Resolution No.

\section*{30. OFFICER GOMPENSATION MEMORANDUM ACGOUNT (OCMA)}

\section*{30A. PURPOSE}

The purpose of the OCMA is to track California allocable compensation paid or owed to the Company's officers in the event of a triggering event \({ }^{4}\). The OCMA is established in accordance with Decision 17-06-006.

\section*{30B. TRACKING PROGEDURES}

In the event of a triggering event, the Company shall maintain the OCMA by tracking the date and amount of allocable salaries, bonuses, benefits, and all other consideration of any value paid or owed to the Company's officers, as defined below:

Salaries: Payroll data for Officer base salaries. Bonuses: Variable Pay/lncentive Compensation Plan. Benefits: Employer portion of health and welfare premiums. Other Consideration: Officer perquisites in payroll data and/or invoices, deferred compensation Company match.

\section*{306. DISPOSITION}

The OCMA balance will be reviewed in the Company's GRC proceeding to determine if any excess compensation \({ }^{2}\) paid and awarded to an officer following a triggering event should be refunded or allowed to be recovered in rates. The OCMA shall remain open and any balance tracked in the account shall be reviewed in every GRC proceeding until a Commission decision closes the account.

\footnotetext{
\({ }^{7}\) "A 'triggering event' occurs if, after January 1, 2013, an electrical corporation or gas corporation violates a federal or state safety regulation with respect to the plant and facility of the utility and, as a proximate cause of that violation, ratepayers incur a financial responsibility in excess of five million dollars \((\$ 5,000,000)\)." Cal. P. U. Code § \(706(\mathrm{a})(2)\).
z "'Excess compensation' means any annual salary, bonus, benefits, or other consideration of any value, paid to an officer of an electrical corporation or gas corporation that is in excess of one million dollars (\$1,000,000)." Cal. P. U. Code § 706(a)(1).
}

Issued by
Advice Letter No. 1044 A. 19-08Decision No. \(\qquad\)
Justin Lee Brown Senior Vice President

Date Filety 28, 2017August 30, 2019 Effective August 27, 2017 Resolution No.

\section*{PRELIMINARY STATEMENT \\ (Continued)}
31. OFFICER COMPENSATION MEMORANDUM ACCOUNT - 2019 (OCMA-2019)

31C. ACCOUNTING PROCEDURE (Continued)
The Company shall maintain this account by making quarterly entries (or annual entries where applicable when quarterly data is not available) as follows:
1. Authorized Compensation Subaccount

A credit entry equal to the salaries, bonuses, benefits, and all other consideration of any value set aside to be paid to its officers as authorized in D.14-06-28 and modified by D.17-06-006.
2. Total Compensation Subaccount

A debit entry equal to the salaries, bonuses, benefits, and all other consideration of any value paid to its officers.

\section*{31D. DISPOSITION}

Amounts tracked in the-The OCMA-2019 December 31 balance, at the end of the most recently recorded calendar year, may will be addressed-amortized beginning with the effective date of rates approved in the Company's next GRGgeneral rate case or other appropriate-Commission proceeding and may be refunded to customers in ratesratesetting application.
\(\qquad\)

Justin Lee Brown Senior Vice President

Damernlear 20, 2018August 30, 2019
Effective January 1, 2019 Resolution No. \(\qquad\)

\section*{PRELIMINARY STATEMENT (Continued)}

\section*{32. DAIRY BIOMETHANE PILOT PROJECT SOLIGITATION DEVELOPMENT MEMORANDUM ACCOUNT (DBPPSDMA)}

\section*{32A. PURPOSE}

The purpose of the DBPPSDMA is to track the Company's solicitation development expenditures related to the implementation of Health \& Safety Code Section \(39730.7(\mathrm{~d})(2)\), which directs gas corporations to implement not less than five dairy biomethane pilot projects to demonstrate interconnection to the common carrier pipeline system, in accordance with the implementation and selection criteria framework adopted in Decision (D.) 17-12-004. The Company is authorized to establish the DBPPSDMA pursuant to D.17-12-004.

\section*{32B. TRACKING PROCEDURES}

The Company shall maintain the DBPPSDMA by tracking the expenditures for solicitation development associated with the Dairy Biomethane Pilot Projects. Separate accounts will be maintained for each of the Company's three California rate jurisdictions. Interest on the tracked balance will be calculated as set forth in Section 12B of the Preliminary Statement.

\section*{32C. DISPOSITION}

Gosts recorded in the account may be recovered in rates only after request by the Company and approval by the Commission.

Advice Letter No. 1089A. 19-08Decision No. \(\qquad\) Senior Vice President

Dabernlear 20, 2018August 30, 2019
Effective_January 1, 2019
Resolution No. \(\qquad\)
Canceling

Cal. P.U.C. Sheet No. \(\qquad\)
California Gas Tariff
Canceling Cal. P.U.C. Sheet No. \(\qquad\) year period beginning with the Company's first general rate case after the MHPs is cutover to direct service through the Company's gas distribution system.

Advice Letter No. Decision No.
\(\qquad\)
\(\qquad\)
\(\qquad\)
 Senior Vice President

Date Filed \(\qquad\)
Effective Resolution No.
\(\qquad\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{RATES APPLICABLE
Schedule No. and Type of Charge} & \multicolumn{11}{|l|}{STATEMENT OF RATES} \\
\hline & \multicolumn{3}{|l|}{Charges [2]
and
Margin
Adjustments} & \multicolumn{2}{|l|}{Subtotal Gas Usage Rate} & \multicolumn{3}{|l|}{Other Surcharges} & \multicolumn{2}{|l|}{Gas Cost} & Effective Sales Rate \\
\hline \multicolumn{12}{|l|}{GS-10-Residential Gas Service} \\
\hline Basic Service Charge & \$5.00 & & & & & & & & & & \$ 5.00 \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 73989 & \$ & . 32078 & \$ 1.06067 & \$ & . 00247 & \$ & . 11166 & & . 22812 & \$1.40292 \\
\hline Tier II & \$ . 91116 & & . 32078 & 1.23194 & & . 00247 & & . 11166 & & . 22812 & 1.57419 \\
\hline \multicolumn{12}{|l|}{GS-11-Residential Air-Conditioning Gas Service} \\
\hline Basic Service Charge & \$5.00 & & & & & & & & & & \$ 5.00 \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Tier I & \$ . 73989 & \$ & . 32078 & \$ 1.06067 & \$ & . 00247 & \$ & . 11166 & & . 22812 & \$ 1.40292 \\
\hline Tier II & . 91116 & & . 32078 & 1.23194 & & . 00247 & & . 11166 & & . 22812 & 1.57419 \\
\hline Air-Conditioning & \$ . 36995 & & . 32078 & . 69073 & & . 00247 & & . 11166 & & . 22812 & 1.03298 \\
\hline \multicolumn{12}{|l|}{GS-12-CARE Residential Gas Service} \\
\hline Basic Service Charge & \$4.00 & & & & & & & & & & \$4.00 \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 48213 & \$ & . 32078 & \$ . 80291 & \$ & . 00247 & \$ & . 05199 & & . 22812 & \$ 1.08549 \\
\hline Tier II & . 61915 & & . 32078 & . 93993 & & . 00247 & & . 05199 & & . 22812 & \$1.22251 \\
\hline \multicolumn{12}{|l|}{GS-15-Secondary Residential Gas Service} \\
\hline Basic Service Charge & \$6.00 & & & & & & & & & & \$ 6.00 \\
\hline Cost per Therm & \$1.13141 & \$ & . 32078 & \$1.45219 & & . 00247 & \$ & . 11166 & & . 22812 & \$1.79444 \\
\hline \multicolumn{12}{|l|}{GS-20-Multi-Family Master-Metered Gas Service} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & & \$25.00 \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ .73989 & \$ & . 32078 & \$ 1.06067 & \$ & . 00247 & \$ & \[
\text { . } 11166
\] & & . 22812 & \$ 1.40292 \\
\hline Tier II & . 91116 & & . 32078 & 1.23194 & & \[
.00247
\] & & \[
.11166
\] & & . 22812 & 1.57419 \\
\hline \multicolumn{12}{|l|}{GS-25-Multi-Family Master-Metered Gas Service-Submetered} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & & \$25.00 \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 73989 & \$ & . 32078 & \$ 1.06067 & \$ & . 00247 & \$ & . 11166 & & . 22812 & \$1.40292 \\
\hline Tier II & . 91116 & & . 32078 & 1.23194 & & . 00247 & & . 11166 & & . 22812 & 1.57419 \\
\hline Submetered Discount per Occupied Space & (\$7.69) & & & & & & & & & & (\$7.69) \\
\hline \multicolumn{12}{|l|}{GS-35-Agriculture Employee Housing \& Nonprofit Group Living Facility Gas Service} \\
\hline Basic Service Charge & \$8.80 & & & & & & & & & & \$8.80 \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 41293 & \$ & . 32078 & \$ . 73371 & \$ & . 00247 & \$ & . 05199 & & . 22812 & \$1.01629 \\
\hline Next 500 & . 27550 & & . 32078 & . 59628 & & . 00247 & & . 05199 & & . 22812 & . 87886 \\
\hline Next 2,400 & . 16556 & & . 32078 & . 48634 & & . 00247 & & . 05199 & & . 22812 & . 76892 \\
\hline Over 3,000 & . 04504 & & . 32078 & . 36582 & & . 00247 & & . 05199 & & . 22812 & . 64840 \\
\hline \multicolumn{12}{|l|}{GS-40-Core General Gas Service (non-Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & & \$11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & & \$780.00 \\
\hline \multicolumn{12}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 65339 & \$ & . 32078 & \$ . 97417 & \$ & . 00247 \$ & & . 11166 & & . 22812 & \$1.31642 \\
\hline Next 500 & \$ . 48160 & & . 32078 & . 80238 & & . 00247 & & . 11166 & & . 22812 & 1.14463 \\
\hline Next 2,400 & \$ . 34417 & & . 32078 & . 66495 & & . 00247 & & . 11166 & & . 22812 & 1.00720 \\
\hline Over 3,000 & \$ . 19352 & & . 32078 & . 51430 & & . 00247 & & . 11166 & & . 22812 & . 85655 \\
\hline
\end{tabular}

Issued by
Advice Letter No. \(\qquad\)
1102
Decision No.

Justin Lee Brown Senior Vice President

Date Fildday 1, 2019August 30, 2019

\section*{Effective}
\(\qquad\) May 1, 2019
Resolution No. \(\qquad\)

SOUTHWEST GAS CORPORATION
P.O. Box 98510

Las Vegas, Nevada 89193-8510
126th-Revised Cal. P.U.C. Sheet No. \(\qquad\) 66 California Gas Tariff Canceling


Advice Letter No. 1102
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Fild lay 1, 2019August 30, 2019 Effective \(\qquad\) May 1, 2019 Resolution No. \(\qquad\)
\(\qquad\)
[1] Customers taking only transportation service will pay the Effective Sales Rate less the Interstate Reservation and Gas Cost components of the Effective Sales Rate, plus a Transportation Service Charge of \(\$ 780\) per month and an amount for distribution shrinkage calculated by multiplying the currently effective Gas Cost rate per therm by the Lost and Unaccounted For Gas percentage of \(0.7651 \%\). The PGA Balancing Account Adjustment is applicable to customers converting from sales service to transportation service for a period of 12 months. The volume charge for customer-secured natural gas transportation will also be subject to the TFF Surcharge.
[2] The Charges and Adjustments applicable to each tariff rate schedule includes the following components:
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Charges and Adjustments Description & GS-10, GS-11, GS-12, GS-15, GS-20, GS-25, GS-35, & \[
\begin{gathered}
\text { GS-40 } \\
\text { (non- } \\
\text { Covered } \\
\text { Entities), } \\
\text { GS-50, } \\
\text { GS-60, } \\
\text { GS-66 } \\
\hline
\end{gathered}
\] & \begin{tabular}{l}
GS-40, \\
(Covered Entities)
\end{tabular} & GS-70 & GS-VIC & & S-LUZ \\
\hline \multicolumn{8}{|l|}{Upstream Intrastate Charges} \\
\hline Storage & \$ & . 01586 & \$ . 01586 & & \$ . 01586 & & \\
\hline Variable & & . 07520 & . 07520 & \$ . 07520 & . 07520 & & \\
\hline Upstream Interstate Reservation & & . 05394 & . 05394 & & . 05394 & & \\
\hline Charges & & & & & & & \\
\hline IRRAM Surcharge & & . 00000 & . 00000 & . 00000 & & & \\
\hline \multicolumn{8}{|l|}{Balancing Account Adjustments} \\
\hline FCAM* & & . 11098 & . 11098 & . 10536 & . 11098 & \$ & . 10536 \\
\hline ITCAM & & . 00890 & . 00890 & . 00890 & . 00890 & & \\
\hline \multicolumn{8}{|l|}{GHGBA**} \\
\hline Non-Covered Entities [a] & & . 05353 & & . 05353 & . 05353 & & \\
\hline Covered Entities [a] & & & . 00076 & & & & 00076 \\
\hline NERBA & & . 00057 & . 00057 & . 00057 & . 00057 & & \\
\hline NGLAPBA & & . 00180 & . 00180 & . 00180 & . 00180 & & \\
\hline Total Rate Adjustment & \$ & . 32078 & \$ . 26801 & \$ . 24536 & \$ . 32078 & & . 10612 \\
\hline
\end{tabular}
* The FCAM surcharge includes an amount of \(\$ .10536\) per therm related to the difference between Southwest Gas' authorized margin and recorded revenues intended to recover these costs.
** Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Cap-and-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).
[a] Pursuant to D.18-03-017, Covered and non-Covered entities have a component to recover the 2015-2017 net compliance costs and proceeds amortized over a twelve month period. Also included are the 2018 GHG costs which are amortized over an eighteen month period.

Issued by
Advice Letter No.
1087
Decision No.

Justin Lee Brown
Senior Vice President

Naternneer 30,2018August 30, 2019
Effective \(\qquad\)
Resolution No.

SOUTHWEST GAS CORPORATION
P.O. Box 98510

Las Vegas, Nevada 89193-8510
Canceling
122nd-Revised Cal. P.U.C. Sheet No. 68 California Gas Tariff 121st-Revised Cal. P.U.C. Sheet No. 68

\section*{STATEMENT OF RATES}

\section*{RATES APPLICABLE TO NORTHERN CALIFORNIA SERVICE AREA [1] [2]}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Schedule No. and Type of Charge} & \multirow[b]{2}{*}{Margin} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\text { Charges [3] } \\
\text { and } \\
\text { Adjustments } \\
\hline
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Subtotal Gas Usage Rate}} & \multicolumn{4}{|r|}{Other Surcharges} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Gas Cost}} & \multirow[t]{2}{*}{Effective Sales Rate} \\
\hline & & & & & & & CPUC & & PPP & & & \\
\hline \multicolumn{13}{|l|}{GN-10-Residential Gas Service} \\
\hline Basic Service Charge & \$5.00 & & & & & & & & & & & \$ 5.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 77998 & \$ & . 14419 & & \$ . 92417 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.29293 \\
\hline Tier II & . 89079 & & . 14419 & & 1.03498 & & . 00247 & & . 06290 & & . 30339 & 1.40374 \\
\hline \multicolumn{13}{|l|}{GN-12-CARE Residential Gas Service} \\
\hline Basic Service Charge & \$ 4.00 & & & & & & & & & & & \$ 4.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 53447 & \$ & . 14419 & & \$ . 67866 & \$ & . 00247 & \$ & . 05199 & \$ & . 30339 & \$ 1.03651 \\
\hline Tier II & . 62312 & & . 14419 & & . 76731 & & . 00247 & & . 05199 & & . 30339 & 1.12516 \\
\hline \multicolumn{13}{|l|}{GN-15-Secondary Residential Gas Service} \\
\hline Basic Service Charge & \$ 6.00 & & & & & & & & & & & \$ 6.00 \\
\hline Cost per Therm & \$ . 93665 & \$ & . 14419 & & \$ 1.08084 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.44960 \\
\hline \multicolumn{13}{|l|}{GN-20-Multi-Family Master-Metered Gas Service} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & & & \$25.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 77998 & \$ & . 14419 & & \$ . 92417 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.29293 \\
\hline Tier II & . 89079 & & . 14419 & & 1.03498 & & . 00247 & & . 06290 & & . 30339 & 1.40374 \\
\hline \multicolumn{13}{|l|}{GN-25-Multi-Family Master-Metered Gas Service-Submetered} \\
\hline Basic Service Charge & \$25.00 & & & & & & & & & & & \$25.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & \$ . 77998 & \$ & . 14419 & & \$ . 92417 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.29293 \\
\hline Tier II & . 89079 & & . 14419 & & 1.03498 & & . 00247 & & . 06290 & & . 30339 & 1.40374 \\
\hline Submetered Discount per Occupied Space & (\$11.01) & & & & & & & & & & & (\$11.01) \\
\hline \multicolumn{13}{|l|}{GN-35-Agriculture Employee Housing \& Nonprofit Group Living Facility Gas Service} \\
\hline Basic Service Charge & \$ 8.80 & & & & & & & & & & & \$ 8.80 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 42356 & \$ & . 14419 & & \$ . 56775 & \$ & . 00247 & \$ & . 05199 & \$ & . 30339 & \$ . 92560 \\
\hline Next 500 & . 32004 & & . 14419 & & . 46423 & & . 00247 & & . 05199 & & . 30339 & . 82208 \\
\hline Next 2,400 & . 21925 & & . 14419 & & . 36344 & & . 00247 & & . 05199 & & . 30339 & . 72129 \\
\hline Over 3,000 & . 07130 & & . 14419 & & . 21549 & & . 00247 & & . 05199 & & . 30339 & . 57334 \\
\hline \multicolumn{13}{|l|}{GN-40-Core General Gas Service (non-Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & & & \$11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & & & \$780.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 64135 & \$ & . 14419 & & \$ . 78554 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ 1.15430 \\
\hline Next 500 & . 51194 & & . 14419 & & . 65613 & & . 00247 & & . 06290 & & . 30339 & 1.02489 \\
\hline Next 2,400 & . 38596 & & . 14419 & & . 53015 & & . 00247 & & . 06290 & & . 30339 & . 89891 \\
\hline Over 3,000 & . 20102 & & . 14419 & & . 34521 & & . 00247 & & . 06290 & & . 30339 & . 71397 \\
\hline
\end{tabular}

Issued by
Advice Letter No. 1102
Decision No. \(\qquad\)
\(\qquad\) Justin Lee Brown Senior Vice President

Date Fileday 1, 2019August 30, 2019 Effective \(\qquad\) May 1, 2019 Resolution No. \(\qquad\)
\(\qquad\) 69

STATEMENT OF RATES

\section*{RATES APPLICABLE TO NORTHERN CALIFORNIA SERVICE AREA [1] [2]}


Issued by
Advice Letter No.
Decision No.
\(\qquad\)
1102
\(\qquad\)

Justin Lee Brown Senior Vice President

Date Fileday 1, 2019August 30, 2019 Effective \(\qquad\) May 1, 2019 Resolution No. \(\qquad\)

\section*{STATEMENT OF RATES}

\section*{RATES APPLICABLE TO NORTHERN CALIFORNIA SERVICE AREA [1] [2]}
[1] Customers taking only transportation service will pay the Effective Sales Rate less the Interstate Reservation and Gas Cost components of the Effective Sales Rate, plus a Transportation Service Charge of \(\$ 780\) per month and an amount for distribution shrinkage calculated by multiplying the currently effective Gas Cost rate per therm by the Lost and Unaccounted For Gas percentage of \(0.5675 \%\). The PGA Balancing Account Adjustment is applicable to customers converting from sales service to transportation service for a period of 12 months. The volume charge for customer-secured natural gas transportation will also be subject to the TFF Surcharge.
[2] A Franchise Fee differential of \(2.5 \%\) will be applied to monthly billings calculated for all rate schedules for all customers within the limits of the Town of Truckee.
[3] The Charges and Adjustments applicable to each tariff rate schedule includes the following components:
\begin{tabular}{|c|c|c|c|c|c|}
\hline Charges and Adjustments Description & \begin{tabular}{l}
GN-10, \\
GN-12, \\
GN-15, \\
GN-20 \\
GN-25, \\
GN-35
\end{tabular} & & \begin{tabular}{l}
GN-40, \\
(Covered Entities)
\end{tabular} & & GN-70 \\
\hline Upstream Intrastate Charges & & & & & \\
\hline Storage & \multirow[t]{3}{*}{\$} & . 02174 & \$ . 02174 & & \\
\hline Variable & & . 20533 & . 20533 & & \\
\hline IRRAM Surcharge & & . 00000 & . 00000 & & . 00000 \\
\hline \multicolumn{6}{|l|}{Balancing Account Adjustments} \\
\hline FCAM* & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{( .13851)}} & \multirow[t]{2}{*}{( .13851)} & \multirow[t]{2}{*}{} & .07139) \\
\hline \multicolumn{2}{|l|}{GHGBA**} & & & & \\
\hline Non-Covered Entities [a] & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{. 05353}} & \multirow[b]{2}{*}{. 00076} & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{. 05353}} \\
\hline Covered Entities [a] & & & & & \\
\hline NERBA & & . 00051 & . 00051 & & . 00051 \\
\hline NGLAPBA & & . 00159 & . 00159 & & . 00159 \\
\hline Total Rate Adjustment & \$ & . 14419 & \$ . 09142 & & .01576) \\
\hline
\end{tabular}
* The FCAM surcharge includes an amount of (\$.07139) per therm related to the difference between Southwest Gas' authorized margin and recorded revenues intended to recover these costs.
** Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Cap- and-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).
[a] Pursuant to D.18-03-017, Covered and non-Covered entities have a component to recover the 2015-2017 net compliance costs and proceeds amortized over a twelve month period. Also included are the 2018 GHG costs which are amortized over an eighteen month period.
Advice Letter No._ 1087
Decision No.

Issued by
Justin Lee Brown
Senior Vice President

Daweneer 30,2018August 30, 2019
Effective January 1, 2019
Resolution No.
\(\qquad\)
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{RATES APPLIC
Schedule No. and Type of Charge} & & \multicolumn{11}{|l|}{STATEMENT OF RATES} \\
\hline & & Margin & & \begin{tabular}{l}
harges [2] \\
and djustments
\end{tabular} & & ubtotal Gas Usage Rate & & \[
\begin{aligned}
& \text { Other Su } \\
& \text { CPUC }
\end{aligned}
\] & & \[
\frac{\text { harges }}{\text { PPP }}
\] & Gas Cost & Effective Sales Rate \\
\hline \multicolumn{13}{|l|}{SLT-10-Residential Gas Service} \\
\hline Basic Service Charge & & 5.00 & & & & & & & & & & \$5.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & & . 34482 & \$ & . 22546 & & \$. 57028 & & . 00247 & & \$. 06290 & \$ 30339 & \$ 93904 \\
\hline Tier II & & . 43236 & & . 22546 & & . 65782 & & . 00247 & & . 06290 & . 30339 & 1.02658 \\
\hline \multicolumn{13}{|l|}{SLT-12-CARE Residential Gas Service} \\
\hline Basic Service Charge & & 4.00 & & & & & & & & & & \$4.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & & . 17009 & & . 22546 & & \$ 39555 & & \$. 02247 & & \$. 05199 & \$ 30339 & \$ . 75340 \\
\hline Tier II & & . 24012 & & . 22546 & & . 46558 & & . 00247 & & . 05199 & . 30339 & . 82343 \\
\hline \multicolumn{13}{|l|}{SLT-15-Secondary Residential Gas Service} \\
\hline Basic Service Charge & & 6.00 & & & & & & & & & & \$6.00 \\
\hline Cost per Therm & & . 47664 & \$ & . 22546 & & \$. 70210 & & \$. 02247 & & \$ 06290 & \$ . 30339 & \$1.07086 \\
\hline \multicolumn{13}{|l|}{SLT-20-Multi-Family Master-Metered Gas Service} \\
\hline Basic Service Charge & & 11.00 & & & & & & & & & & \$11.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & & . 34482 & & . 22546 & & \$ . 57028 & & \$ 00247 & & \$ 06290 & \$ 30339 & \$ 93904 \\
\hline Tier II & & . 43236 & & . 22546 & & . 65782 & & . 00247 & & . 06290 & . 30339 & 1.02658 \\
\hline \multicolumn{13}{|l|}{SLT-25-Multi-Family Master-Metered Gas Service-Submetered} \\
\hline Basic Service Charge & & 11.00 & & & & & & & & & & \$11.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline Baseline Quantities & & . 34482 & & . 22546 & & \$ . 57028 & & . 00247 & & \$ 06290 & \$ . 30339 & \$ . 93904 \\
\hline Tier II & & . 43236 & & . 22546 & & . 65782 & & . 00247 & & . 06290 & . 30339 & 1.02658 \\
\hline Submetered Discount per Occupied Space & & (\$7.69) & & & & & & & & & & (\$7.69) \\
\hline \multicolumn{13}{|l|}{SLT-35-Agriculture Employee Housing \& Nonprofit Group Living Facility Gas Service} \\
\hline Basic Service Charge & & 8.80 & & & & & & & & & & \$8.80 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline First 100 & \$ & . 26072 & & . 22546 & & \$. 48618 & & \$. 02247 & & \$ 05199 & \$ . 30339 & \$ . 84403 \\
\hline Next 500 & & . 20574 & & . 22546 & & . 43120 & & . 00247 & & . 05199 & . 30339 & . 78905 \\
\hline Next 2,400 & & . 15077 & & . 22546 & & . 37623 & & . 00247 & & . 05199 & . 30339 & . 73408 \\
\hline Over 3,000 & & . 05620 & & . 22546 & & . 28166 & & . 00247 & & . 05199 & . 30339 & . 63951 \\
\hline \multicolumn{13}{|l|}{SLT-40-Core General Gas Service (non-Covered Entities)} \\
\hline Basic Service Charge & & 11.00 & & & & & & & & & & \$11.00 \\
\hline Transportation Service Charge & & 780.00 & & & & & & & & & & \$780.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline First 100 & \$ & . 45811 & & . 22546 & & \$ . 68357 & & . 00247 & & \$ 06290 & \$ . 30339 & \$1.05233 \\
\hline Next 500 & & . 38939 & & . 22546 & & . 61485 & & . 00247 & & . 06290 & . 30339 & . 98361 \\
\hline Next 2,400 & & . 32068 & & . 22546 & & . 54614 & & . 00247 & & . 06290 & . 30339 & . 91490 \\
\hline Over 3,000 & & . 20246 & & . 22546 & & . 42792 & & . 02247 & & . 06290 & . 30339 & . 79668 \\
\hline
\end{tabular}

Issued by
Advice Letter No. \(\qquad\)
1102
Decision No. \(\qquad\) Justin Lee Brown Senior Vice President

Date Fileday 1, 2019August 30, 2019 Effective \(\qquad\) Resolution No.

SOUTHWEST GAS CORPORATION
P.O. Box 98510

Las Vegas, Nevada 89193-8510
61st-Revised Cal. P.U.C. Sheet No. \(\qquad\) California Gas Tariff Canceling 60th-Revised Cal. P.U.C. Sheet No. 72
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Schedule No. and Type of Charge} & \[
\begin{array}{r}
\text { STAT } \\
\text { LE TO S }
\end{array}
\] & \multicolumn{5}{|l|}{STATEMENT OF RATES} & SERV & & CE AR & & A [1] & \\
\hline & Margin & & Charges [2] and djustments & & Subtotal Gas Usage Rate & & \[
\begin{aligned}
& \text { Other S } \\
& \hline \text { CPUC }
\end{aligned}
\] & & \[
\frac{\text { harges }}{\text { PPP }}
\] & & Gas Cost & Effective Sales Rate \\
\hline \multicolumn{13}{|l|}{SLT-40-Core General Gas Service (Covered Entities)} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & & & \$11.00 \\
\hline Transportation Service Charge & \$780.00 & & & & & & & & & & & \$780.00 \\
\hline \multicolumn{13}{|l|}{Cost per Therm} \\
\hline First 100 & \$ . 45811 & \$ & . 17269 & & \$ . 63080 & & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ . 99956 \\
\hline Next 500 & . 38939 & & . 17269 & & . 56208 & & . 00247 & & . 06290 & & . 30339 & . 93084 \\
\hline Next 2,400 & . 32068 & & . 17269 & & . 49337 & & . 00247 & & . 06290 & & . 30339 & . 86213 \\
\hline Over 3,000 & . 20246 & & . 17269 & & . 37515 & & . 00247 & & . 06290 & & . 30339 & . 74391 \\
\hline \multicolumn{13}{|l|}{SLT-50-Core Natural Gas Service for Motor Vehicles} \\
\hline Basic Service Charge & \$11.00 & & & & & & & & & & & \$11.00 \\
\hline Cost per Therm & \$ . 22096 & \$ & . 22546 & & \$ . 44642 & \$ & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ . 81518 \\
\hline \multicolumn{13}{|l|}{SLT-60-Core Internal Combustion Engine Gas Service} \\
\hline Basic Service Charge & \$ 11.00 & & & & & & & & & & & \$ 11.00 \\
\hline Cost per Therm & \$ . 25140 & \$ & . 22546 & & \$ . 47686 & & . 00247 & \$ & . 06290 & \$ & . 30339 & \$ . 84562 \\
\hline \multicolumn{13}{|l|}{SLT-66-Core Small Electric Power Generation Gas Service} \\
\hline Basic Service Charge & \[
\text { \$ } 11.00
\] & & 22546 & & \$ 47686 & & - 00247 & & & & 30339 & \[
\text { \$ } 11.00
\] \\
\hline \multicolumn{13}{|l|}{SLT-70-Noncore General Gas Transportation Service} \\
\hline Basic Service Charge & \$ 100.00 & & & & & & & & & & & \$ 100.00 \\
\hline Transportation Service Charge & \$ 780.00 & & & & & & & & & & & \$ 780.00 \\
\hline Cost per Therm & \$ . 18433 & \$ & . 06551 & & \$ . 24984 & & . 00247 & \$ & . 06290 & & & \$ . 31521 \\
\hline \multicolumn{13}{|l|}{TFF-Transportation Franchise Fee Surcharge Provision} \\
\hline TFF Surcharge per Therm & & & & & & & & & & & & \$ . 00278 \\
\hline \multicolumn{13}{|l|}{TDS-Transportation Distribution System Shrinkage Charge} \\
\hline TDS Charge per Therm & & & & & & & & & & & & \$ . 00170 \\
\hline \multicolumn{13}{|l|}{MHPS-Master-Metered Mobile Home Park Safety Inspection Provision} \\
\hline MHPS Surcharge per Space per Month & & & & & & & & & & & & \$ . 21000 \\
\hline
\end{tabular}

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Decision No. \(\qquad\)

Issued by Justin Lee Brown Senior Vice President

Date Fileblay 1, 2019August 30, 2019 Effective \(\qquad\) May 1, 2019 Resolution No. \(\qquad\)
\(\qquad\)

\section*{STATEMENT OF RATES}

\section*{RATES APPLICABLE TO SOUTH LAKE TAHOE SERVICE AREA [1]}
[1] Customers taking only transportation service will pay the Effective Sales Rate less the Interstate Reservation and Gas Cost components of the Effective Sales Rate, plus a Transportation Service Charge of \(\$ 780\) per month and an amount for distribution shrinkage calculated by multiplying the currently effective Gas Cost rate per therm by the Lost and Unaccounted For Gas percentage of \(0.5675 \%\). The PGA Balancing Account Adjustment is applicable to customers converting from sales service to transportation service for a period of 12 months. The volume charge for customer-secured natural gas transportation service will also be subject to the TFF Surcharge.
[2] The Charges and Adjustments applicable to each tariff rate schedule includes the following components:
\begin{tabular}{|c|c|c|c|c|c|}
\hline Charges and Adjustments Description & \[
\begin{aligned}
& \text { SLT-10, } \\
& \text { SLT-12, } \\
& \text { SLT-15, } \\
& \text { SLT-20, } \\
& \text { SLT-25, } \\
& \text { STT-35, }
\end{aligned}
\] &  & \begin{tabular}{l}
SLT-40, \\
(Covered Entities)
\end{tabular} & & SLT-70 \\
\hline \multicolumn{6}{|l|}{Upstream Interstate Charges} \\
\hline Storage & \multirow[t]{2}{*}{\$} & . 02174 & \$ . 02174 & & \\
\hline Reservation & & . 20533 & . 20533 & & \\
\hline IRRAM Surcharge & & . 00000 & . 00000 & \$ & . 00000 \\
\hline \multicolumn{6}{|l|}{Balancing Account Adjustments} \\
\hline FCAM* & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{( .05694)}} & ( .05694) & & . 01018 \\
\hline \multicolumn{4}{|l|}{GHGBA**} & & \\
\hline Non-Covered Entities [a] & \multicolumn{2}{|r|}{. 05353} & & & . 05353 \\
\hline Covered Entities [a] & & & . 00076 & & \\
\hline NERBA & & . 00062 & . 00062 & & . 00062 \\
\hline NGLAPBA & & . 00118 & . 00118 & & . 00118 \\
\hline Total Rate Adjustment & \$ & . 22546 & \$ . 17269 & \$ & . 06551 \\
\hline
\end{tabular}
* The FCAM surcharge includes an amount of \(\$ .01018\) per therm related to the difference between Southwest Gas' authorized margin and recorded revenues intended to recover these costs.
** Pursuant to D.15-10-032, Company costs incurred to comply with the California Air Resources Board (ARB) natural gas supplier Cap- and-Trade Program are to be included in transportation rates and recovered from Non-Covered Entities. Covered Entities, who are directly regulated by the ARB, are only responsible for paying for emission costs related to lost and unaccounted for gas (LUAF).
[a] Pursuant to D.18-03-017, Covered and non-Covered entities have a component to recover the 2015-2017 net compliance costs and proceeds amortized over a twelve month period. Also included are the 2018 GHG costs which are amortized over an eighteen month period.
Advice Letter No._ 1087
Decision No.

Issued by
Justin Lee Brown
Senior Vice President

Dacemeer 30, 2018August 30, 2019
Effective January 1, 2019
Resolution No.
\(\qquad\)

\section*{Schedule Nos. GS-10/GN-10/SLT-10}

RESIDENTIAL GAS SERVICE

\section*{APPLICABILITY}

Applicable to gas service to customers which consists of direct domestic gas usage in a residential dwelling for space heating, air conditioning, cooking, water heating, and other residential uses. This schedule is available only to primary residences.

\section*{TERRITORY}

Throughout the Company's certificated California service areas, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The credit will display as a line item on the customer's bill. The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given.

The baseline daily quantity in therms for all individually-metered residential uses are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (May - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (June - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commissinon Decision18-03-017, the 2018 CA Climate Credit will be distributed in October.

Advice Letter No. 1072A.19-08Decision No. \(\qquad\) 18-03-017

Issued by Justin Lee Brown Senior Vice President

Date Fntaly 14, 2018August 30, 2019
Effective Resolution No.

Schedule No. GS-11

\section*{RESIDENTIAL AIR-CONDITIONING GAS SERVICE}

\section*{APPLICABILITY}

Applicable to gas service to customers which consists of direct domestic gas usage in a residential dwelling for air conditioning in conjunction with space heating, cooking, water heating, and other residential uses. This schedule is available as an option only to primary residences with installed natural gas air-conditioning systems for customers who would otherwise receive service pursuant to Schedule No. GS-10, Residential Gas Service of this California Gas Tariff.

\section*{TERRITORY}

Throughout the Company's certificated gas service areas in its Southern California Division, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The credit will display as a line item on the customer's bill. The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given.

The Tier I and summer season Tier II daily quantities in therms for all individually-metered residential uses are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & Summer Season (May - Oct.) & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (June - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline
\end{tabular}

For billing purposes all summer season quantities sold each month in excess of the Tier II quantities shall be billed at the Gas Air-Conditioning rate, and all winter season quantities sold each month in excess of the Tier I quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commission Decision 18-03-017, the 2018 CA Climate Credit will be distributed in October.

Advice Letter No. 1072A. 19-08Decision No. \(\qquad\) 18-03-017 Senior Vice President

Date FAlaly 14, 2018August 30, 2019
Effective

\section*{Schedule Nos. GS-12/GN-12/SLT-12 \\ CARE RESIDENTIAL GAS SERVICE}

\section*{APPLICABILITY}

Applicable to gas service to customers whose qualifying income does not exceed 200 percent of the Federal poverty level, pursuant to California Alternate Rates for Energy (CARE) program eligibility requirements. This service is available only to primary residences.

\section*{TERRITORY}

Throughout the Company's certificated California service areas, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The credit will display as a line item on the customer's bill. The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given. The CA Climate Credit will be applied after the California Alternate Rates for Energy (CARE) is applied to the customer's bill to ensure the customer receives the maximum benefit of the CARE program.
The baseline daily quantity in therms for all individually-metered residential uses are:
Summer
\begin{tabular}{|c|c|c|c|}
\hline \begin{tabular}{l}
Climate \\
Zone
\end{tabular} & \[
\begin{gathered}
\text { Season } \\
\text { (May - Oct.) }
\end{gathered}
\] & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & Summer Season (June - Oct.) & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commission Decision18-03-017, the 2018 CA Climate Credit will be distributed in October.

Issued by
Advice Letter No. 1072A.19-08Decision No. \(\qquad\) 18-03-017
\(\qquad\)
Resolution No. \(\qquad\)
\(\qquad\)
\(\qquad\)
Schedule Nos. GS-20/GN-20/SLT-20

\section*{MULTI-FAMILY MASTER-METERED GAS SERVICE}

\section*{APPLICABILITY}

Applicable to gas service for cooking, water heating, space heating, and other residential usages supplied to multi-family accommodations through one meter on a single premise in accordance with Rule No. 18 of this California Gas Tariff. This schedule is closed to new installations.

\section*{TERRITORY}

Throughout the Company's certificated California service areas, except as may hereafter be provided.

\section*{RATES}

The commodity charges and basic service charge are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

Customers on this schedule may receive the California (CA) Climate Credit, if applicable, annually each April. \({ }^{[1]}\) The CA Climate Credit will be issued to all active accounts receiving natural gas service on the date the credit is given. The master-metered customer will receive one credit for each resident being served through the master-meter. It is the responsibility of the master-metered customer to pass the CA Climate Credit on to the resident.
The baseline daily quantity in therms per residential unit are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & Summer Season (May - Oct.) & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & \[
\begin{gathered}
\text { Summer } \\
\text { Season } \\
\text { (June - Oct.) }
\end{gathered}
\] & \begin{tabular}{l}
Winter Off-Peak \\
(Apr., May \& Nov.)
\end{tabular} & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.
\({ }^{[1]}\) Due to cycle billing, some customers may receive the CA Climate Credit on their May bills. Pursuant to Commission Decision18-03-017, the 2018 CA Climate Credit will be distributed in October.

Advice Letter No. A.19-08Decision No. \(\qquad\)

Issued by Justin Lee Brown Senior Vice President

Date Filed \(\qquad\)
August 30. 2019
Effective
Resolution No.
\(\qquad\)
Schedule Nos. GS-20/GN-20/SLT-20

\section*{MULTI-FAMILY MASTER-METERED GAS SERVICE (Continued)}

\section*{RATES (Continued)}

Upon completion of an application and verification by a state licensed physician, surgeon or osteopath, an additional monthly medical allowance of 25 therms will be provided for hemiplegic/paraplegic/quadriplegic persons, multiple sclerosis/scleroderma patients and persons who are being treated for a life-threatening illness and have a compromised immune system who are full-time residents in a household served under this schedule.

If the customer qualifying for the standard medical allowance can demonstrate to the Company's satisfaction that the 25-therm allowance is insufficient to meet the life-support and comfort requirements of the eligible resident, the Company shall make a determination as to the additional quantity required and round such quantity to the next higher 25 therms.

The number of therms shall be determined in accordance with the provisions of Rule No. 2C of this California Gas Tariff.

For billing purposes, the baseline quantity shall be determined by multiplying the allowable baseline quantity per residential unit by the number of qualifying residential units.

\section*{GARE Program Discount:}

If an individual submetered tenant of a multi-family master-metered customer meets the eligibility criteria established in Schedule Nos. GS-12/GN-12/SLT-12 of this California Gas Tariff, the tenant shall be eligible for the GARE discount.

For billing purposes, the Company will bill the master-metered customer the discounted rate for the number of eligible submetered tenants. It is the responsibility of master-metered customers to pass the CARE discount to the eligible tenant and to notify the Company when the submetered tenant moves. Recertification of eligibility will be required every two years and whenever a submetered tenant moves.

Minimum Charge:
The minimum charge per meter per month is the basic service charge.
\(\qquad\)
Schedule Nos. GS-20/GN-20/SLT-20
MULTI-FAMILY MASTER-METEREDGAS SERVICE
(Gontinued)

\section*{SPECIAL CONDITIONS}
1. Residential service under this schedule includes service to residential units and mobile home units, but does not include enterprises such as rooming houses, boarding houses, dormitories, rest homes, military barracks, stores, restaurants, service stations, and other similar establishments.
2. As a condition to service under this schedule, a master-meter customer must attach to his application for such service a Declaration of Eligibility for Baseline Rates stating the number of occupied units to be billed. The total baseline allowance will be determined on this declaration.
3. It is the responsibility of the customer to advise the Company within 15 days following any change in the number of residential dwelling units and mobile home spaces utilizing gas service. Failure to do so may result in the loss of baseline rates.

The number of residential units eligible for baseline allowances is subject to verification by the Company. In the event the Company ascertains a customer's ineligibility of a baseline allowance, an appropriate adjusted bill may be rendered to the customer.
\(\qquad\) Senior Vice President Resolution No. \(\qquad\)

\title{
Canceling \\ Originat \\ Cal. P.U.C. Sheet No. \\ Schedule Nos. GS-25/GN-25/SLT-25 \\ MULTI-FAMILY MASTER-METERED GAS SERVICE - SUBMETERED (Continued)
}
\(\qquad\)

\section*{RATES (Continued)}

The baseline daily quantity in therms per residential unit are:
\begin{tabular}{|c|c|c|c|}
\hline Climate Zone & Summer Season (May - Oct.) & Winter Off-Peak (Mar., Apr. \& Nov.) & Winter Peak (Dec.-Feb) \\
\hline Barstow & 0.39 & 1.12 & 2.11 \\
\hline Needles & 0.23 & 0.53 & 0.92 \\
\hline Victorville & 0.39 & 1.25 & 2.04 \\
\hline & Summer Season (June - Oct.) & Winter Off-Peak (Apr., May \& Nov.) & Winter Peak (Dec.-March) \\
\hline Big Bear & 0.46 & 1.45 & 2.83 \\
\hline No. Lake Tahoe & 0.66 & 2.11 & 3.09 \\
\hline So. Lake Tahoe & 0.72 & 2.04 & 3.09 \\
\hline Truckee & 0.72 & 2.17 & 3.55 \\
\hline
\end{tabular}

For billing purposes all quantities sold each month in excess of the baseline quantities shall be billed at the Tier II rate.

Upon completion of an application and verification by a state licensed physician, surgeon or osteopath, an additional monthly medical allowance of 25 therms will be provided for hemiplegic/paraplegic/quadriplegic persons, multiple sclerosis/scleroderma patients and persons who are being treated for a life-threatening illness and have a compromised immune system who are full-time residents in a household served under this schedule.

If the customer qualifying for the standard medical allowance can demonstrate to the Company's satisfaction that the 25-therm allowance is insufficient to meet the life-support and comfort requirements of the eligible resident, the Company shall make a determination as to the additional quantity required and round such quantity to the next higher 25 therms.

The number of therms shall be determined in accordance with the provisions of Rule No. 2C of this California Gas Tariff.

For billing purposes, the baseline quantity shall be determined by multiplying the allowable baseline quantity per residential unit by the number of qualifying residential units.

Issued by
Advice Letter No. g92A. 19-08Decision No. \(\qquad\) 15-10-032

Justin Lee Brown Senior Vice President

Daterfillber 23, 2015August 30, 2019 Effective_December 23, 2015 Resolution No.
\begin{tabular}{|c|c|c|}
\hline & 1st-Revised & Cal. P.U.C. Sheet No. 118 \\
\hline Canceling & Originat & Cal. P.U.C. Sheet No. 118 \\
\hline
\end{tabular}

Schedule No. GS-VIC

\section*{CITY OF VICTORVILLE NATURAL GAS SERVICE}

\section*{APPLICABILITY}

Applicable for natural gas service for resale to the City of Victorville Municipal Utility Services at the Southern California Logistics Airport,-as specified in contracts 12016 and 12019.

\section*{RATES}

The Customer shall pay the following charges to receive natural gas service under this schedule:
1. Basic Service Charge: The Basic Service Charge per month is the charge per meter as set forth in the currently effective Statement of Rates of this California Gas Tariff.
2. Transportation Service Charge: The Transportation Service Charge per month is the charge as set forth in the currently-effective Statement of Rates of this California Gas Tariff.
3. Volume Charge: An amount equal to the applicable Volume Charge per therm of gas received by the Company for the account of the Customer. These charges are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

\section*{Minimum Charge}

The minimum charge per month is the Basic Service Charge plus the Transportation Service Charge, if applicable.
\(\qquad\)

Justin Lee Brown
Senior Vice President

Date Fitede 18, 2014August 30, 2019
Effective
Resolution No. \(\qquad\)

\section*{Canceling \\ Schedule No. GS-LUZ \\ HUZ SOLAR PARTNERS LTD. NATURAL GAS SERVIGE}
\(\qquad\)

\section*{APPLICABILITY}

Applicable for natural gas service to the LUZ Solar Partners Ltd. VIII and IX in Southern Galifornia, as specified in contracts 12003 and 12009.

\section*{RATES}

The Customer shall pay the following charges to receive natural gas service under this schedule:
1. Basic Service Charge: The Basic Service Charge per month is the charge per meter as set forth in the currently effective Statement of Rates of this California Gas Tariff.
2. Volume Charge: An amount equal to the applicable Volume Charge per therm of gas received by the Company for the account of the Customer. These charges are set forth in the currently-effective Statement of Rates of this California Gas Tariff and are incorporated herein by reference.

\section*{Minimum Charge}

The minimum charge per month is the Basic Service Charge plus the Transportation Service Charge, if applicable.

\section*{BILLING ADJUSTMENTS}

Rates may be adjusted to reflect any applicable taxes, franchise or other fees, regulatory surcharges, and interstate or intrastate pipeline-charges or penalties that may occur.

The number of therms to be billed shall be determined in accordance with Rule No. 2C of this California Gas Tariff.

In addition to the charges described above, the customer shall be responsible for any gas costs, taxes and/or fees incurred by the Company in taking delivery of customer secured natural gas from upstream suppliers.

\section*{GURTAILMENT OF SERVICE}

Service under this schedule may be curtailed in accordance with the curtailment provisions of Rule No. 20 of this California Gas Tariff.

Advice Letter No.
Decision No. \(\qquad\)

Issued by Justin Lee Brown Senior Vice President

Date Fiteae-18, 2014August 30, 2019
Effective
Resolution No.

\title{
Schedule No. GS-LUZ \\ HUZ SOLAR PARTNERS LTD. NATURAL GAS SERVICE \\ (Gontinued)
}

\section*{FORCE MAJEURE}

Relief From Liability. Neither party shall be liable for damages to the other on account of "force majeure" occasioned by any act, omission or circumstances occasioned by or in eonsequence of any acts of God, strikes, insurrections, riots, epidemics, landslides, lightning, earthquakes, fires, storms, floods, washouts, arrests and restraints of rulers and people, civil disturbances, explosions, breakage or accident to machinery or lines of pipe, depletion of or temporary failure of gas supply, the binding order of any court of governmental authority which has been resisted in good faith by all reasonable legal means, and any other cause, whether of the kind herein enumerated or not, and not within the control of the party claiming suspension and which by the exercise of due diligence such party is unable to prevent or overcome. Failure to settle or prevent any strikes or other controversy with employees or with anyone purporting or seeking to represent employees shall not be considered to be a matter within the control of the party claiming suspension.

Liabilities Not Relieved. Neither the customer nor the Company shall be relieved from liability in the event of its concurring negligence or failure on its part to use due diligence to remedy the force majeure and remove the cause with all reasonable dispatch, nor shall such causes or contingencies affecting performance of any agreement relieve either party from its obligations to make payments when due in respect of gas theretofore delivered.

\section*{SPECIAL CONDITIONS}
1. Definitions of the principal terms used in this schedule are contained in Rule No. 1 of this California Gas Tariff.
2. All rates and conditions are subject to revision and modification as a result of Commission order.
3. All terms and conditions of Rule No. 21 of this California Gas Tariff shall apply to the transportation of customer-secured natural gas under this schedule.
4. The Company will take receipt of customer's gas from an interconnect with Pacific Gas and Electric Company and deliver the equivalent quantity of natural gas to the customer or for the account of the customer.
5.1. The customer's full requirements service loads are prohibited from being displaced through use of alternate fuels or bypass pipeline service.

Date Fite 18, 2014August 30, 2019 Effective Resolution No.

1stRevised Cal. P.U.C. Sheet No. 145
California Gas Tariff
Canceling Originat

Cal. P.U.C. Sheet No. \(\qquad\)
LIST OF SPECIAL CONTRACTS AND DEVIATIONS
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Name and Location of Customer} & \multirow[b]{2}{*}{Type or Class of Service} & \multirow[b]{2}{*}{Execution Date} & \multirow[t]{2}{*}{Commission Authorization Number and Date} & \multicolumn{2}{|l|}{Most Comparable Regular Tariff} \\
\hline & & & & Schedule No. & Contract Differences \\
\hline City of Victorville Victorville, California & Industrial & 09-15-05 & Advice Letter No. 744 & \[
\begin{aligned}
& \text { GS-701 } \\
& \text { GN-70 } \\
& \text { SLT-70 }
\end{aligned}
\] & Special Agreoment \\
\hline
\end{tabular}
\(\qquad\) 14-06-028

Justin Lee Brown Senior Vice President

Date Fdleae 18, 2014August 30, 2019
Effective June 12, 2014
Resolution No.
\(\qquad\)
\(\qquad\)
RULE NO. 3

\section*{APPLICATION FOR SERVICE}

\section*{A. CUSTOMER APPLICATION}
1. In addition to the information The the Company willmay require each prospective customerapplicant for gas service to establish credit in accordance with Rule No. 6, Establishment and Reestablishment of Credit of this California tariff and to establish the identity of the applicant, all applicants shall provide such other information as the Company may reasonably require for gas service. This the following information upon application for serviceincludes, but is not limited to:
a. Legal name of applicant(s).
b. Name of applicant's spouse or co-applicant.
6. Identification (Social Security number or driver's license number).
d.c. Date of birth.
e-d. Date and place of application.
e. Location of premises to be served.
f. Address to which bills are to be mailed or delivered.
g. Date applicant will be ready for gas service.
h. Whether the premises have been previously supplied with gas.
i. Purposes for which gas service is to be used.
j. Address to which bills are to be mailed of delivered.
k. Rate schedule desired to be applied where-(if optional schedules are availablerates are in effect).
I. Telephone number.
m . Third party identification, address and telephone number, at the option of an elderly and/or disabled applicant.
n. Whether applicant is owner, agent or tenant of premises.
o. Whether applicant or other permanent resident is elderly and/or disabled.
p. Such other information as the Company may reasonably require.
2. Third party notification:

If an applicant or customer who is elderly and/or disabled lists a third party whom they wish notified in the event that their service is scheduled for discontinuance in accordance with Rule No. 11 of this California Gas Tariff,
\(\qquad\)
864 A. 19-08John P. HesterJustin Lee Brown April 24, 2殹ffective Decision No. \(\qquad\) Senior Vice President Resolution No.

\section*{SOUTHWEST GAS CORPORATION}
P.O. Box 98510

Las Vegas, Nevada 89193-8510
Canceling
Cal. P.U.C. Sheet No.
California Gas Tariff
Cal. P.U.C. Sheet No.
\(\qquad\) such third party's name, address, and telephone number shall be noted on the application for service.

The Company shall establish procedures to ensure that third parties consent to receive a copy of the termination notice. The Company shall inform all customers at least once annually of the availability of this service.
\(\qquad\)
\(\qquad\) Senior Vice President Resolution No. \(\qquad\)
\(\qquad\)

\section*{RULE NO. 6}

\section*{ESTABLISHMENT AND REESTABLISHMENT OF CREDIT}

Each applicant for service will be required to establish credit to the satisfaction of the Company before service will be rendered.

\section*{A. ESTABLISHMENT OF CREDIT}
1. The applicant's credit will be deemed established:
a. If applicant for residential service is the principal owner of the premises to be served, or is the principal owner of real estate within the district of the Company in which service is requested, adequate proof of which may be required by the Company; or
b.a. If applicant for nonresidential service is the principal owner of the premises to be served, with an equity satisfactory to the Company, adequate proof of which may be required by the Company; or
c.b. If applicant makes a deposit with the Company to secure the payment of any bills for service to be furnished by the Company under the application as provided in Rule No. 7 of this California Gas Tariff; or
d.c. If applicant furnishes a guarantor satisfactory to the Company to secure payment of bills for the service requested; or
e-d. If applicant has previously been a customer of the Company, and has paid all bills for gas service on the average within a period as set forth in Rule No. 11, Section A. 1 of this California Gas Tariff for a period of 12 consecutive months immediately prior to the date when the applicant for service previously ceased to take service from the Company, provided such service occurred within two years from the date of the new application for service; or
f.e. If applicant can otherwise establish credit to the satisfaction of the Company.
2. In the case of a master-metered establishment which is subject to termination for nonpayment of bills by the landlord, the residential tenants may become customers of the Company by establishing credit as set forth above in Sections A.1.c. and A.1.d. Where prior service is being considered as a condition for establishing credit, proof of prompt payment while residing at such master-metered establishment for the immediately preceding 12 months shall be acceptable to the Company as a satisfactory equivalent.
\(\qquad\)
864 A.19-08- \(\qquad\) John P. HesterJustin Lee Brown
Decision No. \(\qquad\) Senior Vice President Resolution No.
\(\qquad\)
\(\qquad\)
RULE NO. 7

\section*{DEPOSITS}

\section*{A. AMOUNT TO ESTABLISH CREDIT}

The amount of deposit required to establish credit is twice the estimated maximum monthly bill, or for Small Business Customers, twice the estimated monthly average bill.
B. AMOUNT TO REESTABLISH CREDIT
1. Former Customers

Where an applicant is a former customer whose service was discontinued during the last 12 months of their former service for nonpayment of bills, such applicant may be required to pay such former bills and reestablish credit by depositing an amount equal to twice the estimated maximum monthly bill-for the service desired, or for Small Business Customers, twice the estimated monthly average bill.
2. Present Customers
a. A customer whose service has been discontinued for nonpayment of bills may be required to pay such bills and deposit an amount equal to twice the estimated maximum monthly bill or for Small Business Customers, twice the estimated monthly average bill.
b. If a customer receives a bill that is two months past due or becomes delinquent in the payment of a total of six monthly bills within a 12 consecutive month period, such customer may be required to reestablish credit by depositing an amount not to exceed twice the estimated maximum monthly bill. Unless the delinquency in payment is due to nonpayment of all or a portion of a backbill, which occurred as a result of a billing or metering error, Small Business Customers may be required to reestablish credit by depositing an amount not to exceed twice the estimated average monthly bill. A Small Business Customer may enroll in the Company's Automatic Payment Program once within a twelve month consecutive period, in lieu of a cash deposit for reestablishing service.

\section*{C. APPLICABILITY TO UNPAID ACCOUNTS}

Deposits prescribed herein are applicable to unpaid bills for gas service when such service has been discontinued. Deposits will not be applied as payment for past due bills to avoid discontinuance of service.

Decision No. \(\qquad\) John P. HesterJustin Lee Brown Senior Vice President Resolution No.
\(\qquad\)
RULE NO. 8

\section*{NOTICES}
A. NOTICES TO CUSTOMERS
1. Any notice the Company may give to any customer supplied with gas by the Company, under and pursuant to the effective Rules of the Company, may be given by written notice, either delivered at the address specified in the customer's application for gas service or in the customer's contract in case such customer has a contract for said service, or properly enclosed in a sealed envelope and deposited in any United States Post Office postage prepaid, addressed to the customer as above stated.
2. Customers electing Electronic Billing will receive notices throughregarding their electronic bill or other informational bill inserts or via U.S. through electronic mail.
B. NOTICES FROM CUSTOMERS

Any notice a customer may give to the Company, under and pursuant to the effective Rules of the Company, may be given by written notice, delivered at addressed to any of the Company's offices-or properly enclosed in a sealed envelope and deposited in any United States Post Office, postage prepaid, and addressed theretodeposited for delivery by the United State Postal Service.
\(\qquad\) Senior Vice President Resolution No. \(\qquad\)
\(\qquad\)
Rule No. 16

\section*{GAS SERVICE EXTENSIONS \\ (Continued)}
A. GENERAL (Continued)
5. Private Lines

The Company shall not be required to connect Service Facilities to or serve any Applicant from gas facilities that are not owned, operated and maintained by the Company.
6. Special or Added Facilities

Any special or added facilities the Company agrees to install at the request of Applicant will be installed at Applicant's expense.

In accordance with The Pipeline Inspection, Protection, Enforcement and Safety Act of 2006 and Title 49, Section 192.383 of the Code of Federal Regulations, the installation of an excess flow valve, as defined in Rule No. 1 of this California Gas Tariff, shall be performed by the Company on new or replaced single residence service lines. If any other customer requests the installation of an excess flow valve, the Company shall perform the installation subject to the feasibility of such installation, and the customer assuming responsibility for alt costs associated with installation.

\section*{7. Temporary Service Facilities}

Facilities installed for temporary service or for operations of speculative character or questionable permanency shall be made in accordance with the fundamental installation and ownership provisions of this Rule, except that all charges and refunds shall be made under the provisions of Rule No. 13, Temporary Service of this California Gas Tariff.

\section*{8. Contracts}

Each Applicant requesting service may be required to execute written contracts prior to the Company performing its work to establish service. Such contracts shall be in the form on file with the Commission.
\(\qquad\) Senior Vice President Resolution No. \(\qquad\)
\(\qquad\)
RULE NO. 16
GAS SERVICE EXTENSIONS
(Continued)

\section*{G. EXCESS FLOW VALVE AND SERVICE LATERAL SHUT-OFF VALVE INSTALLATION}

The installation of an Excess Flow Valve or Service Lateral Shut-Off Valve shall be performed on all newly installed or replaced Service Laterals connected to the Company's distribution system before the service is activated as provided by this Rule. Nothing in this Rule prevents the Company from installing or specifying, in its sole discretion, the installation of an Excess Flow Valve or a Service Lateral Shut-Off Valve in additional service types.

\section*{1. Applicable Service Lateral types}
a. A single Service Lateral to one single-family residence (SFR);
b. A Branch Service to a SFR installed concurrently with the primary SFR Service Lateral (i.e. a single Excess Flow Valve may be installed to protect both the Service Lateral and the Branch Service);
c. A Branch Service to a SFR installed off a previously installed SFR Service Lateral that does not contain an Excess Flow Valve;
d. Multifamily residences with known customer loads not exceeding 5,500 SCFH per service at time of service installation based on installed meter capacity;
e. A single, small commercial customer served by a single Service Lateral with a known customer load not exceeding 5,500 SCFH, at the time of meter installation, based on installed meter capacity; and,
a.f. For Service Laterals with meter capacity that exceeds \(5,500 \mathrm{SCFH}\), a Service Lateral Shut-Off Valve or, if possible, based on sound engineering analysis and availability, an Excess Flow Valve, shall be installed.
Advice Letter No._ A.19-08-
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed
August 30, 2019
Effective
Resolution No.
\(\qquad\)
RULE NO. 16
GAS SERVICE EXTENSIONS
(Continued)

\section*{G. EXCESS FLOW VALVE AND SERVICE LATERAL SHUT-OFF VALVE INSTALLATION (Continued)}
2. The Company is not required to install an Excess Flow Valve if one or more of the following conditions are present:
a. The Service Lateral does not operate at a pressure of 10 psig or greater throughout the year;
b. The Company has prior experience with contaminants in the gas stream that could interfere with the Excess Flow Valve's operation or cause loss of service to a customer;
c. An Excess Flow Valve could interfere with the necessary operation or maintenance activities such as blowing liquids from the Service Lateral; or
d. An Excess Flow Valve meeting the performance standards in 49 C.F.R. \(\S\) 192.381 is not commercially available to the Company.
3. The Applicant shall provide the Company information concerning the gas usage and demand requirements. The Excess Flow Valve or Service Lateral Shut-Off Valve will be designed and constructed so that suitable gas capacity is available and satisfactory to the Company.
2.4. The Company will construct, own, operate and maintain the Excess Flow Valve or Service Lateral Shut-Off Valve in connection with the Branch Service and/or Service Lateral installation.
3.5. The Company shall pay for all costs associated with the installation, replacement or maintenance of the Excess Flow Valve or Service Lateral ShutOff Valve unless that work is made necessary by the relocation of a main or Service Lateral that is either: due solely to meet the Applicant's convenience as provided by Rule 16(F)(2)(b); performed to redress a Customer's noncompliance with any of these tariff schedules; or is due solely to the addition of any special or added facilities that the Company agrees to install at the request of Applicant.
Advice Letter No. A.19-08-

Issued by Justin Lee Brown Senior Vice President

Date Filed__ August 30, 2019 Effective Resolution No.
\(\qquad\)
\(\qquad\)
RULE NO. 16

\section*{GAS SERVICE EXTENSIONS}
(Continued)

\section*{G. EXCESS FLOW VALVE AND SERVICE LATERAL SHUT-OFF VALVE} INSTALLATION (Continued)
6. The Customer has the right to request that an Excess Flow Valve be installed on their existing Service Lateral if the load does not exceed 5,500 SCFH and the conditions in Rule 16(G)(2) are not present. In such instances, the Company shall notify the Customer of the following:
a. Any costs associated with the installation that shall be paid by the Customer.
b. The Company shall install the Excess Flow Valve at a mutually agreeable date.
6.7. If a Customer requests the installation of an Excess Flow Valve on their existing Service Lateral, the Company shall perform the installation subject to the practicability of the installation at a mutually agreeable date.
Advice Letter No._ A.19-08-
Decision No.

Issued by Justin Lee Brown Senior Vice President

Date Filed
August 30, 2019
Effective
Resolution No. \(\qquad\)

\section*{GAS SERVICE EXTENSIONS \\ (Continued)}

\section*{H. EXCEPTIONAL CASES}

When the application of this Rule appears impractical or unjust to either party or the ratepayers, the Company or Applicant may refer the matter to the Commission for a special ruling or for the approval of special conditions which may be mutually agreed upon.
I. DEFINITIONS FOR RULE NO. 16

Advance: Cash payment made to the Company prior to the initiation of any work done by the Company which is not covered by allowances.
Applicant: A person or agency requesting the Company to supply gas service.
Contribution: In-kind services and/or the value of all property conveyed to the Company at any time during the Company's work on an extension which is part of the Company's total estimated installed cost of its facilities or cash payments not covered by Applicant's allowances.
Distribution Main: The Company's gas facilities, which are operated at distribution pressure and which are designed to supply three or more services.

Excavation: All necessary trenching, backfilling and other digging as required to install extension facilities, including furnishing of any imported backfill material and disposal of spoil as required, surface repair and replacement, landscape repair and replacement.
Excess Flow Valve: A device designed to restrict the flow of gas in a customer's natural gas service line-Service Lateral by automatically closing in the event of a service-line-Service Lateral break, thus mitigating the consequences of service line Service Lateral failures.
Franchise Area: Public streets, roads, highways and other public ways and places where the Company has a legal right to occupy under franchise agreements with governmental bodies having jurisdiction.
Insignificant Loads: Small operating loads, such as log lighters, barbecues, outdoor lighting, etc.
Intermittent Loads: Loads which, in the opinion of the Company, are subject to discontinuance for a time or at intervals.
\(\qquad\)
\(\qquad\)
RULE NO. 16

\section*{GAS SERVICE EXTENSIONS}
(Continued)

\section*{I. DEFINITIONS FOR RULE NO. 16 (Continued)}

Meter Set Assembly: Consists of the customer meter, service pressure regulator and associated pipe and fittings.

Permanent Service: Service which, in the opinion of the Company, is of a permanent and established character. This may be continuous, intermittent or seasonal in nature.

Premises: All of the real property and apparatus employed in a single enterprise on an integral parcel of land undivided (except in the case of industrial, agricultural, oil field, resort enterprises and public or quasi-public institutions), by a dedicated street, highway or other public thoroughfare, or a railway. Automobile parking lots constituting a part of and adjacent to a single enterprise may be separated by an alley from the remainder of the premises served.
Protective Structures: Fences, retaining walls (in lieu of grading), barriers, posts, barricades and other structures as required by the Company.
Residential Development: Five or more dwelling units in two or more buildings located on a single parcel of land.

Residential Subdivision: An area of five or more lots for residential dwelling units which may be identified by filed subdivision plans or an area in which a group of dwellings may be constructed about the same time, either by a builder or several builders working on a coordinated basis.
Seasonal Service: Gas service to establishments which are occupied seasonally or intermittently, such as seasonal resorts, cottages or other part-time establishments.
Service Delivery Point: Where the Company's Service Lateral is connected to Applicant's pipe (house line), normally adjacent to the location of the Meter Set Assembly.
Service Lateral: The pipe, valves, Meter Set Assemblies and associated equipment extending from the point of connection at the Distribution Main to the Service Delivery Point, which is normally on Applicant's Premises.
Service Lateral Shut-Off Valve: A curb valve or other valve or manually operated valve located near the Service Lateral that is safely accessible to the personnel authorized by the Company to manually shut off gas flow to the Service Lateral.
\(\qquad\) Senior Vice President Resolution No.

\title{
CHAPTER 22 \\ Post-Test Year \\ Ratemaking Mechanism
}

\section*{Company Witness: Timothy S. Lyons}

\section*{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA POST-TEST YEAR RATEMAKING ADJUSTMENT CHAPTER 22}

The Company is proposing a Post-Test Year (PTY) ratemaking adjustment for years 2022 through 2025. The proposed PTY ratemaking adjustment is 2.75 percent and is consistent with the settlement agreement and decision in the Company's last general rate case in A.12-12.024. Chapter 22 is presented in two distinct parts.

The first part shows a summary of the margin for each PTY, which is developed by applying a 2.75 percent adjustment to the previous year's authorized margin.

The second part includes the calculation of rates by rate schedule necessary to recover the margin developed for each PTY assuming 2.75 percent increase in margin for all rate schedules.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Line & \multirow[t]{2}{*}{Description} & Attrition & \multicolumn{10}{|l|}{Attrition Year} & Line \\
\hline No. & & Percent & & 2021 & & 2022 & & 2023 & & 2024 & & 2025 & No. \\
\hline & (a) & (b) & & (c) & & (d) & & (e) & & (e) & & (f) & \\
\hline 1 & Prior Year Margin After Rate Relief & & \$ & 22,261,389 & \$ & 22,261,389 & \$ & 22,873,577 & \$ & 23,502,600 & \$ & 24,148,922 & 1 \\
\hline 2 & Add: Attrition Adjustment @ 2.75\% & 2.75\% & & - & & 612,188 & & 629,023 & & 646,322 & & 664,095 & 2 \\
\hline 3 & Margin before Infrstructure Adjustment & & \$ & 22,261,389 & \$ & 22,873,577 & \$ & 23,502,600 & \$ & 24,148,922 & \$ & 24,813,017 & 3 \\
\hline 4 & North Lake Tahoe Lateral Adjustment & & & & & 635,226 & & 3,248,159 & & 4,151,224 & & 4,119,203 & 4 \\
\hline 5 & Revenue After Infrastructure Adjustment & & & 22,261,389 & & 23,508,803 & & 26,750,759 & & 28,300,146 & & 28,932,221 & 5 \\
\hline 6 & Add: Attrition Adjustment \% (Line 17 / Line 1) & & & 0.00\% & & 2.85\% & & 14.20\% & & 17.66\% & & 17.06\% & 6 \\
\hline 7 & Total Attrition Rate (2.75\% + Line 6) & & & & & 5.60\% & & 16.95\% & & 20.41\% & & 19.81\% & 7 \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA
NORTH LAKE TAHOE LATERAL PR
TEST YEAR TWELVE MONTHS ENDED DECEMBER 31， 2021

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\begin{tabular}{|c|c|}
\hline No． & Description \\
\hline & （a） \\
\hline 1 & North Lake Tahoe Lateral Project \\
\hline 2 & Gross Plant Replaced \\
\hline 3 & Accumulated Depreciation \\
\hline 4 & Net Plant（Line \(2+\) Line 3） \\
\hline 5 & Accumulated Deferred Income Tax \\
\hline 6 & Mains Rate Base（Line 4 ＋Line 5） \\
\hline 7 & Rate of Return \\
\hline 8 & Rate of Return Revenue（Line 6 ＊Line 7） \\
\hline 9 & Revenue Conversion Factor \\
\hline 10 & Revenue Requirement（Line 8 ＊Line 9） \\
\hline 11 & Revenue Requirement \\
\hline 12 & Depreciation Expense（2．29\％per year） \\
\hline 13 & Property Tax \\
\hline 14 & Total Revenue Requirement \\
\hline
\end{tabular}

\title{
SOUTHWEST GAS CORPORATION \\ NORTHERN CALIFORNIA RATE JURISDICTION \\ SUMMARY OF PROPOSED MARGIN RATES BY CLASS \\ TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2021
}
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline Line & \multirow[b]{2}{*}{Description} & \multirow[b]{2}{*}{Schedule} & \multicolumn{10}{|c|}{Proposed Margin Rates} & \multirow[t]{2}{*}{Line No.} \\
\hline No. & & & \multicolumn{2}{|r|}{2021} & \multicolumn{2}{|r|}{2022} & \multicolumn{2}{|r|}{2023} & \multicolumn{2}{|r|}{2024} & \multicolumn{2}{|r|}{2025} & \\
\hline & (a) & (b) & \multicolumn{2}{|r|}{(c)} & \multicolumn{2}{|r|}{(d)} & \multicolumn{2}{|r|}{(e)} & \multicolumn{2}{|r|}{(f)} & \multicolumn{2}{|r|}{(g)} & \\
\hline \multirow{3}{*}{1} & Primary Residential Gas Service & GN-10/ & & & & & & & & & & & \\
\hline & Basic Service Charge & GN-12 & \$ & 5.75 & \$ & 5.75 & \$ & 5.75 & \$ & 5.75 & \$ & 5.75 & 1 \\
\hline & \multicolumn{13}{|l|}{Commodity Charge} \\
\hline 2 & Baseline Quantities & & \$ & 0.77118 & \$ & 0.82141 & \$ & 0.98187 & \$ & 1.20787 & \$ & 1.47192 & 2 \\
\hline \multirow[t]{2}{*}{3} & Tier II & & \$ & 0.89641 & \$ & 0.94664 & \$ & 1.10710 & \$ & 1.33310 & \$ & 1.59715 & 3 \\
\hline & Secondary Residential Gas Service & GN-15 & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{4} & Basic Service Charge & & \$ & 6.00 & \$ & 6.00 & \$ & 6.00 & \$ & 6.00 & \$ & 6.00 & 4 \\
\hline & Commodity Charge & & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{5} & All Usage & & \$ & 0.95173 & \$ & 1.01081 & \$ & 1.19952 & \$ & 1.46530 & \$ & 1.77585 & 5 \\
\hline & Multi-Family Master Metered Gas Service & GN-20 & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{6} & Basic Service Charge & & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & 6 \\
\hline & Commodity Charge & & & & & & & & & & & & \\
\hline 7 & Baseline Quantities & & \$ & 0.77118 & \$ & 0.82141 & \$ & 0.98187 & \$ & 1.20787 & \$ & 1.47192 & 7 \\
\hline \multirow[t]{3}{*}{8} & Tier II & & \$ & 0.89641 & \$ & 0.94664 & \$ & 1.10710 & \$ & 1.33310 & \$ & 1.59715 & 8 \\
\hline & \multicolumn{13}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Multi-Family Master Metered Gas Service - \\
Submetered \\
GN-25
\end{tabular}}} \\
\hline & & & & & & & & & & & & & \\
\hline 9 & Basic Service Charge & & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & 9 \\
\hline \multirow[t]{2}{*}{10} & Submeter Discount & & \$ & (9.58) & \$ & (9.58) & \$ & (9.58) & \$ & (9.58) & \$ & (9.58) & 10 \\
\hline & \multicolumn{13}{|l|}{Commodity Charge} \\
\hline 11 & Baseline Quantities & & \$ & 0.77118 & \$ & 0.82141 & \$ & 0.98187 & \$ & 1.20787 & \$ & 1.47192 & 11 \\
\hline \multirow[t]{2}{*}{12} & Tier II & & \$ & 0.89641 & \$ & 0.94664 & \$ & 1.10710 & \$ & 1.33310 & \$ & 1.59715 & 12 \\
\hline & Core General Gas Service & GN-35/ & & & & & & & & & & & \\
\hline 13 & Basic Service Charge & GN-40 & \$ & 11.00 & \$ & 11.00 & \$ & 11.00 & \$ & 11.00 & \$ & 11.00 & 13 \\
\hline \multirow[t]{2}{*}{14} & Transportation Service Charge & & \$ & 780.00 & \$ & 780.00 & \$ & 780.00 & \$ & 780.00 & \$ & 780.00 & 14 \\
\hline & \multicolumn{13}{|l|}{Commodity Charge} \\
\hline 15 & First 100 & & \$ & 0.64944 & \$ & 0.68926 & \$ & 0.81645 & \$ & 0.99559 & \$ & 1.20489 & 15 \\
\hline 16 & Next 500 & & \$ & 0.48198 & \$ & 0.51153 & \$ & 0.60592 & \$ & 0.73887 & \$ & 0.89420 & 16 \\
\hline 17 & Next 2400 & & \$ & 0.33973 & \$ & 0.36056 & \$ & 0.42709 & \$ & 0.52080 & \$ & 0.63029 & 17 \\
\hline \multirow[t]{2}{*}{18} & Over 3000 & & \$ & 0.12751 & \$ & 0.13533 & \$ & 0.16030 & \$ & 0.19547 & \$ & 0.23656 & 18 \\
\hline & Core Natural Gas Service for Motor Vehicles & GN-50 & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{19} & Basic Service Charge & & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & 19 \\
\hline & Commodity Charge & & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{20} & All Usage & & \$ & 0.03132 & \$ & 0.03336 & \$ & 0.03985 & \$ & 0.04900 & \$ & 0.05970 & 20 \\
\hline & Core Internal Combustion Engine Gas Service & GN-60 & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{21} & Basic Service Charge & & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & 21 \\
\hline & Commodity Charge & & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{22} & All Usage & & \$ & 0.71521 & \$ & 0.92173 & \$ & 1.58144 & \$ & 2.51058 & \$ & 3.59621 & 22 \\
\hline & Core Small Electric Power Generation Gas Service & GN-66 & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{23} & Basic Service Charge & & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & \$ & 25.00 & 23 \\
\hline & Commodity Charge & & & & & & & & & & & & \\
\hline \multirow[t]{2}{*}{24} & All Usage & & \$ & 0.71521 & \$ & 0.92173 & \$ & 1.58144 & \$ & 2.51058 & \$ & 3.59621 & 24 \\
\hline & Noncore General Gas Transportation Service & GN-70 & & & & & & & & & & & \\
\hline 25 & Basic Service Charge & & \$ & 100.00 & \$ & 100.00 & \$ & 100.00 & \$ & 100.00 & \$ & 100.00 & 25 \\
\hline \multirow[t]{2}{*}{26} & Transportation Service Charge & & \$ & 780.00 & \$ & 780.00 & \$ & 780.00 & \$ & 780.00 & \$ & 780.00 & 26 \\
\hline & Commodity Charge & & & & & & & & & & & & \\
\hline 27 & All Usage & & \$ & 0.12545 & \$ & 0.15281 & \$ & 0.24020 & \$ & 0.36329 & \$ & 0.50711 & 27 \\
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NORTHERN CALIFORNIA RATE JURISDICTION
CALCULATION OF PROPOSED MARGIN AND RATES BY CLASS POST TEST YEAR TWELVE

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\]} & \multirow[t]{3}{*}{Description} & \multirow[t]{3}{*}{Schedule No.} & \multicolumn{3}{|l|}{Test Year Billing Units} & \multicolumn{4}{|l|}{\multirow[t]{2}{*}{Proposed Margin}} & \multirow[t]{3}{*}{Line No.} \\
\hline & & & \multirow[t]{2}{*}{Number of Bills} & \multicolumn{2}{|l|}{Volumes} & & & & & \\
\hline & & & & Transport & Sales & \multicolumn{2}{|l|}{Rates} & \multicolumn{2}{|l|}{Revenues} & \\
\hline & (a) & (b) & (c) & (d) & (e) & & (f) & & (g) & \\
\hline \multirow[t]{3}{*}{1} & Primary Residential Gas Service & GN-10/ & & & & & & & & \\
\hline & Basic Service Charge & GN-12 & 197,270 & & & \$ & 5.75 & \$ & 1,134,303 & 1 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 2 & Baseline Quantities & & & 9,050,994 & 9,050,994 & \$ & 0.98187 & \$ & 8,886,935 & 2 \\
\hline 3 & Tier II & & & 4,006,522 & 4,006,522 & \$ & 1.10710 & & 4,435,636 & 3 \\
\hline \multirow[t]{2}{*}{4} & Total Primary Residential Gas Service & & 197,270 & 13,057,516 & 13,057,516 & & & & 14,456,874 & 4 \\
\hline & Secondary Residential Gas Service & GN-15 & & & & & & & & \\
\hline \multirow[t]{2}{*}{5} & Basic Service Charge & & 119,305 & & & \$ & 6.00 & \$ & 715,830 & 5 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 6 & All Usage & & & 6,982,234 & 6,982,234 & \$ & 1.19952 & & 8,375,325 & 6 \\
\hline 7 & Total Secondary Residential Gas Service & & 119,305 & 6,982,234 & 6,982,234 & & & & 9,091,155 & 7 \\
\hline \multirow[t]{2}{*}{8} & Total Residential Gas Service & & 316,575 & 20,039,750 & 20,039,750 & & & & 23,548,029 & 8 \\
\hline & Multi-Family Master Metered Gas Service & GN-20 & & & & & & & & \\
\hline \multirow[t]{2}{*}{9} & Basic Service Charge & & 24 & & & \$ & 25.00 & \$ & 600 & 9 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 10 & Baseline Quantities & & & 11,606 & 11,606 & \$ & 0.98187 & \$ & 11,396 & 10 \\
\hline 11 & Tier II & & & 156 & 156 & \$ & 1.10710 & \$ & 173 & 11 \\
\hline \multirow[t]{2}{*}{12} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & & \$ & 12,169 & 12 \\
\hline & Multi-Family Master Metered Gas Service - Submetered & GN-25 & & & & & & & & \\
\hline 13 & Basic Service Charge & & 0 & & & \$ & 25.00 & \$ & 0 & 13 \\
\hline \multirow[t]{2}{*}{14} & Submeter Discount & & 0 & & & \$ & (9.58) & \$ & 0 & 14 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 15 & Baseline Quantities & & & 0 & 0 & \$ & 0.98187 & \$ & 0 & 15 \\
\hline 16 & Tier II & & & 0 & 0 & \$ & 1.10710 & \$ & 0 & 16 \\
\hline 17 & Total Muti- Fam Sub & & 0 & 0 & 0 & & & \$ & 0 & 17 \\
\hline \multirow[t]{2}{*}{18} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & & \$ & 12,169 & 18 \\
\hline & Core General Gas Service & GN-35/ & & & & & & & & \\
\hline 19 & Basic Service Charge & GN-40 & 19,078 & & & \$ & 11.00 & \$ & 209,858 & 19 \\
\hline \multirow[t]{2}{*}{20} & Transportation Service Charge & & 12 & & & \$ & 780.00 & \$ & 9,360 & 20 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 21 & First 100 & & & 1,011,005 & 1,011,005 & \$ & 0.81645 & \$ & 825,436 & 21 \\
\hline 22 & Next 500 & & & 1,901,594 & 1,901,594 & \$ & 0.60592 & \$ & 1,152,219 & 22 \\
\hline 23 & Next 2400 & & & 1,689,766 & 1,689,766 & \$ & 0.42709 & \$ & 721,686 & 23 \\
\hline 24 & Over 3000 & & & 1,431,347 & 1,431,347 & \$ & 0.16030 & \$ & 229,442 & 24 \\
\hline 25 & Total Core General Gas Service & & 19,078 & 6,033,712 & 6,033,712 & & & \$ & 3,148,001 & 25 \\
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NORTHERN CALIFORNIA RATE JURISDICTION
CALCULATION OF PROPOSED MARGIN AND RATES BY CLASS POST TEST YEAR TWELVE
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\hline \multirow[t]{3}{*}{Line No.} & \multirow[t]{3}{*}{Description} & \multirow[t]{3}{*}{Schedule No.} & \multicolumn{3}{|l|}{Test Year Billing Units} & \multicolumn{4}{|l|}{\multirow[t]{2}{*}{Proposed Margin}} & \multirow[t]{3}{*}{\begin{tabular}{l}
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No.
\end{tabular}} \\
\hline & & & \multirow[t]{2}{*}{Number of Bills} & \multicolumn{2}{|l|}{Volumes} & & & & & \\
\hline & & & & Transport & Sales & \multicolumn{2}{|l|}{Rates} & \multicolumn{2}{|l|}{Revenues} & \\
\hline & (a) & (b) & (c) & (d) & (e) & & (f) & & (g) & \\
\hline \multirow[t]{3}{*}{26} & Core Natural Gas Service for Motor Vehicles & GN-50 & & & & & & & & \\
\hline & Basic Service Charge & & 36 & & & \$ & 25.00 & \$ & 900 & 26 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 27 & All Usage & & & 181,069 & 181,069 & \$ & 0.03985 & \$ & 7,216 & 27 \\
\hline \multirow[t]{2}{*}{28} & Total Core Natural Gas Service for Motor Vehicles & & 36 & 181,069 & 181,069 & & & \$ & 8,116 & 28 \\
\hline & Core Internal Combustion Engine Gas Service & GN-60 & & & & & & & & \\
\hline \multirow[t]{2}{*}{29} & Basic Service Charge & & 24 & & & \$ & 25.00 & \$ & 600 & 29 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 30 & All Usage & & & 202 & 202 & \$ & 1.58144 & \$ & 319 & 30 \\
\hline \multirow[t]{2}{*}{31} & Total Core Internal Combustion Engine Gas Service & & 24 & 202 & 202 & & & \$ & 919 & 31 \\
\hline & Core Small Electric Power Generation Gas Service & GN-66 & & & & & & & & \\
\hline \multirow[t]{2}{*}{32} & Basic Service Charge & & 0 & & & \$ & 25.00 & \$ & 0 & 32 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 33 & All Usage & & & 0 & 0 & \$ & 1.58144 & \$ & 0 & 33 \\
\hline \multirow[t]{2}{*}{34} & Total Core Small Electric Power Generation Gas Service & & 0 & 0 & 0 & & & \$ & 0 & 34 \\
\hline & Noncore General Gas Transportation Service & GN-70 & & & & & & & & \\
\hline 35 & Basic Service Charge & & 408 & & & \$ & 100.00 & \$ & 40,800 & 35 \\
\hline \multirow[t]{2}{*}{36} & Transportation Service Charge & & 420 & & & \$ & 780.00 & \$ & 318,240 & 36 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 37 & All Usage & & & 989,670 & 0 & \$ & 0.24020 & \$ & 237,720 & 37 \\
\hline 38 & Total Noncore General Gas Transportation Service & & 408 & 989,670 & 0 & & & \$ & 596,760 & 38 \\
\hline 39 & Total All Schedules & & 336,145 & 27,256,165 & 26,266,495 & & & & ,313,994 & 39 \\
\hline 40 & Special Contract Gas Service & G-T & & & & & & \$ & 0 & 40 \\
\hline 40 & Other Operating Revenues & & & & & & & \$ & 179,664 & 40 \\
\hline 41 & Total Operating Revenue & & & & & & & & ,493,658 & 41 \\
\hline 42 & Total Revenue Requirement & & & & & & & & ,493,658 & 42 \\
\hline 43 & Over/Under Recovery & & & & & & & \$ & (0) & 43 \\
\hline
\end{tabular}
CALCULATION OF PROPOSED MARGIN AND RATES BY CLASS POST TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2024

NORTHERN CALIFORNIA RATE JURISDICTION
CALCULATION OF PROPOSED MARGIN AND RATES BY CLASS POST TEST YEAR TWELVE
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Line No.} & \multirow[t]{3}{*}{Description} & \multirow[t]{3}{*}{Schedule No.} & \multicolumn{3}{|l|}{Test Year Billing Units} & \multicolumn{4}{|l|}{\multirow[t]{2}{*}{Proposed Margin}} & \multirow[t]{3}{*}{Line No.} \\
\hline & & & \multirow[t]{2}{*}{Number of Bills} & \multicolumn{2}{|l|}{Volumes} & & & & & \\
\hline & & & & Transport & Sales & \multicolumn{2}{|l|}{Rates} & \multicolumn{2}{|l|}{Revenues} & \\
\hline \multirow[t]{4}{*}{26} & (a) & (b) & (c) & (d) & (e) & & (f) & & (g) & \\
\hline & Core Natural Gas Service for Motor Vehicles & GN-50 & & & & & & & & \\
\hline & Basic Service Charge & & 36 & & & \$ & 25.00 & \$ & 900 & 26 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 27 & All Usage & & & 181,069 & 181,069 & \$ & 0.04900 & \$ & 8,873 & 27 \\
\hline 28 & Total Core Natural Gas Service for Motor Vehicles & & 36 & 181,069 & 181,069 & & & \$ & 9,773 & 28 \\
\hline \multirow[t]{3}{*}{29} & Core Internal Combustion Engine Gas Service & GN-60 & & & & & & & & \\
\hline & Basic Service Charge & & 24 & & & \$ & 25.00 & \$ & 600 & 29 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 30 & All Usage & & & 202 & 202 & \$ & 2.51058 & \$ & 507 & 30 \\
\hline 31 & Total Core Internal Combustion Engine Gas Service & & 24 & 202 & 202 & & & \$ & 1,107 & 31 \\
\hline \multirow[t]{3}{*}{32} & Core Small Electric Power Generation Gas Service & GN-66 & & & & & & & & \\
\hline & Basic Service Charge & & 0 & & & \$ & 25.00 & \$ & 0 & 32 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 33 & All Usage & & & 0 & 0 & \$ & 2.51058 & \$ & 0 & 33 \\
\hline \multirow[t]{2}{*}{34} & Total Core Small Electric Power Generation Gas Service & & 0 & 0 & 0 & & & \$ & 0 & 34 \\
\hline & Noncore General Gas Transportation Service & GN-70 & & & & & & & & \\
\hline 35 & Basic Service Charge & & 408 & & & \$ & 100.00 & \$ & 40,800 & 35 \\
\hline \multirow[t]{2}{*}{36} & Transportation Service Charge & & 420 & & & \$ & 780.00 & \$ & 318,240 & 36 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 37 & All Usage & & & 989,670 & 0 & \$ & 0.36329 & \$ & 359,535 & 37 \\
\hline 38 & Total Noncore General Gas Transportation Service & & 408 & 989,670 & 0 & & & \$ & 718,575 & 38 \\
\hline 39 & Total All Schedules & & 336,145 & 27,256,165 & 26,266,495 & & & & ,889,552 & 39 \\
\hline 40 & Other Operating Revenues & & & & & & & \$ & 216,339 & 40 \\
\hline 41 & Total Operating Revenue & & & & & & & & ,105,891 & 41 \\
\hline 42 & Total Revenue Requirement & & & & & & & & ,105,891 & 42 \\
\hline 43 & Over/Under Recovery & & & & & & & \$ & (1) & 43 \\
\hline
\end{tabular}
CALCULATION OF PROPOSED MARGIN AND RATES BY CLASS POST TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2025
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{3}{*}{Line No.} & \multirow[t]{3}{*}{Description} & \multirow[t]{3}{*}{Schedule No.} & \multicolumn{3}{|l|}{Test Year Billing Units} & \multicolumn{4}{|l|}{\multirow[t]{2}{*}{Proposed Margin}} & \multirow[t]{3}{*}{Line No.} \\
\hline & & & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Number of } \\
\text { Bills } \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{Volumes} & & & & & \\
\hline & & & & Transport & Sales & \multicolumn{2}{|l|}{Rates} & \multicolumn{2}{|l|}{Revenues} & \\
\hline & (a) & (b) & (c) & (d) & (e) & & (f) & & (g) & \\
\hline \multirow[t]{3}{*}{1} & Primary Residential Gas Service & GN-10/ & & & & & & & & \\
\hline & Basic Service Charge & GN-12 & 197,270 & & & \$ & 5.75 & & 1,134,303 & 1 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 2 & Baseline Quantities & & & 9,050,994 & 9,050,994 & \$ & 1.47192 & & 13,322,319 & 2 \\
\hline 3 & Tier II & & & 4,006,522 & 4,006,522 & \$ & 1.59715 & & 6,399,008 & 3 \\
\hline \multirow[t]{2}{*}{4} & Total Primary Residential Gas Service & & 197,270 & 13,057,516 & 13,057,516 & & & & 20,855,630 & 4 \\
\hline & Secondary Residential Gas Service & GN-15 & & & & & & & & \\
\hline \multirow[t]{2}{*}{5} & Basic Service Charge & & 119,305 & & & \$ & 6.00 & \$ & 715,830 & 5 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 6 & All Usage & & & 6,982,234 & 6,982,234 & \$ & 1.77585 & & 12,399,397 & 6 \\
\hline 7 & Total Secondary Residential Gas Service & & 119,305 & 6,982,234 & 6,982,234 & & & & 13,115,227 & 7 \\
\hline \multirow[t]{2}{*}{8} & Total Residential Gas Service & & 316,575 & 20,039,750 & 20,039,750 & & & & 33,970,857 & 8 \\
\hline & Multi-Family Master Metered Gas Service & GN-20 & & & & & & & & \\
\hline \multirow[t]{2}{*}{9} & Basic Service Charge & & 24 & & & \$ & 25.00 & \$ & 600 & 9 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 10 & Baseline Quantities & & & 11,606 & 11,606 & \$ & 1.47192 & \$ & 17,083 & 10 \\
\hline 11 & Tier II & & & 156 & 156 & \$ & 1.59715 & \$ & 249 & 11 \\
\hline \multirow[t]{2}{*}{12} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & & \$ & 17,932 & 12 \\
\hline & Multi-Family Master Metered Gas Service - Submetered & GN-25 & & & & & & & & \\
\hline 13 & Basic Service Charge & & 0 & & & \$ & 25.00 & \$ & 0 & 13 \\
\hline \multirow[t]{2}{*}{14} & Submeter Discount & & 0 & & & \$ & (9.58) & \$ & 0 & 14 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 15 & Baseline Quantities & & & 0 & 0 & \$ & 1.47192 & \$ & 0 & 15 \\
\hline 16 & Tier II & & & 0 & 0 & \$ & 1.59715 & \$ & 0 & 16 \\
\hline 17 & Total Muti- Fam Sub & & 0 & 0 & 0 & & & \$ & 0 & 17 \\
\hline \multirow[t]{2}{*}{18} & Total Multi-Family Master Metered Gas Service & & 24 & 11,762 & 11,762 & & & \$ & 17,932 & 18 \\
\hline & Core General Gas Service & GN-35/ & & & & & & & & \\
\hline 19 & Basic Service Charge & GN-40 & 19,078 & & & \$ & 11.00 & \$ & 209,858 & 19 \\
\hline \multirow[t]{2}{*}{20} & Transportation Service Charge & & 12 & & & \$ & 780.00 & \$ & 9,360 & 20 \\
\hline & Commodity Charge & & & & & & & & & \\
\hline 21 & First 100 & & & 1,011,005 & 1,011,005 & \$ & 1.20489 & \$ & 1,218,151 & 21 \\
\hline 22 & Next 500 & & & 1,901,594 & 1,901,594 & \$ & 0.89420 & \$ & 1,700,407 & 22 \\
\hline 23 & Next 2400 & & & 1,689,766 & 1,689,766 & \$ & 0.63029 & \$ & 1,065,040 & 23 \\
\hline 24 & Over 3000 & & & 1,431,347 & 1,431,347 & \$ & 0.23656 & \$ & 338,604 & 24 \\
\hline 25 & Total Core General Gas Service & & 19,078 & 6,033,712 & 6,033,712 & & & & 4,541,420 & 25 \\
\hline
\end{tabular}
CALCULATION OF PROPOSED MARGIN AND RATES BY CLASS POST TEST YEAR TWELVE MONTHS ENDED DECEMBER 31, 2025


CHAPTER 23

\section*{Proxy Statement}

\section*{Company Witness: Theodore K. Wood}


\section*{Southwest Gas HOLDINGS}

\section*{2019 Proxy Statement}

Notice of 2019 Annual Meeting of Shareholders To Be Held on May 2, 2019

\section*{Southwest Gas} holdings

Dear Shareholder:

You are cordially invited to the Annual Meeting of Shareholders of Southwest Gas Holdings, Inc. scheduled to be held on Thursday, May 2, 2019, at Cili Restaurant at Bali Mai Golf Club, 5160 Las Vegas Blvd. South, Las Vegas, Nevada 89119, commencing at 3:00 p.m. PDT. Your Board of Directors looks forward to greeting personally those shareholders able to attend.

The Notice of Annual Meeting of Shareholders and the Proxy Statement contain details of the business to be conducted at the Annual Meeting. Your Board of Directors asks you to support the director nominees and to follow its recommendations with respect to the other proposals set forth in the Proxy Statement, which include increasing the authorized shares of Company common stock and approving the Company's reincorporation from California to Delaware.

It is important that your shares are represented and voted at the meeting regardless of the number of shares you own and whether or not you plan to attend. Accordingly, we request you vote, as instructed in the Notice of Internet Availability of Proxy Materials or proxy card, via the internet, by telephone or on the proxy card, as promptly as possible. If you received only a notice in the mail or by email, you may also request a paper proxy card to submit your vote by mail, if you prefer. However, we encourage you to vote via the internet or by telephone because it is more convenient, conserves natural resources and reduces printing costs and postage fees.

Your interest and participation in the affairs of our company are greatly appreciated.
Sincerely yours,


John P. Hester President and Chief Executive Officer

\section*{NOTICE OF ANNUAL MEETING OF SHAREHOLDERS}

March 22, 2019
NOTICE IS HEREBY GIVEN that the Annual Meeting of Shareholders of Southwest Gas Holdings, Inc. ("we," "us" or the "Company") will be held on Thursday, May 2, 2019, at 3:00 p.m. PDT, at Cili Restaurant at Bali Hai Golf Club, 5160 Las Vegas Blvd. South, Las Vegas, Nevada 89119, for the following purposes:
(1) To elect eleven directors of the Company;
(2) To consider and act upon a proposal to amend the Articles of Incorporation of the Company to increase the authorized shares of Common Stock from 60,000,000 to 120,000,000 shares;
(3) To consider and act upon a proposal to approve the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary;
(4) To approve, on a non-binding advisory basis, the Company's executive compensation;
(5) To ratify the selection of PricewaterhouseCoopers LLP as the independent registered public accounting firm for the Company for fiscal year 2019;
(6) To approve the adjournment of the Annual Meeting, if necessary, to solicit additional proxies in the event that there are not sufficient votes at the time of the Annual Meeting to approve Proposal 2 or Proposal 3; and
(7) To transact such other business as may properly come before the meeting or any adjournment thereof.

The Board of Directors of the Company established March 5, 2019 as the record date for the determination of shareholders entitled to vote at the Annual Meeting and to receive notice thereof.

Please review the proxy statement and vote, at your earliest convenience, using any of the following methods:
즈․ Call the phone number listed on your proxy card to vote BY TELEPHONE
묭 Visit the website listed on your proxy card to vote VIA THE INTERNET
Sign, date and return your proxy card in the enclosed postage-paid envelope to vote BY MAIL
(m) Attend the meeting to vote IN PERSON

Your vote is very important. Please submit your proxy even if you plan to attend the Annual Meeting.

\section*{By Order of the Board of Directors}


\author{
Karen S. Haller
}

Executive Vice President/Chief Legal and
Administrative Officer and Corporate Secretary

\section*{Important Notice Regarding the Availability of Proxy Materials for the Shareholder Meeting to be held on}

May 2, 2019: Pursuant to rules promulgated by the Securities and Exchange Commission ("SEC"), we have elected to provide access to our proxy materials by notifying you of the availability of our proxy materials on the internet. On or about March 22, 2019, an important Notice Regarding the Availability of Proxy Materials (the "Notice of Internet Availability") will be sent to our shareholders of record, and a paper copy of the proxy materials will be sent to employee investment plan participants and those shareholders of record who have requested a paper copy. Brokers and other nominees who hold shares on behalf of beneficial owners will be sending their own similar notice regarding availability of proxy materials. In accordance with SEC rules, you may access our proxy materials and 2018 Annual Report to Shareholders at www.proxydocs.com/swx or www.swgasholdings.com/proxymaterials, which provide for anonymous access. The Notice of Internet Availability also includes instructions for shareholders to request, at no charge, a printed copy of the proxy materials.Page
Invitation to 2019 Annual Meeting of Shareholders
Notice of Annual Meeting of Shareholders
Location Map for 2019 Annual Meeting of Shareholders ..... M-1
Proxy Statement ..... 1
General Information ..... 1
Governance of the Company ..... 6
Board of Directors ..... 6
Board Leadership Structure ..... 6
Risk Oversight ..... 7
Board and Management Approach to Sustainability ..... 7
Committees of the Board ..... 8
Selection of Directors ..... 9
Board Evaluation and Director Succession Planning ..... 10
Majority Voting Policy ..... 10
Transactions with Related Persons ..... 11
Directors and Officers Share Ownership Guidelines ..... 11
Pledging, Hedging and Other Transactions in Company Securities ..... 12
Compensation Committee Interlocks and Insider Participation ..... 12
Director Attendance at Annual Meetings ..... 12
Communications with Directors ..... 12
Securities Ownership by Directors, Director Nominees, Executive Officers, and Certain Beneficial Owners ..... 13
Section 16(a) Beneficial Ownership Reporting Compliance ..... 14
Proposal 1 - Election of Directors ..... 15
General ..... 15
Vote Required ..... 15
Names, Qualifications and Reasons for Selection of Nominees ..... 15
Proposal 2 - Approval of the Amendment to Articles of Incorporation to Increase
Authorized Shares of Common Stock ..... 21
General ..... 21
Vote Required ..... 21
Proposal 3 - Approval of Reincorporation of the Company from California to Delaware ..... 22
General ..... 22
General Background and Principal Reasons for Reincorporation ..... 22
Possible Negative Consequences of Reincorporation ..... 24
Mechanics and Consequences of Reincorporation ..... 25
Effectiveness of Reincorporation ..... 26
Significant Differences Between theCharters and Bylaws of Southwest GasCalifornia and Southwest Gas Delawareand Between the Corporate Laws ofCalifornia and Delaware27
Page
Interest of the Company's Directors and Executive Officers in the Reincorporation ..... 33
Certain U.S. Federal Income Tax Consequences ..... 33
Vote Required ..... 34
Executive Compensation ..... 35
Compensation Discussion and Analysis ..... 35
Executive Summary ..... 35
Compensation Program Objectives, Key Considerations and Principles ..... 37
Compensation Program Administration ..... 38
How We Determine Amounts Paid For Each Element of Compensation ..... 39
Consideration of 2018 Say-on-Pay Vote ..... 40
Details of Compensation Program ..... 40
Analysis of Risk in Company Executive Compensation Policies ..... 49
Deductibility of Compensation ..... 49
Compensation Committee Report ..... 50
Executive Compensation Tables ..... 51
Summary Compensation Table (2018, 2017 and 2016) ..... 51
Grants of Plan-Based Awards (2018) ..... 53
Outstanding Equity Awards at Fiscal Year-End 2018 ..... 54
Stock Vested During 2018 ..... 55
Pension Benefits ..... 56
Nonqualified Deferred Compensation (2018) ..... 57
Post-Termination Benefits ..... 57
Pay Ratio Disclosure ..... 60
Director Compensation ..... 62
2018 Director Compensation Table ..... 62
Director Compensation Narrative ..... 62
Proposal 4 - Advisory Vote To Approve the Company's Executive Compensation ..... 64
Audit Committee Information ..... 65
Proposal 5 - Selection of Independent
Registered Public Accounting Firm ..... 65
Audit Committee Report ..... 67
Proposal 6 - Approval of Adjournment of the Annual Meeting, if Necessary, to Solicit Additional Proxies ..... 68
Submission of Shareholder Proposals ..... 69
Other Matters to Come Before the Meeting ..... 69
Appendix A - Merger Agreement ..... A-1
Appendix B - Certificate of Incorporation ..... B-1
Appendix C - Bylaws ..... C-1

\section*{ANNUAL MEETING OF SHAREHOLDERS}

Cili Restaurant at Bali Hai Golf Club
5160 Las Vegas Blvd. South
Las Vegas, NV 89119

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\section*{Southwest Gas}
holdings

\section*{PROXY STATEMENT}

\section*{ANNUAL MEETING OF SHAREHOLDERS}

To Be Held on May 2, 2019

\section*{GENERAL INFORMATION}

We are providing these proxy materials to you in connection with the solicitation of proxies by the Board of Directors (the "Board") of Southwest Gas Holdings, Inc. ("we," "us," or the "Company") for the 2019 Annual Meeting of Shareholders and for any adjournment or postponement of the Annual Meeting. The Annual Meeting will be held on Thursday, May 2, 2019, at 3:00 p.m. PDT, at Cili Restaurant at Bali Hai Golf Club, 5160 Las Vegas Blvd. South, Las Vegas, Nevada 89119.

We are sending a Notice of Internet Availability of Proxy Materials ("Notice") and making this Proxy Statement, a form of Proxy Card and our 2018 Annual Report to Shareholders available to shareholders on our website at www.swgasholdings.com/proxymaterials on or about March 22, 2019. We also will be mailing these materials to certain shareholders and to those shareholders who request paper or e-mail copies of the proxy materials on or about March 22, 2019.

\section*{What is the purpose of the Annual Meeting?}

At the Annual Meeting, shareholders will act upon the matters outlined in the Notice of Annual Meeting of Shareholders and described in these materials, including:
- The election of eleven directors of the Company;
- To approve an increase in the authorized shares of Company Common Stock from 60,000,000 to 120,000,000 shares;
- The approval of the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary;
- The approval, in a non-binding advisory vote, of the Company's executive compensation;
- The ratification of the selection of PricewaterhouseCoopers LLP as the independent registered public accounting firm for the Company for fiscal year 2019;
- To approve the adjournment of the Annual Meeting, if necessary, to solicit additional proxies in the event that there are not sufficient votes at the time of the Annual Meeting to approve Proposal 2 or Proposal 3; and
- The transaction of other business, if properly presented at the meeting.

\section*{Who is entitled to vote at the Annual Meeting?}

Only shareholders of record at the close of business on March 5, 2019, the record date for the Annual Meeting, are entitled to receive notice of and to vote at the meeting. If you were a shareholder of record on that date, you are entitled to vote all of the shares that you held on that date at the meeting, or any adjournment or postponement of the meeting.

If you wish to vote in person at the Annual Meeting, you must provide proof of identification, e.g., driver's license, state picture identification or passport.

\section*{How many votes do I have?}

You have one vote for each share of the Company's common stock ("Common Stock") you owned as of the record date for the Annual Meeting.

If your shares are registered directly in your name, you are the holder of record of those shares and can vote your shares either in person at the Annual Meeting or by proxy whether or not you attend the meeting. To vote by proxy, you must either:
- Vote over the internet at www.proxypush.com/swx by following the instructions provided in the Notice or Proxy Card;
- Vote by telephone by calling toll-free 1-866-883-3382 on a touch-tone telephone and following the instructions as prompted; or
- Request and complete a Proxy Card, sign it and return it in the postage-paid envelope that will be provided to you. The Notice has instructions on how to request a Proxy Card if you did not receive printed materials.

If you hold your shares in a brokerage account or through a bank or other holder of record, you are the beneficial owner of the shares, and the shares are held in "street name." Your broker, bank or other holder of record (collectively referred to as "broker") is sending these proxy materials to you. As the beneficial owner, you have the right to direct your broker how to vote by following the instructions provided by your broker or to vote in person at the Annual Meeting. Shares held in street name may be voted in person at the Annual Meeting only if the shareholder obtains a legal proxy from the broker that holds the shares giving the shareholder the right to vote the shares.

If you hold your shares indirectly in the Southwest Gas Corporation Employees' Investment Plan (the "EIP"), you have the right to direct the EIP trustee how to vote your shares by following the instructions from the EIP trustee accompanying the Proxy Statement. If you do not direct the EIP trustee how to vote your shares, then the EIP trustee will vote your shares in the same proportion as the shares for which timely instructions were received from other EIP participants.

\section*{Can I revoke or change my vote?}

Yes, a record holder can revoke or change a vote at any time prior to the voting of shares at the Annual Meeting by (a) casting a new vote by telephone or over the internet; (b) sending a new Proxy Card with a later date; (c) sending a written notice of revocation that is received on or prior to May 1, 2019, by mail to EQ Shareowner Services, Southwest Gas Holdings, Inc., P.O. Box 64945, Saint Paul, MN 55164-0945; or (d) voting in person at the Annual Meeting. If a broker, bank, trustee or other nominee holds your shares, you must contact them in order to find out how to change your vote.

\section*{What are the Board's recommendations?}

The Board's recommendations are set forth within the description of each proposal in this Proxy Statement. In summary, the Board recommends a vote:
- FOR the election of the nominated slate of directors (see Proposal 1);
- FOR increasing the authorized shares of Company Common Stock from 60,000,000 to 120,000,000 shares (see Proposal 2);
- FOR the approval of the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary (see Proposal 3);
- FOR the approval, on an advisory basis, of the Company's executive compensation (see Proposal 4);
- FOR the ratification of the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for fiscal year 2019 (see Proposal 5); and
- FOR the approval of the adjournment of the Annual Meeting, if necessary, to solicit additional proxies in the event that there are not sufficient votes at the time of the Annual Meeting to approve Proposal 2 or Proposal 3 (see Proposal 6).

\section*{How many votes must be present to hold the Annual Meeting?}

In order to conduct business at the Annual Meeting, the holders of a majority of the shares of Common Stock entitled to vote must be represented in person or by proxy at the meeting. This is called a quorum. As of the close of business on the record date, \(53,108,242\) shares of Common Stock were outstanding. Therefore, the presence, in person or by proxy, of the holders of at least \(26,554,122\) shares of Common Stock will be required to establish a quorum at the Annual Meeting. Proxies received but marked as abstentions and broker non-votes will be included in the calculation of the votes considered to be present at the meeting.

\section*{2 Southwest Gas Holdings 2019 Notice and Proxy}

A "broker non-vote" occurs when a broker lacks discretionary authority to vote on a "non-routine" proposal and a beneficial owner fails to give the broker voting instructions on that matter. The rules of the New York Stock Exchange (the "NYSE") determine whether matters presented at the Annual Meeting are "routine" or "non-routine" in nature. The election of directors is considered a "non-routine" matter. Similarly, the proposals to approve the Company's reincorporation from California to Delaware, to approve the Company's executive compensation (on a non-binding, advisory basis) and to approve adjournment of the Annual Meeting are considered "non-routine" matters. Therefore, beneficial owners who hold their shares in street name must provide voting instructions to their brokers in order for their broker to vote their shares on these matters. The increase in authorized shares of Company Common Stock and the ratification of the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for fiscal year 2019 are each considered a "routine" matter, and brokers will have discretionary authority to vote on these matters without any instructions from the beneficial owners.

\section*{What vote is required to approve each Proposal?}

The eleven nominees for director who receive the highest number of votes "FOR" their election will be elected as directors. This is called a "plurality vote". However, our Board has adopted a Majority Voting Policy, which is reflected in our Corporate Governance Guidelines. Pursuant to this policy, any director who receives a greater number of votes "WITHHELD" from his or her election than votes "FOR" his or her election must promptly submit his or her resignation to the Board following the certification of the election results. For more details of our majority voting policy, see "GOVERNANCE OF THE COMPANY—Majority Voting Policy" below.

The affirmative vote of a majority of the shares outstanding on the record date (March 5,2019) is necessary to approve the increase in the authorized number of shares of Company Common Stock to \(120,000,000\) shares and the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary.

The affirmative vote of a majority of shares of Common Stock represented and voting at a duly held Annual Meeting at which a quorum is present (which shares of Common Stock voting affirmatively also constitute at least a majority of the required quorum) is necessary to ratify PricewaterhouseCoopers LLP's selection as the independent registered public accounting firm for the Company for fiscal year 2019; to approve, on an advisory basis, the Company's executive compensation; and to approve the adjournment of the Annual Meeting, if necessary, to solicit additional proxies. Although the result of the vote to approve executive compensation is non-binding, the Board will consider the outcome of the vote when making future executive compensation decisions.

\section*{How are my votes counted?}
" Election of Directors: You may vote "FOR all nominees (except as marked)" or "WITHHELD from all nominees." If you mark "FOR all nominees (except as marked)," your votes will be counted for all of the director nominees you do not mark. Abstentions and broker non-votes will not be counted as votes cast and will, therefore, have no effect on the election of directors.
" Approval to Increase Authorized Shares of Company Common Stock: You may vote "FOR," "AGAINST," or "ABSTAIN" with respect to the increase of authorized shares of Company Common Stock. If you "ABSTAIN" or if your shares are treated as a broker non-vote, your votes will be counted for purposes of establishing a quorum but will be treated as voting "AGAINST" approval of the proposal.
" Approval of the Company's Reincorporation from California to Delaware: You may vote "FOR," "AGAINST," or "ABSTAIN" with respect to the proposal to approve the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary. If you "ABSTAIN" or if your shares are treated as a broker non-vote, your votes will be counted for purposes of establishing a quorum but will be treated as voting "AGAINST" approval of the proposal.
" Advisory Vote to Approve Executive Compensation: You may vote "FOR," "AGAINST" or "ABSTAIN" with respect to the advisory vote to approve the Company's executive compensation. The result of this vote is non-binding. However, the Board will consider the outcome of the vote when making future executive compensation decisions. Abstentions and broker non-votes will not be counted as votes cast and will, therefore, have no effect on the approval of this proposal.
" Ratification of the selection of PricewaterhouseCoopers LLP: You may vote "FOR," "AGAINST" or "ABSTAIN" with respect to the ratification of the selection of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for fiscal year 2019. Abstentions and broker non-votes will not be counted as votes cast and will, therefore, have no effect on the outcome of this proposal.
- Approval of Adjournment of the Annual Meeting, if Necessary, to Solicit Additional Proxies: You may vote "FOR," "AGAINST" or "ABSTAIN" with respect to the approval of adjournment of the Annual Meeting, if necessary, to solicit additional proxies. Abstentions and broker non-votes will not be counted as votes cast and will, therefore, have no effect on the approval of this proposal.

We will appoint an inspector of election in advance of the meeting to tabulate votes, to ascertain whether a quorum is present, and to determine the voting results on all matters presented to Company shareholders.

\section*{What if I do not vote for any or all of the matters listed on my Proxy Card?}

As a shareholder of record, if you return a signed Proxy Card without indicating your vote on any or all of the matters to be considered at the Annual Meeting, your shares will be voted "FOR" the director nominees listed on the Proxy Card, "FOR" approval of the amendment to the Company's Articles of Incorporation to increase the authorized number of shares of the Company's Common Stock, "FOR" approval of the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary, "FOR" the advisory vote to approve executive compensation, "FOR" the ratification of PricewaterhouseCoopers LLP as the Company's independent registered public accounting firm for fiscal year 2019, and "FOR" the approval of the adjournment of the Annual Meeting, if you have not voted otherwise on a particular proposal. With respect to any other matter that properly comes before the Annual Meeting, Michael J. Melarkey and José A. Cárdenas, the proxies designated by the Board and identified in the accompanying Proxy Card, will vote all proxies granted to them at their discretion.

\section*{Can the shares that I hold in a brokerage account or the EIP be voted if I do not instruct my broker or the EIP trustee?}
- Shares held in street name: If you do not instruct your broker to vote your shares of Common Stock held in street name, your broker has the discretion to vote your shares on all routine matters scheduled to come before the Annual Meeting. For "non-routine" matters, your broker does not have discretion to vote your shares and, if you do not give your broker voting instructions, your shares will be considered broker non-votes. The election of directors, the proposal to approve the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary, the advisory vote to approve executive compensation and the proposal to approve adjournment of the Annual Meeting to solicit additional proxies are considered "non-routine" matters, and in order to vote on these matters, you will need to instruct your broker on how to vote your shares. The increase in authorized shares of Company Common Stock and the ratification of the selection of the Company's independent registered public accounting firm are considered "routine," and your broker will have the discretion to vote your shares unless you provide voting instructions.
- Shares held in the EIP: If you do not provide instructions to the EIP trustee for the shares of Common Stock that you hold in the EIP, then the EIP trustee will vote your shares in the same proportion as the shares for which timely instructions were received from other EIP participants.

\section*{Are proxy materials available on the internet?}

Complete copies of the Notice of 2019 Annual Meeting of Shareholders, this Proxy Statement and the 2018 Annual Report to Shareholders are available at www.swgasholdings.com/proxymaterials.

\section*{Why did I receive a Notice instead of a full set of the proxy materials?}

The Securities and Exchange Commission ("SEC") rules allow us to furnish our proxy materials via the internet. Accordingly, we sent to the majority of our shareholders a Notice for this year's Annual Meeting of Shareholders. Instructions on how to access the proxy materials via the internet or to request a paper or e-mail copy can be found in the Notice. In addition, shareholders may request to receive proxy materials in printed form by mail or e-mail on an ongoing basis by submitting a request to us at www.investorelections.com/swx. A shareholder's election to receive proxy materials by mail or e-mail will remain in effect until the shareholder terminates it. If multiple shareholders reside at the same address, each shareholder will receive their own proxy materials, unless the shareholder instructs otherwise.

If the Annual Meeting is postponed or adjourned, your proxy will still be valid and may be voted at the postponed or adjourned meeting. You will still be able to change or revoke your proxy until it is voted.

\section*{Who is soliciting my proxy?}

Your proxy is being solicited by the Board, and the Company will bear the entire cost of the proxy solicitation. Morrow Sodali LLC ("Morrow"), 470 West Ave, Stamford, CT 06902 has been employed to assist in obtaining proxies from certain shareholders at an estimated cost of \(\$ 9,000\), plus certain expenses. Arrangements have also been made with brokerage houses and other custodians, nominees and fiduciaries to send proxies and proxy materials to you, if your shares are held in "street name." Morrow will reimburse them for their expenses in providing the materials to you on our behalf. In addition, solicitation by our directors, officers or employees in person or by telephone, e-mail or facsimile may supplement solicitation of proxies. No additional compensation will be paid for such services.

\section*{GOVERNANCE OF THE COMPANY}

\section*{Board of Directors}

Under the provisions of the California Corporations Code and the Company's Bylaws, the Company's business, property and affairs are managed by or under the direction of the Board. The Board is kept informed of the Company's business through discussions with the Chief Executive Officer and other officers and by reviewing reports and other materials provided to it by management at the Board and committee meetings.

\section*{Independence}

The Board determines the independence of our directors by applying the independence principles and standards established by the New York Stock Exchange ("NYSE") and included in our Corporate Governance Guidelines. Our guidelines require that the Board be comprised of a majority of independent directors, consistent with the NYSE rules. The Board determined that directors Boughner, Cárdenas, Chestnut, Comer, Hanneman, Lewis-Raymond, Mariucci, Melarkey, Thoman, Thomas and Thornton have no material relationships with the Company and are independent ("Independent Directors"). The Board also determined that all of the members of the Audit, Compensation, and Nominating and Corporate Governance Committees are independent.

In making these determinations, the Board reviewed all transactions or relationships with the Company using a definition of "material relationships" that (i) includes the criteria listed in Section 303A of the listing requirements of the NYSE and (ii) presumes that matters not subject to disclosure pursuant to Item 404 of Regulation S-K of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), and matters above the Item 404 threshold which are authorized by Southwest Gas Corporation's regulatory tariffs, are not "material relationships." The definition of "material relationships" for directors on the Audit Committee also includes the criteria listed in Section 10A(m)(3) of the Exchange Act. The definition of "material relationships" for directors serving on the Compensation Committee also includes the criteria listed in Section 16(b) of the Exchange Act and Section 162(m) of the Internal Revenue Code as it existed prior to the 2017 amendment. The independence criteria used are included in the Company's Corporate Governance Guidelines, which are available on the Company's website at www.swgasholdings.com. The Board based its independence determination primarily on a review of the responses of the directors and officers to questions regarding employment and compensation history, affiliations and family relationships, discussions with directors, and a review of Company payment histories.

In concluding that the directors listed above are independent, the Board reviewed transactions pursuant to which we purchased approximately \(\$ 1.8\) million in datacenter and communications-related products and services in 2018 from Switch, Inc. (NYSE: SWCH) or its subsidiaries ("Switch"). Director Thomas and certain members of his family have an equity interest in Switch, and director Thomas is a director of Switch, Inc. The Nominating and Corporate Governance Committee, excluding director Thomas, has reviewed the Switch transaction annually since 2011 under the Company's policy for related person transactions, taking into account all relevant information, and has determined each year that director Thomas does not have a direct or indirect material interest in the transaction. The principal considerations in this determination are that the relationship with Switch was negotiated on an arm's-length basis in the ordinary course of business, the transaction represents less than 1\% of Switch's annual revenues and director Thomas and his relatives and affiliates hold, collectively, a minority interest in Switch. Additionally, the committee considered the nature and scope of the relationship of director Thomas' family with Switch, which does not involve any relative of director Thomas acting as an officer or employee of Switch or in any similar capacity. The transaction also represents less than \(1 \%\) of our annual operations and maintenance expense. Based on the committee's recommendation and its own review, the Board has determined that director Thomas is an Independent Director.

\section*{Board Meetings}

The Board held five regular meetings in 2018 and an organizational meeting immediately following the 2018 Annual Meeting of Shareholders. Each incumbent director attended more than \(75 \%\) of the Board and committee meetings on which he or she served during 2018. Non-management directors meet in executive session, without management present, at least four times a year, and the Independent Directors are expected to meet at least once a year. These sessions are presided over by Michael J. Melarkey, Chairman of the Board (the "Chair"), who is the current "Presiding Director."

\section*{Board Leadership Structure}

The policy of the Board is that the role of Chair should be separate from that of the Chief Executive Officer. The Chair is elected annually, at the organizational meeting, by the full Board. Every three years or upon a Chair's
resignation, retirement, or failure to be reelected to the Board by shareholders, the Board conducts an in-depth assessment of potential candidates for that position. The Board believes that this leadership structure is the appropriate structure for the Company at this time because it allows the Board to exercise true independent oversight of management. It is the Board's intention to reelect director Melarkey as Chair, subject to his reelection as a director at the Annual Meeting of Shareholders.

The Board believes the structure described above provides strong leadership for our Board, while positioning our Chief Executive Officer as the leader of the Company for our investors, counterparties, employees and other stakeholders. The Board believes that the current structure, which includes an independent Chairman serving as Presiding Director, helps ensure independent oversight over the Company and allows the Chief Executive Officer to focus his energies on management of the Company.

All members of the Board are independent, with the exception of the Chief Executive Officer. A number of the independent Board members are currently serving or have served as directors or as members of senior management of other public companies and large institutions. All of the Board committees are comprised solely of Independent Directors, each with a different Independent Director serving as Chair of the committee. The Board believes that the number of independent experienced directors that make up our Board, along with the independent oversight of the Board by the non-executive Chair, benefits the Company and its shareholders.

The Board recognizes that in the event that circumstances facing the Company change, a different leadership structure may be in the best interests of the Company and its shareholders.

\section*{Risk Oversight}

The entire Board is responsible for reviewing and overseeing the Company's internal risk management processes and policies to help ensure that the Company's corporate strategy is functioning as directed and that necessary steps are taken to foster a culture of risk-aware and risk-adjusted decision making throughout the Company.

Regulation by various state and federal utility regulatory commissions is one of the key risks that the Company's utility subsidiary faces. The limits imposed on Southwest Gas Corporation as a public utility permeate its business operating model (including pricing of services, authorized areas of service and obligations to serve the public). Other risks affecting the Company include risks associated with credit, liquidity, cybersecurity and operational matters and have evolved with changes in the natural gas distribution and utility infrastructure services industries.

The Board receives regular reports from management in areas of material risk to the Company, including credit risk, liquidity risk and operational risk. Credit and liquidity risks are addressed in the review of capital budgets and ongoing capital requirements. Liquidity risks are also addressed in the review of gas supply acquisition and related regulatory cost recovery. Operational risks are addressed in the review of operating budgets, key performance indicators and regulatory compliance requirements, including pipeline safety requirements. Cybersecurity is a priority that is regularly addressed by the Board with the relevant functional leaders of the Company. The full Board receives these reports, as well as regular reports on the Company's enterprise risk management program, from management to help enable it to oversee and manage the Company's risks in these areas. Oversight responsibility rests with the full Board and is not assigned to any of the Board committees.

\section*{Board and Management Approach to Sustainability}

The Company strives to make a positive impact on our employees, customers and the environment, and we are dedicated to improving energy efficiency, protecting the environment, and supporting our communities. We have been implementing sustainable business practices in key aspects of our operations, with a goal of refining these practices and rolling them out to the entire Company over time. For example, in 2019, Southwest Gas Corporation released its Sustainability Report, reporting on the sustainable practices in our utility operations, among other things. In addition to demonstrating our ongoing commitment to sustainable and responsible business practices, the Sustainability Report also highlights our commitment to providing assistance to local communities and customers in Southwest Gas Corporation's service territories.

Please visit our website at www.swgasholdings.com to view our Sustainability Report and future updates that we post as we roll out our sustainable business practices to other aspects of our business. The information on our website is not a part of or incorporated into this proxy statement.

The standing committees of the Board are the Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee. The committees are composed solely of Independent Directors as outlined above. The table below shows the directors who are currently members or chairs of each committee.
\begin{tabular}{lccc} 
Name of Director & \begin{tabular}{c} 
Audit \\
Committee
\end{tabular} & \begin{tabular}{c} 
Compensation \\
Committee
\end{tabular} & \begin{tabular}{c} 
Nominating \\
and \\
Corporate \\
Covernance \\
Committee
\end{tabular} \\
\hline Robert L. Boughner & \(\checkmark\) & & \(\checkmark\) \\
\hline José A. Cárdenas & \(\checkmark\) & & Chairman \\
\hline Thomas E. Chestnut & \(\checkmark\) & Chairman & \(\checkmark\) \\
\hline Stephen C. Comer & \(\checkmark\) & \(\checkmark\) & \\
\hline LeRoy C. Hanneman, Jr. \({ }^{*}\) & & & \\
\hline John P. Hester & \(\checkmark\) & & \(\checkmark\) \\
\hline Jane Lewis-Raymond & & \(\checkmark\) & \(\checkmark\) \\
\hline Anne L. Mariucci & Chairman & \(\checkmark\) & \(\checkmark\) \\
\hline Michael J. Melarkey & \(\checkmark\) & & \\
\hline A. Randall Thoman & \(\checkmark\) & \(\checkmark\) & \(\checkmark\) \\
\hline Thomas A. Thomas & & \(\checkmark\) & \\
\hline Leslie T. Thornton & & & \\
\hline
\end{tabular}
* Mr. Hanneman has attained retirement age, as specified in the Corporate Governance Guidelines, and will retire from Board service immediately prior to the 2019 Annual Meeting.

The Audit Committee, whose functions are discussed here and below under the caption "Audit Committee Information," is a separately designated standing committee established in accordance with Section 3(a)(58)(A) of the Exchange Act. The committee meets periodically with management to consider, among other things, the adequacy of the Company's internal control and financial reporting process. The committee also discusses these matters with the Company's independent registered public accounting firm, internal auditors and Company financial personnel. The Board has determined that directors Comer and Thoman each qualify as an "audit committee financial expert," as the term is defined in Item 407(d)(5)(ii) of Regulation S-K under the Exchange Act. The Audit Committee held five meetings during 2018.

The Compensation Committee is responsible for determining Chief Executive Officer compensation and making recommendations to the Board annually on such matters as directors' fees and benefit programs, executive compensation and benefits, and compensation and benefits for all other Company employees. The committee's responsibilities, as outlined in its charter, can be delegated to subcommittees made up of committee members. The committee receives recommendations from management on the amount and form of executive and director compensation, and the committee has the ability to directly employ consultants to assess the executive compensation program and director compensation, which it routinely does. The committee is also responsible for the "Compensation Committee Report" and related disclosures contained in this Proxy Statement. The Compensation Committee held four meetings during 2018.

The Nominating and Corporate Governance Committee is responsible for making recommendations to the Board regarding nominees to be proposed for election as directors; evaluating the Board's size, composition, organization, processes, practices and committee structures; and developing the criteria for the selection of directors. The committee will consider director candidates suggested by shareholders. The process for selecting directors is addressed in more detail below under the caption "Selection of Directors." The committee is also charged with the responsibility of developing and recommending to the Board corporate governance principles and implementing and monitoring compliance with the Company's Code of Business Conduct and Ethics. The Nominating and Corporate Governance Committee held five meetings during 2018.

The charters for the Audit, Compensation and Nominating and Corporate Governance Committees, the Company's Corporate Governance Guidelines and the Company's Code of Business Conduct and Ethics that applies to all employees, officers and directors are available on the Company's website at www.swgasholdings.com. Print versions of these documents are available to shareholders upon request directed to the Corporate Secretary, Southwest Gas Holdings, Inc., 5241 Spring Mountain Road, Las Vegas, NV 89150.

We believe the Board should be composed of individuals with varied, complementary backgrounds, who possess certain core competencies, some of which may include broad experience in business, finance or administration and familiarity with national and international business matters. Additional factors that will be considered in the selection process include the following:
- Independence from management;
- Diversity, age, education and geographic location;
- Knowledge and business experience;
- Integrity, leadership, reputation and ability to understand the Company's business;
" Existing commitments to other businesses and boards; and
- The current number and competencies of our existing directors.

We define "diversity" in a broad sense, i.e., age, race, color, gender, geographic origin, ethnic background, religion, disability and professional experience. Neither the Nominating and Corporate Governance Committee nor the Board has a policy with regard to the consideration of diversity in identifying director nominees. However, the Nominating and Corporate Governance Committee takes diversity into consideration as it does the other factors listed above in selecting the director nominees for approval by the Board. The Nominating and Corporate Governance Committee does not assign a specific weight to any one factor.

The Nominating and Corporate Governance Committee will consider director candidates suggested by shareholders by applying the criteria for candidates described above and considering the additional information referred to below. Shareholders who would like to suggest a director candidate should write to the Company's Corporate Secretary and include:
- A statement that the writer is a shareholder and is proposing a candidate for consideration as a director nominee;
- The name of and contact information for the candidate;
- A statement of the candidate's business and educational experience;
- Information regarding each of the factors listed above, sufficient to enable the committee to evaluate the candidate;
- A statement detailing any relationship between the candidate and the Company, Company affiliates and any competitor of the Company;
- Detailed information about any relationship or understanding between the proposing shareholder and the candidate;
- Information on the candidate's share ownership in the Company; and
- The candidate's written consent to being named a nominee and serving as a director, if elected.

The Nominating and Corporate Governance Committee has an ongoing program for identifying and evaluating potential director candidates. When seeking a candidate for director, the Nominating and Corporate Governance Committee may solicit suggestions from incumbent directors, management or others. As candidates are identified, their qualifications are reviewed in light of the selection criteria outlined above. Whether any of such candidates are selected depends upon the current director composition, the dynamics of the Board and the ongoing requirements of the Company (see "Board Evaluation and Succession Planning" below).

Shareholders may also nominate a person for election to the Board at an annual meeting by giving written notice to the Company not less than 120 days prior to the first anniversary of the date of the proxy statement for the preceding year's annual meeting, or within 10 days after notice is mailed or public disclosure is made regarding either a change of the annual meeting by more than 30 days or a special meeting at which directors are to be elected. In order to make such a nomination, a shareholder is required to include in the written notice the following:
" As to each person whom the shareholder proposes to nominate for election or reelection as a director, all the information relating to such person that is required to be disclosed in solicitations of proxies for election of directors, or is otherwise required pursuant to Regulation 14A of the Exchange Act;
- Each person's written consent to being named a nominee and serving as a director, if elected;
- The name and address of the proposing shareholder or beneficial owner; and
- The class and number of shares of the Common Stock held directly or indirectly by the proposing shareholder.

All candidates for the Board also may be required to complete a director questionnaire provided by the Company.
The foregoing summary of the Company's shareholder director nomination procedure is not complete and is qualified in its entirety by reference to the full text of the Company's Bylaws that have been publicly filed with the SEC and are available at www.sec.gov.

\section*{Board Evaluation and Director Succession Planning}

Each year, the Board and its committees conduct self-evaluations of their respective performances. These processes are overseen by the Nominating and Corporate Governance Committee and are reviewed annually to ensure that they are effective and that all appropriate feedback is being sought and obtained. As part of the Board's most recent self-evaluation process, the directors considered various topics relating to Board composition, structure, effectiveness and responsibilities, as well as the overall mix of director skills, experience and backgrounds. The Audit Committee, Compensation Committee, and Nominating and Corporate Governance Committee self-evaluation processes are led by their respective committee chairs, as provided in the committee charters. Each committee performance evaluation includes a review of the committee charter to consider the necessity and appropriateness of changes.

Annual evaluations are a key component of the director nomination process and director succession planning. In planning for succession, the Nominating and Corporate Governance Committee and the Board consider the results of Board evaluations, as well as other appropriate information, including the overall mix of tenure and experience of the Board, the types of skills and experience desirable for future Board members and the needs of the Board and its committees at the time. Recent succession planning discussions have focused on the size and composition of the Board, including Board diversity, and anticipated director retirements.

Given the importance of recruiting qualified, independent directors to serve as directors of the Company, the Board believes that it is prudent to conduct an organized search for potential director candidates in order to preserve the high quality of the Board and maintain its diversity of experience. Following the 2016 annual meeting of shareholders, director Cárdenas was named Chairman of the Nominating and Corporate Governance Committee to lead the execution of our succession plans over the course of the next several years. In 2018, the process led to the selection of two new directors, Jane Lewis-Raymond and Leslie T. Thornton, who began Board service on January 1, 2019.

\section*{Majority Voting Policy}

The Company's Corporate Governance Guidelines set forth our majority voting policy for directors, which states that, in an uncontested election, if any director nominee receives a greater number of votes "withheld" from his or her election than votes "FOR" his or her election (a "Majority Withheld Vote"), the director nominee must promptly tender his or her resignation to the Board following certification of the shareholder vote.

The Nominating and Corporate Governance Committee must promptly consider the tendered resignation and make a recommendation to the Board as to whether to accept or reject the tendered resignation, or whether other action should be taken. The Nominating and Corporate Governance Committee in making its recommendation, and the Board in making its decision, may each consider any factors or other information that it considers appropriate and relevant, including, but not limited to:
- the stated reasons, if any, why shareholders withheld their votes and whether they can be cured;
- the director's tenure;
- the director's qualifications;
" the director's past and expected future contributions to the Company; and
- the overall composition of the Board.

The Board will act on the Nominating and Corporate Governance Committee's recommendation within 90 days following certification of the shareholder vote. The Board may accept a director's resignation or reject the resignation. Thereafter, the Company will promptly publicly disclose the Board's decision whether to accept or reject the tendered resignation and its rationale for rejecting the tendered resignation, if applicable.

If the Board accepts a director's resignation, or if a nominee for director is not elected and the nominee is not an incumbent director, then the Board, in its sole discretion, may fill any resulting vacancy or may decrease the size of the Board, in each case pursuant to our Bylaws. If a director's resignation is not accepted by the Board, such director will continue to serve until the next annual meeting and until his or her successor is duly elected, or his or her earlier resignation or removal.

Any director who tenders his or her resignation pursuant to this policy may not participate in the Nominating and Corporate Governance Committee's recommendation or the Board's decision to accept or reject the tendered resignation. If each member of the Nominating and Corporate Governance Committee receives a Majority Withheld Vote at the same election, then the Independent Directors who do not receive a Majority Withheld Vote must appoint another committee to consider any tendered resignations and recommend to the Board whether to accept such resignations.

\section*{10 Southwest Gas Holdings 2019 Notice and Proxy}

Through this policy, the Board seeks to be accountable to all shareholders and to respect the rights of shareholders to express their views through their votes for directors. However, the Board also deems it important to preserve sufficient flexibility to make sound evaluations based on the relevant circumstances in the event of a Majority Withheld Vote against a specific director. For example, the Board may wish to assess whether the sudden resignations of one or more directors would materially impair the effective functioning of the Board. Accordingly, the Board's policy is intended to allow the Board to react to situations that could arise if the resignation of multiple directors would prevent a key committee from achieving a quorum or would otherwise adversely impact the Company.

\section*{Transactions with Related Persons}

The Company has written policies and procedures for the review, approval or ratification of any transaction in which the Company was, is or will be a participant, the amount involved exceeds \$120,000 and any Director or Officer of the Company, any Director nominee, any person who is the beneficial owner of more than 5\% of the Common Stock, or any immediate family members of the foregoing (each, a "Related Person"), had a direct or indirect material interest ("Related Person Transactions"). Under the Corporate Governance Guidelines, prior to entering into a potential Related Person Transaction, including transactions that involve less than \$120,000, the Related Person or applicable business unit leader must notify the General Counsel who will assess whether the transaction is a Related Person Transaction. If the General Counsel is involved in the transaction, the Chair of the Nominating and Corporate Governance Committee will assess the transaction. If it is determined that a transaction is a Related Person Transaction, the details of the transaction will be submitted to the Nominating and Corporate Governance Committee for review.

The Nominating and Corporate Governance Committee will approve and ratify the Related Person Transaction only if the committee determines that the transaction is not inconsistent with the best interests of the Company and may, in its discretion, impose any conditions it deems appropriate on the Company or the Related Person in connection with the Related Person Transaction.

Each transaction with a related person is unique and must be assessed on a case-by-case basis. The Company did not enter into any reportable Related Person transactions in 2018. In determining whether or not a transaction is inconsistent with the best interests of the Company, the Nominating and Corporate Governance Committee considers all of the relevant facts and circumstances available to the committee, including without limitation:
- The related person's interest in the proposed transaction;
- The approximate dollar value of the amount involved in the proposed transaction;
- The approximate dollar value of the amount of the related person's interest in the proposed transaction without regard to the amount of any profit or loss;
- Whether the transaction is proposed to be, or was, undertaken in the ordinary course of business of the Company;
- Whether the transaction is proposed to be, or was, entered into on terms no less favorable to the Company than terms that could have been reached with an unrelated third party;
- The purpose of, and the potential benefits to the Company from, the transaction;
- The impact on a director's independence in the event the related person is a director, an immediate family member of a director or an entity in which a director is a partner, shareholder or executive officer; and
- Any other information regarding the transaction or the related person in the context of the proposed transaction that would be material to investors in light of the circumstances of the particular transaction.

\section*{Directors and Officers Share Ownership Guidelines}

In order to better align the interests of management and the Board with those of all shareholders, the Company has adopted Common Stock ownership guidelines for directors and officers.

Each non-employee director is required to retain at least five times the value of his or her annual cash retainer in Common Stock (or equivalents). Each non-employee director is required to fulfill the requirement within five years of being elected to the Board. All non-employee directors are currently in compliance with these guidelines.

Each Company officer and each officer of Southwest Gas Corporation is required to accumulate Common Stock with a target value equal to a multiple of the officer's base salary, ranging from one times base salary for vice presidents, three times base salary at the senior vice president level and above, and five times base salary for the Chief Executive Officer. If an officer has not yet reached the applicable target ownership requirement, he or she is required to retain a portion of the shares of Common Stock acquired from any stock option exercise or the vesting of restricted stock units or performance shares. The applicable retention rate is \(75 \%\) for the Chief Executive Officer and
\(50 \%\) for all other officers. Qualified shares include Common Stock owned directly by the officer or his or her spouse, Common Stock held by the officer or his or her spouse in the Company's 401(k) or Dividend Reinvestment Plan and restricted stock units which have been granted but are subject to time vesting requirements. Similar to the requirement for Company officers, certain senior officers of Centuri Construction Group, including Centuri's Chief Executive Officer, are required to defer cash compensation into a deferral plan account with returns based on Centuri's financial performance. The target value in 2018 for Centuri's Chief Executive Officer is three times base salary. Beginning in 2019 the target value will be two times base salary. Beginning in 2019, the Centuri Chief Executive Officer will be required to accumulate Company Common Stock with a target value equal to two times base salary.

\section*{Pledging, Hedging and Other Transactions in Company Securities}

Our Insider Trading Policy prohibits directors and executive officers of the Company from pledging Company securities as collateral for a loan. Transactions by directors and executive officers in Company securities involving short sales, puts, calls or other derivative securities, on an exchange or in any other organized market, are prohibited. Directors and executive officers are also prohibited from entering into hedging, monetization transactions or similar arrangements involving Company securities. We believe these prohibitions ensure that levels of stock ownership in accordance with our stock ownership guidelines are effective in aligning each individual's interests with those of our shareholders.

\section*{Compensation Committee Interlocks and Insider Participation}

Board members who served on the Compensation Committee during 2018 were directors Chestnut, Comer, Hanneman, Mariucci, Melarkey, and Thoman. None of these directors has ever been an officer or employee of the Company or any of its subsidiaries. No member of the Compensation Committee had any relationship requiring disclosure under any paragraph of Item 404 of Regulation S-K of the Exchange Act. None of the Company's executive officers served as a director or a member of a compensation committee (or other committee serving an equivalent function) of any other entity, an executive officer of which served as a director of the Company or member of the Compensation Committee during 2018.

\section*{Director Attendance at Annual Meetings}

We strongly support and encourage each member of our Board to attend our annual meeting of shareholders. Last year, all of the director nominees, except directors Lewis-Raymond and Thornton, who were not yet serving as directors, attended the 2018 Annual Meeting of Shareholders.

\section*{Communications with Directors}

Any shareholder and other interested parties who would like to communicate with the Board, the Presiding Director or any individual director can write to:

Southwest Gas Holdings, Inc.
Corporate Secretary
5241 Spring Mountain Road
P.O. Box 98510

Las Vegas, Nevada 89193-8510
Depending on the subject matter, the Corporate Secretary will either:
- Forward the communication to the director or directors to whom it is addressed;
- Attempt to handle the inquiry directly, for example, where it is a request for information about the Company or a stock-related matter; or
- Not forward the communication, if it is primarily commercial in nature, or if it relates to an improper or irrelevant topic.

At each regular Board meeting, management presents a summary of all communications received since the last Board meeting which were not previously forwarded and such communications are made available to all of the directors.

\section*{12 Southwest Gas Holdings 2019 Notice and Proxy}

\section*{Securities Ownership by Directors, Director Nominees, Executive Officers, and Certain Beneficial Owners}

Directors, Director Nominees and Executive Officers. The following table discloses all Common Stock beneficially owned by the Company's directors, the nominees for director and the executive officers of the Company, as of March 5, 2019.
\begin{tabular}{|c|c|c|}
\hline Directors, Nominees \& Executive Officers & No. of Shares of Common Stock Beneficially Owned(1) & Percent of Outstanding Common Stock \\
\hline Robert L. Boughner & 38,270 & * \\
\hline José A. Cárdenas & 20,353 & * \\
\hline Thomas E. Chestnut & 29,023 & * \\
\hline Stephen C. Comer & 30,122 \({ }^{(2)}\) & * \\
\hline LeRoy C. Hanneman, Jr. \({ }^{(8)}\) & 27,672 \({ }^{(3)}\) & * \\
\hline John. P. Hester & 60,909(4)(5) & * \\
\hline Jane Lewis-Raymond & 1,710 & * \\
\hline Anne L. Mariucci & 29,643 & * \\
\hline Michael J. Melarkey & 32,290 & * \\
\hline A. Randall Thoman & 24,416 \({ }^{6}\) ) & * \\
\hline Thomas A. Thomas & 29,770 & * \\
\hline Leslie T. Thornton & 1,710 & * \\
\hline Gregory J. Peterson & 13,115 & * \\
\hline Paul M. Daily & - & * \\
\hline Karen S. Haller & 23,383(5)(7) & * \\
\hline Eric DeBonis & 7,063 & * \\
\hline Other Executive Officers & 69,701 & * \\
\hline All Directors and Executive Officers & 439,150 & 0.83\% \\
\hline
\end{tabular}
* Represents less than \(1 \%\) of the issued and outstanding shares of the Company's Common Stock as of March 5, 2019.
(1) Common Stock holdings listed in this column only include restricted stock units that are vested as of March 5, 2019 or those that are scheduled to vest within 60 days after that date.
(2) The holdings include 5,127 shares over which Mr. Comer has shared voting and investment power with his spouse through a family trust.
(3) The holdings include 4,475 shares over which Mr. Hanneman has shared voting and investment control with his spouse through a family trust.
(4) The holdings include 7,765 shares over which Mr. Hester's spouse has voting and investment control.
(5) Number of shares does not include 28,018 shares held by the Southwest Gas Corporation Foundation, which is a charitable trust. Mr. Hester, Mr. Justin Brown, and Ms. Haller are trustees of the Foundation but disclaim beneficial ownership of the shares held by the foundation.
(6) The holdings include 3,240 shares over which Mr. Thoman has shared voting and investment power with his spouse through a family trust.
(7) The holdings include 996 shares over which Ms. Haller's spouse has voting and investment control.
(8) Mr. Hanneman has attained retirement age, as specified in the Corporate Governance Guidelines, and will retire from Board service immediately prior to the 2019 Annual Meeting and is therefore not a director nominee. The total for Mr. Hanneman includes 23,197 shares that will vest upon his retirement, which will be within 60 days of the record date (March 5, 2019).

Beneficial Owners. The following table discloses all Common Stock beneficially owned by anyone that the Company believes beneficially owns more than \(5 \%\) of the Company's outstanding shares of Common Stock based solely on the Company's review of filings with the SEC pursuant to Section 13(d) or 13(g) of the Exchange Act.
\begin{tabular}{lrr} 
Beneficial Owner & \begin{tabular}{r} 
No. of Shares \\
Beneficially Owned
\end{tabular} & \begin{tabular}{r} 
Percent of Outstanding \\
Common Stock
\end{tabular} \\
\hline BlackRock Inc. \({ }^{(1)}\) & \(6,235,560\) & \(11.74 \%\) \\
55 East 52nd Street & & \\
New York, New York 10055 & \(5,353,726\) & \(10.08 \%\) \\
\hline \begin{tabular}{l} 
The Vanguard Group, Inc. \({ }^{(2)}\) \\
100 Vanguard Blvd. \\
Malvern, Pennsylvania 19355
\end{tabular} & & \\
\hline \begin{tabular}{l} 
T. Rowe Price Associates, Inc. \({ }^{(3)}\) \\
100 E. Pratt Street \\
Baltimore, Maryland 21202
\end{tabular} & \(3,013,031\) & \(5.67 \%\) \\
\hline
\end{tabular}
(1) According to a Schedule 13G/A filed on January 31, 2019, BlackRock Inc. has sole voting power over 6,034,734 shares, no voting power over 200,826 shares and sole dispositive power over all of the shares beneficially owned.
(2) According to a Schedule 13G/A filed on February 11, 2019, The Vanguard Group, Inc. has sole voting power over 49,060 shares, shared dispositive power over 50,533 shares, and sole dispositive power over 5,303,193 of the shares beneficially owned.
(3) According to a Schedule 13G filed on February 14, 2019, T. Rowe Price Associates, Inc. has sole voting power over 555,313 shares and sole dispositive power over all of the shares beneficially owned.

\section*{Section 16(a) Beneficial Ownership Reporting Compliance}

The Company has procedures in place to assist directors and executive officers in complying with Section 16(a) of the Exchange Act, which includes the preparation of forms for filing. Based solely upon a review of filings with the SEC and written representations, the Company believes that all of our directors and executive officers complied during 2018 with the reporting requirements of Section 16(a) of the Exchange Act.

\section*{General}

The authorized number of directors is currently fixed at twelve, but due to the retirement of Mr. Hanneman immediately prior to the Annual Meeting, the number of directors of the Company will be eleven at the time of our Annual Meeting. At our Annual Meeting, shareholders will elect directors to hold office until the next annual meeting of shareholders or until their successors shall be elected and duly qualified.

Based on the recommendation of the Nominating and Corporate Governance Committee, the Board has nominated Robert L. Boughner, José A. Cárdenas, Thomas E. Chestnut, Stephen C. Comer, John P. Hester, Jane LewisRaymond, Anne L. Mariucci, Michael J. Melarkey, A. Randall Thoman, Thomas A. Thomas, and Leslie T. Thornton to serve as directors of the Company. All of the nominees are independent under the NYSE corporate governance rules except for Mr. Hester. Each of the nominees, except Ms. Lewis-Raymond and Ms. Thornton, was elected to his or her present term of office by shareholders at our 2018 Annual Meeting. Ms. Lewis-Raymond and Ms. Thornton were elected by the Board and began service on January 1, 2019. If any nominee for any reason is unable or unwilling to serve, the proxies may be voted for such substitute nominee as the proxy holder may determine, unless the Board, in its discretion, reduces the number of directors serving on the Board.

\section*{Vote Required}

The eleven nominees for director who receive the highest number of votes "FOR" election will be elected as directors. Pursuant to our Majority Voting Policy, if any director nominee receives a greater number of votes "WITHHELD" from his or her election than "FOR" his or her election, such director nominee must promptly tender his or her resignation. For more details of our majority voting policy, see "GOVERNANCE OF THE COMPANY—Majority Voting Policy" above.

\section*{Names, Qualifications and Reasons for Selection of Nominees}

The director nominees, as outlined below, possess core competencies in management, operations, finance, administration and strategic transactions, and they have significant expertise in the industries that matter most to our business. The nominees have also demonstrated personal integrity and strong leadership while overseeing impressive growth in both of the Company's business segments. They bring diverse and unique perspectives, are able to challenge management and also possess vast experience with mergers and acquisitions. We believe that the nominees' skills and experience, including their combined knowledge of financial, legal and regulatory matters, enhance the Board's ability to make decisions that create shareholder value.

The names of the nominees, their principal occupation and the Board's reasons for their selection are set forth below. Except as noted, each of the nominees has held the position listed beside their name for at least the past five years.

\section*{Robert L. Boughner}

Mr. Boughner, 66, has more than 30 years of executive management and more than 20 years of board-level experience with substantial experience in highly regulated industries, including casino gaming and financial services. He retired from Boyd Gaming Corporation (NYSE: BYD) in August 2016 after a 40-year career with Boyd, most recently serving as Boyd's Executive Vice President and Chief Business Development Officer. In that role, he oversaw business development and resort operations, as well as the acquisition and integration of various hotel and casino assets. Prior to that appointment, Mr. Boughner held other senior executive positions with Boyd for the design, development, operation and expansion of hotels and casinos. During various phases of his career with Boyd his roles included primary accountability for new market expansion, top line and profit margin growth and optimization of significant administrative and business processes. He continues as a member of Boyd's board of directors where he has served since 1996. Mr. Boughner is a Senior Partner with Global Market Advisors, an international hospitality and gaming advisory firm. Previously, Mr. Boughner served as an independent director for 20 years on boards of subsidiaries of Western Alliance Bancorporation (NYSE: WAL), including Bank of Nevada and Western Alliance Bank, during periods of asset acquisition, multiple rounds of capital-raising and rapid expansion in Nevada, California and Arizona. Mr. Boughner is involved in various educational, philanthropic and civic organizations.

\section*{José A. Cárdenas}

Mr. Cárdenas, 66, has been Senior Vice President and General Counsel for Arizona State University (ASU) since January 2009. In addition to serving as chief legal officer of the University, he serves as a representative on and to the boards of directors of ASU affiliated and related entities such as the ASU Foundation. From 1982 through 2008, Mr. Cárdenas was a partner in the Phoenix based law firm of Lewis and Roca. He was the firm's managing partner (chief executive) from 1999 to 2003 and then the firm's chairman from 2003 through 2008. Mr. Cárdenas is a native of Las Vegas, Nevada. He received his undergraduate degree from the University of Nevada, Las Vegas in 1974 and a law degree from Stanford University Law School in 1977. Mr. Cárdenas has been admitted to practice law in Arizona, California, the Ninth Circuit Court of Appeals and the United States Supreme Court and is a member of various bar associations, including the Hispanic National Bar Association. Mr. Cárdenas was a member of the board of directors of Swift Transportation Company until the completion of its merger with Knight Transportation, Inc. in 2017. He is active in community and charitable activities, including service as a trustee of the Virginia G. Piper Charitable Trust. He is a past chairman of the boards of Greater Phoenix Leadership, Valley of the Sun United Way, the Translational Genomics Research Institute and O'Connor House.

Private Investor
Retired Gaming Executive
Director Since: 2008
Board Committees: Audit, Nominating and Corporate Governance

Qualifications, Skills and Experience The Board determined that Mr. Boughner should serve as a director of the Company because of his business and leadership experience with Boyd both in Nevada and nationally, as well as his experience as a director of Boyd and Western Alliance Bancorporation entities.

Senior Vice President and General Counsel Arizona State University

Director Since: 2011
Board Committees: Audit, Nominating and Corporate Governance (Chair)

Qualifications, Skills and Experience The Board determined that Mr. Cárdenas should serve as a director because of his business and legal experience and his leadership experience as a director of Swift Transportation Company and as a trustee or chairman for a number of private foundations and institutes.

\section*{Thomas E. Chestnut}

Mr. Chestnut, 68, was the owner, President and Chief Executive Officer of Chestnut Construction Company from 1990 until 2013. After serving in Vietnam with the U.S. Army, he began a career in the construction industry in 1972 with Del Webb Corporation. Leaving Del Webb in 1980 as Manager of Commercial Operations, Mr. Chestnut took a position with The Wray Company, a commercial contractor and wholly owned subsidiary of Weyerhaeuser Company. He remained with Wray until 1990 when he founded Chestnut Construction Company in Tucson, Arizona. Mr. Chestnut is a past president and life director of the Arizona Builders Alliance and a past president of the Arizona Building Chapter of the Associated General Contractors of America. He is a past chair and life trustee of the Carondelet Foundation, a member and past president of the Tucson Conquistadores and a member and past director of the Centurions of St. Mary's Hospital. Mr. Chestnut was named the 2001 Tucson Small Business Leader of the Year by the Tucson Metropolitan Chamber of Commerce and the 2002 Arizona Small Business Person of the Year by the United States Small Business Administration.

\section*{Stephen C. Comer}

Mr. Comer, 69, received his degree in business administration from California State University Northridge in 1972. He began his career with Arthur Andersen LLP in Los Angeles and established Arthur Andersen's Las Vegas office, as its managing partner, in 1985. Leaving Arthur Andersen in 2002, Mr. Comer took a position as partner with Deloitte \& Touche LLP and was promoted to managing partner of its Nevada practice in 2004. He retired in 2006. Mr. Comer served as a director of Pinnacle Entertainment, Inc., until its acquisition in 2018. He is a member of the American Institute of Certified Public Accountants and the Nevada Society of Certified Public Accountants and holds a professional CPA license in the State of Nevada. He is also involved in numerous civic, educational and charitable organizations.

\section*{John P. Hester}

Mr. Hester, 56, has been President and Chief Executive Officer since March 2015 and was named President in August 2014. Mr. Hester joined the Company in 1989, and has been named to various positions at Southwest Gas, such as Director/Regulatory Affairs and Systems Planning in 2002, Vice President/Regulatory Affairs and Systems Planning in 2003, Senior Vice President/ Regulatory Affairs and Energy Resources in 2006, and Executive Vice President in 2013. Prior to joining Southwest Gas, he worked at the Illinois Department of Energy and Natural Resources, as well as the Illinois Commerce Commission. He received his bachelor's and master's degrees in economics from Northern Illinois University. Mr. Hester is a past trustee of the Las Vegas Metro Chamber of Commerce and currently serves on the American Gas Association Board of Directors, the Catholic Charities of Southern Nevada Board of Trustees and the College of Southern Nevada Foundation Board of Trustees.

Retired Construction Executive
Director Since: 2004
Board Committees: Compensation, Nominating and Corporate Governance

Qualifications, Skills and Experience The Board determined that Mr. Chestnut should serve as a director of the Company because of his business experience in the residential and commercial construction businesses and his leadership experience in managing his construction business. In addition, the Board based its recommendation on his knowledge of the business and operations of the Company, resulting from his service as a director since 2004.

Retired Managing Partner
Deloitte \& Touche LLP
Director Since: 2007
Board Committees: Audit, Compensation (Chair)

Qualifications, Skills and Experience The Board determined that Mr. Comer should serve as a director of the Company because of his business, accounting and auditing experience with Arthur Andersen LLP and Deloitte \& Touche LLP and his leadership positions with both entities, as well as his experience as a director of Pinnacle Entertainment, Inc.

President and Chief Executive Officer Southwest Gas Holdings, Inc.
Southwest Gas Corporation

\section*{Director Since: 2015}

Board Committees: None
Qualifications, Skills and Experience The Board determined that Mr. Hester should serve as a director because, as President and Chief Executive Officer of the Company, he has an intimate working knowledge of all aspects of the Company's operations.

\section*{Jane Lewis-Raymond}

Ms. Lewis-Raymond, 52, has served the natural gas industry as an attorney and executive for nearly three decades. Currently, Ms. LewisRaymond is an attorney with Parker Poe Adams and Bernstein LLP, where she started in 2017. She retired from Piedmont Natural Gas Company Inc. in 2016, where she was a senior officer and member of the Executive Management Team since 2006, leading top line growth and measurable strategic and sustainability directives to build longterm value for shareholders. Earlier in her career, she was with the American Gas Association, as Vice President of Regulatory Affairs. Ms. Lewis-Raymond is the Co-chair for the Teach For America Charlotte-Piedmont Triad Advisory Board and serves on the National Advisory Council for Teach For America, the Board of Directors for MeckEd, the Steering Committee for The Keystone Energy Board, and is a member of Women Executives. She is a graduate of the University of Maryland and an Order of the Coif graduate of the University of Maryland School of Law.

\section*{Anne L. Mariucci}

Ms. Mariucci, 61, has over 30 years of experience in homebuilding and real estate. Prior to 2003, Ms. Mariucci held a number of senior executive management roles with Del Webb Corporation and was responsible for its large-scale community development and homebuilding business. She also served as President of Del Webb following its merger with Pulte Homes, Inc. in 2001 until 2003. Since 2003, she has been affiliated with the private equity firm Hawkeye Partners (Austin, Texas). Ms. Mariucci received her undergraduate degree in accounting and finance from the University of Arizona and completed the corporate finance program at the Stanford University Graduate School of Business. She serves as a director of CoreCivic, Inc. (NYSE: CXW), Taylor Morrison Home Corporation (NYSE: TMHC), Berry Petroleum (NASDAQ: BRY), Banner Health, the Arizona State University Foundation and the Fresh Start Women's Foundation. Ms. Mariucci is a past chairman of the Arizona Board of Regents and served on the board from 2006 to 2014. She is a past director of the Arizona State Retirement System, HonorHealth and Action Performance Companies, as well as a past trustee of the Urban Land Institute.

Counsel
Parker Poe Adams \& Bernstein LLP
Retired Executive
Piedmont Natural Gas Company, Inc.
Director Since: 2019
Board Committees: Audit, Nominating and Corporate Governance

Qualifications, Skills and Experience The Board determined that Ms. LewisRaymond should serve as a director of the Company because of her legal experience and work as a natural gas industry senior executive. In addition, her experience in corporate governance initiatives relating to enterprise risk management, cybersecurity and crisis management planning were key to the Board's recommendation.

\section*{Private Investor}

Retired Real Estate Development and Homebuilding Executive

Director Since: 2006
Board Committees: Compensation, Nominating and Corporate Governance

Qualifications, Skills and Experience The Board determined that Ms. Mariucci should serve as a director of the Company because of her experience as a director of other publicly traded companies, business and financial expertise and experience in the housing industry with Del Webb Corporation and Pulte Homes and throughout the Company's service territories.

\section*{Michael J. Melarkey}

Mr. Melarkey, 69, was a partner in the law firm of Avansino, Melarkey, Knobel, Mulligan \& McKenzie for more than 35 years until the firm's merger in 2015 with McDonald, Carano and Wilson, a statewide Nevada law firm (MCW). He received his undergraduate degree from the University of Nevada, Reno, his law degree from the University of San Francisco and his masters in laws in taxation from New York University. Mr. Melarkey was actively engaged in private legal practice in Reno, Nevada from 1976 until his firm's merger with MCW in 2015. Following the merger, Mr. Melarkey was named Of Counsel with MCW. Mr. Melarkey is a former member of the American Bar Association and the International Association of Gaming Lawyers and is licensed to practice law in the State of Nevada. He is a trustee of the Bretzlaff Foundation, the Robert S. and Dorothy J. Keyser Foundation, the Roxie and Azad Joseph Foundation and the E. L. Wiegand Trust. He is Vice President of Miami Oil Producers, Inc. and from 2015 until 2017 held management positions and ownership interests in the Pioneer Crossing Casino in Fernley, Nevada, the Pioneer Crossing Casino in Dayton, Nevada and the Pioneer Crossing Casino in Yerington, Nevada. He also serves as a director of numerous mutual funds, including fourteen registered investment companies advised by Gabelli Funds, LLC, five registered investment companies advised by Keeley-Teton Advisors, LLC and seven registered investment companies advised by Teton Advisors, Inc. He serves on the Audit Committee of the GDL Fund.

\section*{A. Randall Thoman}

Mr. Thoman, 67, received his degree in accounting from the University of Utah and has been a Certified Public Accountant for more than 30 years. He began his career with Deloitte \& Touche LLP and became a Partner in June 1991. For 15 years, Mr. Thoman was the Partner with primary responsibility for the technical interpretation and application of accounting principles and audit standards and the review of all reporting issues and financial statements for Nevada-based companies registered with the SEC. Mr. Thoman retired from Deloitte \& Touche LLP in October 2009. Mr. Thoman served on the board of SHFL Entertainment, Inc. until its acquisition in 2013.

Retired Partner
Avansino, Melarkey, Knobel, Mulligan \& McKenzie

Director Since: 2004
Chairman of the Board
Board Committees: Compensation, Nominating and Corporate Governance

\section*{Qualifications, Skills and Experience}

The Board determined that Mr. Melarkey should serve as a director because of his business and legal experience, his leadership abilities as a trustee for a number of private foundations and as a director of a number of mutual funds. In addition, the Board based its recommendation on his knowledge of the business and operations of the Company, resulting from his service as a director since 2004.

\section*{Retired Partner}

Deloitte \& Touche LLP
Director Since: 2010
Board Committees: Audit (Chair), Compensation

Qualifications, Skills and Experience The Board determined that Mr. Thoman should serve as a director of the Company because of his business, accounting and auditing experience with Deloitte \& Touche LLP, his leadership positions at the firm and his experience with SEC reporting and compliance, as well as his prior experience as a director of another publicly traded company.

\section*{Thomas A. Thomas}

Mr. Thomas, 61, received his undergraduate degree in finance and his juris doctorate from the University of Utah. After obtaining his law degree, he joined Valley Bank of Nevada and held various executive positions with the bank until its merger with Bank of America in 1992. After the merger, he became managing partner of Thomas \& Mack Co., an investment management and commercial real estate development company with properties and developments in Nevada, California, Arizona, and Utah. Mr. Thomas is a member of the board of directors of Switch, Inc. (NYSE: SWCH). He is actively involved in numerous charitable organizations including the Opportunity Village Foundation, the UNLV Foundation Advisory Board, the Las Vegas Rotary Club and the BYU President's Leadership Council. He was instrumental in establishing the Thomas \& Mack Legal Clinic and Moot Court Facility at the UNLV Boyd School of Law.

\section*{Leslie T. Thornton}

Ms. Thornton, 60, began her career in the utility industry as a senior executive in 2011 for WGL Holdings, Inc. (WGL) and Washington Gas Light Company, a wholly-owned subsidiary of WGL, and served in elevated roles until becoming the Senior Vice President, Merger Transition Counsel. During her WGL tenure, Ms. Thornton earned her Master of Laws degree in National Security Law with a cybersecurity focus and provided legal counsel on a broad range of issues including critical infrastructure cybersecurity and data protection. Before joining WGL, Ms. Thornton was a partner at two Washington D.C. based national law firms. In the Clinton administration, she served in various senior roles including Chief of Staff to the U.S. Secretary of Education. Since 2005, she has been a member of the board of directors for Career Education Corporation (NASDAQ: CECO), where she serves on the Audit Committee and chairs the Compliance and Risk Committee. Recently, Ms. Thornton joined the Advisory Board of Encrypted Sensors, a security technology start-up, and is a Board Leadership Fellow for the National Association of Corporate Directors where she is a frequent speaker on governance, compliance, and cybersecurity and data protection. Ms. Thornton serves on the Board of Trustees for the University of the District of Columbia David A. Clarke School of Law, and the Board of Governors for the District of Columbia Bar, among other activities. She is a graduate of the University of Pennsylvania and Georgetown University Law Center.

Managing Partner
Thomas \& Mack Co. LLC
Director Since: 2008
Board Committees: Audit, Nominating and Corporate Governance

Qualifications, Skills and Experience The Board determined that Mr. Thomas should serve as a director because of his banking and business experience and his familiarity with the commercial markets throughout the Company's service territories.

\section*{Retired Executive}

WGL Holdings, Inc. \& Washington Gas Light Company

Director Since: 2019
Board Committees: Audit, Compensation

Qualifications, Skills and Experience The Board determined that Ms. Thornton should serve as a director because of her legal experience, service as a utility industry senior executive, and her expertise in the area of critical infrastructure cybersecurity and data protection.

\title{
APPROVAL OF THE AMENDMENT TO ARTICLES OF INCORPORATION TO INCREASE AUTHORIZED SHARES OF COMMON STOCK \\ (Proposal 2 on the Proxy Card)
}

The Board Recommends that Shareholders Vote "FOR" this Proposal

\section*{General}

Shareholders are being asked to approve an amendment to Article V of the Company's Articles of Incorporation increasing the number of shares of Common Stock which the Company has authority to issue from \(60,000,000\) shares to \(120,000,000\) shares. Increasing the number of shares of Common Stock will result in a total of \(127,000,000\) authorized shares of common, preferred and preference stock (combined), with a total par value of \(\$ 160,000,000\). No change will be made to the number of authorized shares of preferred and preference stock. An affirmative vote of a majority of the shares of the Company's Common Stock outstanding on March 5, 2019, the record date, is required to approve the proposed amendment.

As of March 5, 2019, there were 53,108,242 shares of Common Stock issued out of the 60,000,000 shares authorized. There are no outstanding shares of preferred or preference stock. The Company therefore has an \(89 \%\) ratio of issued shares to authorized shares, leaving only \(6,891,758\) shares available to be issued in the future.
The proposal to increase the number of shares of authorized Common Stock is designed to ensure that the Company has the ability to issue Common Stock to meet its ongoing capital requirements or a portion thereof. The Company's utility segment operates in jurisdictions with growing populations and opportunities for investment through infrastructure replacement. The Company's utility infrastructure services segment continues to expand the markets and customers it serves. In order to meet advantageous market conditions, provide service to its growing customer base and take advantage of future acquisition opportunities, the Company needs the ability to finance such endeavors, or a portion thereof, through the issuance and sale of additional Common Stock. The increase in authorized shares of Common Stock will also ensure that shares would be available, as needed, for issuance in connection with equity compensation plans, stock splits, stock dividends, options, warrants, rights, acquisitions, and other corporate purposes. The Board of Directors believes that the availability of additional shares for such purposes without delay or the necessity for a special shareholders meeting will be beneficial to the Company.
No further action or authorization by you, the shareholders, would be necessary prior to the issuance of the additional shares of Common Stock, unless required by applicable law, regulatory requirements, or by the rules of any stock exchange on which the Company's securities are listed. A shareholder vote is generally required in connection with any transaction which requires an amendment to the Company's Articles of Incorporation, any merger or sale of substantially all of the assets of the Company, and, under the California Corporations Code, any reorganization in which the Company's shareholders would own less than five-sixths of the voting power of the surviving corporation.

The holders of any of the additional shares of Common Stock issued in the future will have the same rights and privileges as the holders of the shares of Common Stock currently authorized and outstanding.
Although the Board of Directors has no present intention of doing so, it could issue shares of Common Stock that could make it more difficult or discourage an attempt to obtain control of the Company by means of a merger, tender offer, proxy contest, or other means. Such shares could be used to create voting or other impediments or to discourage persons seeking to gain control of the Company. Other measures previously approved by shareholders that are designed to address change in control attempts include the Board's ability to issue blank-check Preferred Stock and the supermajority requirements described in Article IV-A of the Articles of Incorporation for approval of any business combination of the Company with any shareholder who beneficially owns \(10 \%\) or more of the outstanding shares of the Company's Common Stock.

While the Company may consider effecting a new equity offering of Common Stock in the proximate future for purposes of raising additional capital or otherwise, the Company, as of the date hereof and except for the Company's currently authorized equity shelf programs or as outlined above, has no immediate plans, arrangements, commitments, or understandings with respect to the issuance of any shares of such stock.

\section*{Vote Required}

The affirmative vote of the majority of the outstanding shares of Common Stock of the Company is required to approve the proposal to amend the Company's Articles of Incorporation increasing the number of shares of Common Stock which the Company has authority to issue from \(60,000,000\) shares to \(120,000,000\) shares.

\title{
APPROVAL OF REINCORPORATION OF THE COMPANY FROM CALIFORNIA TO DELAWARE (Proposal 3 on the Proxy Card)
}

The Board Recommends that Shareholders Vote "FOR" this Proposal

\section*{General}

On February 26, 2019, the Board approved a proposal to change the state of incorporation of the Company from California to Delaware (the "Reincorporation"), subject to the approval of the Company's shareholders. If approved by the Company's shareholders, the Reincorporation will be effected through the merger of the Company with and into a newly formed wholly-owned subsidiary of the Company incorporated in the State of Delaware solely for the purpose of effecting the Reincorporation ("Southwest Gas Delaware"). The name of the Company after the Reincorporation will remain "Southwest Gas Holdings, Inc." For purposes of the discussion below, the Company as it currently exists as a corporation organized under the laws of the State of California is sometimes referred to as "Southwest Gas California."

The Board considered several factors in reaching this decision, including the corporate governance objectives of the Company, the ability to enhance long-term shareholder value, the differences between California and Delaware state corporate laws, and other advantages and disadvantages of Reincorporation. The Board believes that the choice of state domicile is important because state corporate law governs the internal affairs of a corporation. Management and boards of directors of corporations look to state corporate law and judicial interpretations of state law to guide their decision-making on many key issues, including the appropriate governance policies and procedures, satisfaction of fiduciary obligations to shareholders, compliance with legal requirements in the corporation's business operations, and consideration of key strategic alternatives for the corporation, including mergers, acquisitions, and divestitures. The Board believes that it is essential for the Company to be able to draw upon well-established principles of corporate governance in making legal and business decisions. The prominence and predictability of Delaware corporate law provide a reliable foundation on which the Company's governance decisions can be based, and the Board believes that the Company's shareholders will benefit from the responsiveness of Delaware corporate law to their needs. In addition to the benefits of being a Delaware corporation, the Board has proposed as part of the Reincorporation to preserve certain key stockholders rights that are currently held by its shareholders as a matter of California law, including the right to call special shareholder meetings and act by written consent.

After careful consideration of these factors, the Board believed that it is in the best interest of the Company and its shareholders to effectuate the Reincorporation.

\section*{General Background and Principal Reasons for Reincorporation}

The State of Delaware has been a leader in adopting a comprehensive and coherent set of corporate laws that are responsive to the evolving legal and business needs of corporations organized under Delaware law. The Board's decision to reincorporate in the State of Delaware was driven primarily by Delaware's history of comprehensiveness and flexibility of its corporate laws and its tradition of promoting progressive principles of corporate governance. Specifically, the Board believes that there are several benefits in the Reincorporation, as summarized below.

\section*{Predictability, Flexibility and Responsiveness of Delaware Law}

Delaware courts have, over many years, established a jurisprudence that is significantly more thorough, predictable, and broadly applied with respect to principles of corporate governance than most, if not all, other jurisdictions. The Delaware General Corporation Law ("DGCL") is generally acknowledged to be the most advanced and flexible statutory corporation code in the United States. The Delaware legislature is particularly responsive to developments in modern corporate law and Delaware has proven sensitive to changing needs of corporations and their shareholders. The Delaware General Assembly each year considers and adopts statutory amendments in an effort to ensure that the DGCL continues to be responsive to the changing legal and business needs of corporations. The Delaware Secretary of State is viewed as particularly user-friendly, flexible and responsive (as compared to other states) in its administration of the filings and interactions required for mergers, acquisitions and other corporate transactions, thereby reducing complications and delays that can arise in time sensitive transactions.

Consequently, Delaware has become the preferred state of incorporation for most publicly-traded companies in the United States and, as a result of the large number of major corporations being domiciled in Delaware, Delaware
courts were often the first and most influential to address important new issues relating to corporate governance and rights and obligations of shareholders and corporations. As a result, courts of and corporations organized under the laws of other states, including California, have often looked to Delaware law for guidance for such issues, and the DGCL and Delaware administrative practices have become comparatively well-known and widely understood. Corporations domiciled in Delaware are often at an advantage over their peers that are organized under the laws of other states, including many California corporations, in that Delaware corporations can draw upon these welldeveloped, firmly established and consistently interpreted principles of corporate law when making business and legal decisions. The Board therefore anticipates that the DGCL will provide greater efficiency, clarity, predictability and flexibility in the Company's legal affairs and corporate governance decisions than is presently available under California law. The Board further believes that any direct benefit that the DGCL provides to the Company indirectly benefits the shareholders, who are the Company's owners. In addition, Delaware case law provides a body of law defining the proper duties and decision making processes expected of boards of directors in evaluating potential or proposed extraordinary corporate transactions, which will further benefit the Company's shareholders.

Delaware's court system also provides swift and efficient resolutions in corporate litigation involving complex corporate issues. Delaware has a specialized court of equity called the Court of Chancery that hears and decides corporate law cases, and appeals to Delaware's Supreme Court can be decided quickly. The Delaware Court of Chancery operates under rules that are intended to ensure litigation of disputes in a timely and effective way, keeping in mind the timelines and constraints of business decision-making and market dynamics, and routinely handles cases involving complex corporate issues with a level of experience and a degree of sophistication and understanding unmatched by other courts in the country. The appellate process on decisions emanating from the Court of Chancery is similarly streamlined and highly responsive in cases involving complex corporate issues, and the justices of Delaware appellate courts tend to have substantial experience with corporate cases because of the relatively higher volume of these cases in the Delaware courts. The fact that issues of corporate governance are frequently addressed first in Delaware contributes to an efficient and expert court system and bar. In contrast, California does not have a similar specialized court established to hear only corporate law cases. Rather, disputes involving questions of California corporate law are either heard by the California Superior Court, the general trial court in California that hears all manner of cases, or, if federal jurisdiction exists, a federal district court. These courts hear many different types of cases, and the cases may be heard before judges or juries with limited corporate law experience. As a result, corporate law cases brought in California may not proceed as expeditiously as cases brought in Delaware and the outcomes in such courts may be less consistent or predictable. The highly specialized nature of the Delaware court system is therefore widely believed to result in more consistent and timely rulings.

\section*{Enhanced Ability to Attract and Retain Qualified Candidates for Board and Management}

We experience increasing competition in recruiting and retaining talented individuals to serve on our management team and Board of Directors. The Board believes that the comparatively stable and predictable corporate environment afforded by Delaware would enable the Company to compete more effectively with other public companies in the recruitment and retention of talented and experienced directors and officers. Not only is Delaware law more familiar to directors and officers, it also offers greater certainty and stability from the perspective of those who serve as corporate officers and directors because the parameters of director and officer liability, including protection for shareholders from possible abuses by directors and officers, are more extensively addressed in Delaware court decisions and are therefore better defined and better understood than under California law. It should also be noted that directors' personal liability is not, and cannot be, eliminated under Delaware law for intentional misconduct, bad faith conduct, unlawful dividend payments or unlawful stock purchases or redemptions, or any transaction from which the director derives an improper personal benefit. The Board therefore believes that the comparatively stable and predictable corporate environment afforded by Delaware would not only enhance its ability to recruit and retain directors and officers in the future, but also provide appropriate protection for shareholders from possible abuses by directors and officers and encourage directors and officers to continue to make independent decisions in good faith on behalf of the Company.

Ability to Have the Delaware Courts Serve as the Exclusive Forum for the Adjudication of Certain Legal Matters
To ensure that we get the full benefits of Delaware's corporate legal framework, the Board has decided to include in the Certificate of Incorporation of Southwest Gas Delaware (the "Delaware Certificate") a provision providing that the Delaware courts are the exclusive forum for the adjudication of certain legal actions.

Under the exclusive forum provision contained in the Delaware Certificate, the Court of Chancery in the state of Delaware will be the exclusive forum for certain actions involving the Company, unless we consent to an alternative forum. Based on the proposed language in the Delaware Certificate, the Delaware courts would be the exclusive forum for (i) derivative actions brought by or on behalf of us, and (ii) direct actions brought by a stockholder against
the Company or any of its directors or officers, alleging a violation of the DGCL, the Delaware Certificate or the Bylaws of Southwest Gas Delaware (the "Delaware Bylaws" and, together with the Delaware Certificate, the "Delaware Incorporation Documents") or a breach of fiduciary duties or other violation of Delaware decisional law relating to the internal affairs of the Company.

The exclusive forum provision contained in the Delaware Certificate is intended to assist us in avoiding multiple lawsuits in multiple jurisdictions on matters relating to the corporate law of Delaware, which will be our state of incorporation if this Proposal is approved. We believe that the exclusive forum provision in the Delaware Certificate will reduce the risk that we could become subject to duplicative litigation in multiple forums, as well as the risk that the outcome of cases in multiple forums could be inconsistent, even though each forum purports to follow Delaware law. Any of these could expose the Company to increased expenses or losses.

The exclusive forum provision contained in the Delaware Certificate would only regulate the forum where our stockholders may file claims relating to the specified intra-corporate disputes noted above. The exclusive forum provision does not contain any restrictions on the ability of our stockholders to bring such claims, nor the remedies available if such claims are ultimately successful; rather it attempts to prevent us from being forced to waste corporate assets defending against duplicative suits.

Although the Board believes that the designation of the Delaware Court of Chancery as the exclusive forum for intracorporate disputes serves the best interests of the Company and our shareholders as a whole, the Board also believes that we should retain the ability to consent to an alternative forum on a case-by-case basis. Specifically, where the Board determines that our interests and those of our stockholders are best served by permitting a dispute to proceed in a forum other than the Delaware Court of Chancery, the exclusive forum provision in the Delaware Certificate permits us to consent to the selection of such alternative forum.

The Board believes that our stockholders will benefit from having intra-corporate disputes litigated in the Delaware Court of Chancery. Although some plaintiffs might prefer to litigate such matters in a forum outside of Delaware because they perceive another court as more convenient or more favorable to their claims (among other reasons), the Board believes that the substantial benefits to us and our stockholders as a whole from designating the Delaware Court of Chancery as the exclusive forum for intra-corporate disputes outweigh these concerns. The Delaware Court of Chancery is widely regarded as the preeminent court for the determination of disputes involving a corporation's internal affairs in terms of precedent, experience and focus. The Delaware Court of Chancery's considerable expertise has led to the development of a substantial and influential body of case law interpreting Delaware's corporate law. This would provide us and our stockholders with more predictability regarding the outcome of intracorporate disputes. In addition, the Delaware Court of Chancery has developed streamlined procedures and processes that help provide decisions for litigating parties on a relatively expedited basis. This accelerated schedule can limit the time, cost, and uncertainty of litigation for all parties. Furthermore, there is a significant risk that allowing stockholders to bring such highly sophisticated matters in forums with little familiarity or experience in corporate governance leaves stockholders at risk that foreign jurisdictions may misapply Delaware law.

Without the exclusive forum provision in the Delaware Certificate, we remain exposed to the possibility of plaintiffs using our geographically diverse operational base to bring claims against us in multiple jurisdictions or choosing a forum state for litigation that may not apply Delaware law to our internal affairs in the same manner as the Delaware courts would be expected to do.

\section*{Possible Negative Consequences of Reincorporation}

Notwithstanding the belief of the Board as to the benefits to the Company's shareholders of the Reincorporation, it should be noted that Delaware law has generally been criticized by some commentators on the grounds that it does not afford minority shareholders the same substantive rights and protections as are available in a number of other states, including California. The Reincorporation may make it more difficult for minority shareholders to influence our policies. In addition, franchise taxes payable by the Company in Delaware may be greater than the equivalent or other similar taxes currently payable by the Company in California. The Delaware Incorporation Documents, as compared to the Company's existing Articles of Incorporation (the "California Articles") and Bylaws (the "California Bylaws" and, together with the California Articles, the "California Incorporation Documents") under California laws, contain or eliminate certain provisions that may have the effect of reducing the rights of minority shareholders. Certain key provisions of our governance structure that would change as a result of the Reincorporation include:
- Filling a Vacancy on the Board. Under California law, any vacancy on the board other than one created by removal of a director may be filled by the board. A vacancy created by removal of a director may be filled by the board only if authorized by the articles of incorporation or a bylaw approved by the corporation's shareholders; the California

\section*{24 Southwest Gas Holdings 2019 Notice and Proxy}

Incorporation Documents do not give the Board this right. As a result, under the California Incorporation Documents, shareholders generally have the right to fill vacancies on the Board and have the sole right to fill vacancies on the Board created by removal of a director. The Delaware Certificate, however, provides that unless the Board otherwise determines, newly created directorships resulting from any increase in the authorized number of directors or any vacancies on the Board resulting from the death, resignation, retirement, disqualification, removal from office or other cause shall be filled only by a majority vote of the directors then in office, though less than a quorum, or by a sole remaining director, and not by the stockholders.
- Number of Directors on the Board. Under the California Bylaws and California law, any change outside of the established range of directors set forth in the California Bylaws or a change in the established range must be approved by the shareholders. Under the Delaware Bylaws, either the stockholders or the Board may amend the provision of the Delaware Bylaws setting the established range of directors, and thus stockholder approval will not be required to change the range of the number of directors.
- Exclusive Forum Selection Provision. As discussed above, the Delaware Certificate contains an exclusive forum selection provision whereby the Delaware courts serve as the exclusive forum for the adjudication of certain legal matters, which provision was not part of the California Incorporation Documents.

The Board has considered the possible disadvantages of the Reincorporation and has concluded that the potential benefits outweigh the possible disadvantages.

In addition, the Board recognized that our existing governance structure has served us well for years as a public company. Accordingly, the Board determined, in connection with the Reincorporation, to maintain the following key provisions of our governance structure even though they would not be required under Delaware law:
- Shareholder Ability to Call Special Shareholders' Meeting. Under California law, a holder of 10 percent or more of our outstanding stock may call a special meeting of shareholders; Delaware law does not contain any such requirement. The Company had previously revised the default rule in California, and the California Bylaws instead provide that holders of not less than one-third of the voting shares of the Company then issued and outstanding may call a special meeting of shareholders. We have elected to follow the same provision as it exists in the California Bylaws and provide in our Delaware Bylaws that holders of not less than one-third of the voting shares of the Company are entitled to call a special meeting of the stockholders.
- Shareholder Power to Act by Written Consent. Under California law and the California Incorporation Documents, shareholders of the Company may act by written consent with respect to any action that could otherwise be taken at a meeting of shareholders. Stockholders of Southwest Gas Delaware will also have the same written consent rights under the Delaware Bylaws.
- Majority Voting Policy. The California Articles provide that no shareholder shall be entitled to cumulative voting rights as to any election of directors, and we have elected to include the same provision in the Delaware Certificate. As a result, directors of Southwest Gas Delaware will continue to be elected by a plurality of the votes cast. If our shareholders vote to approve the Reincorporation, we will maintain our majority voting policy as it is currently in effect. Under our majority voting policy, a director who receives more "withheld" votes than "for" votes must offer his or her resignation as a director to the Board. The independent Nominating and Corporate Governance Committee of the Board will consider the offer of resignation and will recommend to the Board whether to accept or reject the tendered resignation. The Board retains discretion in evaluating the tendered resignation and will consider all factors deemed relevant. The majority voting policy requires that the Board make its decision on the resignation within 90 days of the shareholders' meeting and to publicly disclose such decision.

It should also be noted that the interests of our directors and executive officers in voting on the Reincorporation proposal may be different from, or in addition to, those of shareholders generally because, for example, some substantive provisions of California and Delaware law apply only to directors and officers. See "Interest of the Company's Directors and Executive Officers in the Reincorporation" below. For a comparison of shareholders' rights and the material substantive provisions that apply to the Board and executive officers under Delaware and California law, see "Significant Differences Between the Charters and Bylaws of Southwest Gas California and Southwest Gas Delaware and Between the Corporate Laws of California and Delaware" below. The Board has considered these interests, among other matters, in reaching its decision to approve the Reincorporation and to recommend that our shareholders vote in favor of this Proposal.

\section*{Mechanics and Consequences of Reincorporation}

The Reincorporation will be accomplished by means of a merger (the "Merger") pursuant to the terms and conditions of the Agreement and Plan of Merger (the "Merger Agreement") between the Company and Southwest Gas Delaware. Under the Merger Agreement, the Company will merge with and into Southwest Gas Delaware, and the Company will cease to exist, and Southwest Gas Delaware will become the surviving entity following the
effectiveness of the Merger (the "Effective Date"). The existing holders of the Company's Common Stock will own all of the outstanding shares of common stock of Southwest Gas Delaware, and no change in ownership will result from the Reincorporation.

Other than the change in corporate domicile, the Reincorporation will not result in any change in the Company's business operations, board composition or term, assets, liabilities or net worth, or physical location, nor will it result in any change of our current employees, including management, or in their title or responsibilities. Upon consummation of the Reincorporation, our daily business operations will continue as they are presently conducted at the Company's current principal executive office located at 5241 Spring Mountain Road, Las Vegas, Nevada 89150, and our telephone number will remain (702) 876-7237. The consolidated financial condition and results of operations of Southwest Gas Delaware immediately after consummation of the Reincorporation will be substantially identical as those of the Company immediately prior to the consummation of the Reincorporation. The Company believes that there will be no material accounting impact as a result of the Reincorporation. If the Reincorporation is approved, at the Effective Date, Southwest Gas Delaware will be the successor-in-interest to the Company and the shareholders of the Company will become stockholders of Southwest Gas Delaware.

If the Reincorporation is approved, at the Effective Date, each outstanding share of the Company's Common Stock will automatically be converted into one share of common stock of Southwest Gas Delaware. Each of the equity compensation plans currently maintained by the Company immediately prior to the Reincorporation will be assumed and continued by Southwest Gas Delaware, and each pre-Reincorporation equity award to purchase or receive shares of the Company's Common Stock under such plans will convert into an equity award to purchase or receive an equivalent number of shares of Southwest Gas Delaware common stock with no other changes in the terms and conditions of such award. The Company's other employee benefit arrangements in effect immediately prior to the Reincorporation would also be continued by Southwest Gas Delaware upon the terms and subject to the conditions of such plans in effect immediately prior to the Reincorporation. In addition, Southwest Gas Delaware, as successor-in-interest to the Company, will succeed to the Company's rights and obligations under the officer change in control agreements to which the Company is currently a party.

\section*{SHARE CERTIFICATES CURRENTLY ISSUED FOR THE COMPANY'S SHARES WILL AUTOMATICALLY REPRESENT SHARES IN SOUTHWEST GAS DELAWARE UPON COMPLETION OF THE MERGER, AND SHAREHOLDERS WILL NOT BE REQUIRED TO SURRENDER OR EXCHANGE SHARE CERTIFICATES AS A RESULT OF THE REINCORPORATION.}

If the Reincorporation is approved, at the Effective Date, the Company will be governed by the Delaware Certificate, the Delaware Bylaws and the DGCL. Although the Delaware Incorporation Documents contain many provisions that are similar to the provisions of the California Incorporation Documents, there are important differences between the Delaware Incorporation Documents and the California Incorporation Documents and between the DGCL and the California Corporations Code that are described in further detail below. See "Significant Differences Between the Charters and Bylaws of Southwest Gas California and Southwest Gas Delaware and Between the Corporate Laws of California and Delaware" below.

The Company's Common Stock is currently listed for trading on the New York Stock Exchange ("NYSE") under the ticker symbol "SWX." If the Reincorporation is approved, at the Effective Date, the Company's registration statements on file with the SEC immediately prior to the Reincorporation will be assumed by Southwest Gas Delaware, and the shares of common stock of Southwest Gas Delaware would continue to be traded on NYSE without interruption, under the same symbol.

\section*{Effectiveness of Reincorporation}

If the shareholders approve the Reincorporation at the Annual Meeting, we currently intend to cause the Reincorporation to become effective as soon as reasonably practicable following the Annual Meeting, subject to the completion of certain legal formalities, including obtaining certain consents and approval by third parties and providing certain notices to regulatory authorities. We have determined that a written notice must be provided to the Arizona Corporation Commission 120 days prior to the Effective Date of the Merger. The Merger Agreement also provides that the Merger Agreement may be terminated and the Merger may be abandoned at any time before the Effective Date and for any reason by the Board of Directors of either the Company or Southwest Gas Delaware or both, notwithstanding the approval, if obtained, of the principal terms of the Merger Agreement by the shareholders of the Company, or the adoption of the Merger Agreement by the sole shareholder of Southwest Gas Delaware, or both. Furthermore, the Merger Agreement may be amended at any time prior to the Effective Date, either before or after the shareholders have voted to adopt this Proposal, subject to applicable law. The Company will re-solicit shareholder approval of the Reincorporation if the terms of the Merger Agreement are changed in any material respect that requires shareholder approval.

\section*{Significant Differences Between the Charters and Bylaws of Southwest Gas California and Southwest Gas Delaware and Between the Corporate Laws of California and Delaware}

The following summarizes a comparison of certain key provisions between the California Incorporation Documents and Delaware Incorporation Documents, as well as certain provisions of California and Delaware corporate laws. The comparison highlights important differences, but is not intended to list all differences, and is qualified in its entirety by reference to such documents and to the respective General Corporation Laws of the States of California and Delaware. Shareholders are encouraged to read the Delaware Certificate, the Delaware Bylaws, the California Articles and the California Bylaws in their entirety. The Delaware Certificate and Delaware Bylaws are attached to this Proxy Statement, and the California Bylaws and California Articles are filed publicly as exhibits to our periodic reports with the SEC.
\begin{tabular}{|c|c|c|}
\hline Provision & Southwest Gas California & Southwest Gas Delaware \\
\hline Authorized Shares & 120,000,000 shares of Common Stock, par value \(\$ 1.00\) per share (or 60,000,000 shares of Common Stock if Proposal 2 above is not approved); \(5,000,000\) shares of Preferred Stock, without par value; 2,000,000 shares of Preference Stock, par value \(\$ 20.00\) per share. & No change. 120,000,000 shares of common stock, par value \(\$ 1.00\) per share (or 60,000,000 shares of common stock if Proposal 2 above is not approved); \(5,000,000\) shares of Preferred Stock, without par value; \(2,000,000\) shares of Preference Stock, par value \(\$ 20.00\) per share. \\
\hline Vote Required to Elect Director & \begin{tabular}{l}
Under California law, cumulative voting for election of directors is permitted if the shareholder provides advance notice of the intent to exercise cumulative voting. California law also permits public companies to eliminate cumulative voting by the approval of shareholders. \\
The California Articles provide that no stockholder shall be entitled to cumulative voting rights as to the election of directors, and thus directors are elected by a plurality of the votes cast. The Company has also implemented a majority voting policy for uncontested elections.
\end{tabular} & \begin{tabular}{l}
No change. Under Delaware law, cumulative voting is not permitted unless the corporation provides for cumulative voting rights in its certificate of incorporation. The default voting standard for the election of directors under Delaware law is a plurality vote; however, the certificate of incorporation or bylaws may specify a different standard for the election of directors, such as a majority of the votes cast. \\
The Delaware Certificate provides that no stockholder shall be entitled to cumulative voting rights as to the election of directors. The Delaware Bylaws provide that directors shall be elected by a plurality of the votes cast. The majority voting policy for uncontested elections will also be maintained.
\end{tabular} \\
\hline Number of Directors on the Board & \begin{tabular}{l}
Under California law, although a change in the number of directors must generally be approved by shareholders, the board may fix the exact number of directors within a stated range set forth in the articles of incorporation, if that stated range has been approved by the shareholders. Any change outside of the established range or a change in the established range must be approved by the shareholders. \\
The California Bylaws provide that the number of directors will neither be fewer than 9 nor greater than 13, with the exact number of directors to be fixed by resolution of the board.
\end{tabular} & \begin{tabular}{l}
Under Delaware law, the number of directors is fixed by or in the manner provided in the bylaws, unless the certificate of incorporation fixes the number of directors. \\
The Delaware Certificate does not fix a number of directors. The Delaware Bylaws provide that the number of directors will neither be fewer than 9 nor greater than 13 , with the exact number of directors to be fixed by resolution of the board.
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Provision & Southwest Gas California & Southwest Gas Delaware \\
\hline Filling a Vacancy on the Board & Under California law, any vacancy on the board other than one created by removal of a director may be filled by the board. If the number of directors is less than a quorum, a vacancy may be filled by the unanimous written consent of the directors then in office, by the affirmative vote of a majority of the directors at a meeting, or by a sole remaining director. A vacancy created by removal of a director may be filled by the board only if authorized by the articles of incorporation or a bylaw approved by the corporation's shareholders; the California Incorporation Documents do not give the Board this right. & \begin{tabular}{l}
Under Delaware law, vacancies and newly created directorships may be filled by a majority of the directors then in office (even though less than a quorum) or by a sole remaining director, unless otherwise provided in the certificate of incorporation or bylaws. \\
The Delaware Certificate provides that unless the Board otherwise determines, newly created directorships resulting from any increase in the authorized number of directors or any vacancies on the Board resulting from the death, resignation, retirement, disqualification, removal from office or other cause shall be filled only by a majority vote of the directors then in office, though less than a quorum, or by a sole remaining director, and not by the stockholders.
\end{tabular} \\
\hline Removal of Directors & Under California law, any director, or the entire board of directors, may be removed, with or without cause, with the approval of a majority vote of the shareholders. & No change. Under Delaware law, any director, or the entire board, may be removed, with or without cause, with the approval of a majority of the outstanding shares entitled to vote at an election of directors. \\
\hline Ability of Shareholders to Call Special Meetings & \begin{tabular}{l}
Under California law, a special meeting of shareholders may be called by the board of directors, the chairman of the board, the president, or the holders of shares entitled to cast not less than \(10 \%\) of the votes at such meeting and such persons as are authorized by the articles of incorporation or bylaws. \\
The California Bylaws provide that a special meeting of shareholders may be called by the Chief Executive Officer of the Company (or other officers acting for such person), the Board, or holders of not less than one-third (1/3) of the voting shares then issued and outstanding.
\end{tabular} & \begin{tabular}{l}
No change. Under Delaware law, a special meeting of stockholders may be called by the board of directors or by any person authorized in the certificate of incorporation or the bylaws. \\
The Delaware Bylaws provide that a special meeting of shareholders may be called by the Chief Executive Officer of the Company (or other officers acting for such person), the Board, or holders of not less than one-third (1/3) of the voting shares then issued and outstanding.
\end{tabular} \\
\hline Shareholder Action by Written Consent & California law provides that shareholder action by written consent is available unless otherwise provided in a company's articles of incorporation. The Company has not opted out of this default rule. & Substantially similar. The Delaware Bylaws provide that an action to be taken at any annual or special meeting of stockholders may be taken without a meeting if a consent in writing shall be signed by the holders of outstanding shares having not less than the minimum number of votes required to authorize or take such action at such meeting at which all shares entitled to vote thereon were present and voted. \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Provision & Southwest Gas California & Southwest Gas Delaware \\
\hline Amendment of Bylaws & \begin{tabular}{l}
The California Bylaws provide that the bylaws may be amended by the affirmative vote of a majority of shares outstanding (or by the written consent of such shareholders). \\
The California Bylaws provide that the Board may also adopt, amend or repeal any section of the California Bylaws; provided, however, that shareholder approval is required for any change in the size of the Board outside of the established range or a change in the established range. See "Number of Directors on the Board" above.
\end{tabular} & Substantially similar. The Delaware Certificate and the Delaware Bylaws provide that the Bylaws may be amended by the affirmative vote of a majority of shares outstanding (or by the written consent of such stockholders) or by the affirmative vote of a majority of the members of the Board. \\
\hline Exclusive Forum Selection Provision & The California Articles and the California Bylaws do not contain an exclusive forum selection provision. & The Delaware Certificate contains an exclusive forum selection provision that provides that the Court of Chancery in the state of Delaware will be the exclusive forum for certain actions involving Southwest Gas Delaware, unless Southwest Gas Delaware consents to an alternative forum. \\
\hline Interested Shareholder Transaction and Business Combination & \begin{tabular}{l}
California law does not provide any specific restrictions on an interested shareholder effecting a business combination. \\
The California Articles contain a provision whereby certain business combinations with a "dominant stockholder," generally a person who acquires \(10 \%\) or more of the outstanding voting stock, require the affirmative vote of at least \(85 \%\) of the outstanding shares of Southwest Gas California, subject to certain exceptions.
\end{tabular} & \begin{tabular}{l}
No change. Under Section 203 of the DGCL, a Delaware corporation is prohibited from engaging in a "business combination" with an "interested stockholder" (i.e., a stockholder acquiring \(15 \%\) or more of the Company's outstanding voting stock) for three years following the date that such person or entity becomes an interested stockholder without board approval. Section 203 makes certain types of unfriendly or hostile corporate takeovers, or other non-board approved transactions involving a corporation and one or more of its significant stockholders, more difficult. Delaware companies may opt out of Section 203 if the company's original certificate of incorporation expressly elects not to be governed by Section 203. \\
The Delaware Certificate elects not to be governed by Section 203 of the DGCL, and therefore Section 203 will not apply to Southwest Gas Delaware following the Reincorporation. However, the Delaware Certificate contains the same business combination restrictions currently in the California Articles.
\end{tabular} \\
\hline
\end{tabular}
\begin{tabular}{|c|c|c|}
\hline Provision & Southwest Gas California & Southwest Gas Delaware \\
\hline Stockholder Vote Required to Approve Merger or Sale of Company & Except in limited circumstances, California law generally requires the affirmative vote of a majority of the outstanding shares entitled to vote of both the acquiring and target corporations in order to approve a merger, including the affirmative vote of each class of outstanding stock. In addition, California law requires that a sale of all or substantially all of the assets of a corporation be approved by the holders of the outstanding shares representing a majority of the voting power of the corporation selling its assets. & No change. Similar to California law, except in limited circumstances, Delaware law generally requires that the holders of the outstanding shares representing a majority of the voting power of both the acquiring and target corporations approve a statutory merger, and require that a sale of all or substantially all of the assets of a corporation be approved by the holders of the outstanding shares representing a majority of the voting power of the corporation selling its assets. \\
\hline Restrictions on Cash Merger & Under California law, a merger may not be consummated for cash if the purchaser owns more than \(50 \%\) but less than \(90 \%\) of the then outstanding shares unless either: (i) all of the shareholders consent, which is not practical for a public company, or (ii) the Commissioner of Corporations approves the merger. This may have the effect of making a "cash-out" merger by a majority shareholder more difficult to accomplish. & Delaware law does not have an analogous provision. \\
\hline Dividend & Under California law, a corporation may not pay dividends or otherwise make other distribution to its shareholders unless either: (i) the corporation's retained earnings immediately prior to the proposed distribution equal or exceed the amount of the proposed distribution; or (ii) immediately after giving effect to the distribution, the corporation's assets (exclusive of goodwill, capitalized research and development expenses and deferred charges) would be at least equal to one and one fourth ( \(11 / 4\) ) times its liabilities (not including deferred taxes, deferred income and other deferred credits), and the corporation's current assets would be at least equal to its current liabilities (or one and one fourth ( \(11 / 4\) ) times its current liabilities if the average pre-tax and pre-interest expense earnings for the preceding two fiscal years were less than the average interest expense for such years). These tests are applied to California corporations on a consolidated basis. & Delaware law is generally more flexible than California law with respect to payment of dividends and implementing share repurchase programs. Delaware law generally provides that a corporation may redeem or repurchase its shares out of its surplus. In addition, Delaware law generally provides that a corporation may declare and pay dividends out of surplus, or if there is no surplus, out of net profits for the fiscal year in which the dividend is declared and/or for the preceding fiscal year. Surplus is defined as the excess of a corporation's net assets (i.e., its total assets minus its total liabilities) over the capital associated with issuances of its common stock. Moreover, Delaware permits a board of directors to reduce its capital and transfer such amount to its surplus. \\
\hline
\end{tabular}

Elimination of Director
Personal Liability for Monetary Damages

California law permits a corporation to eliminate the personal liability of directors for monetary damages, except where such liability is based on:
(i) Intentional misconduct or knowing and culpable violation of law;
(ii) Acts or omissions that a director believes to be contrary to the best interests of the corporation or its shareholders or that involve the absence of good faith on the part of the director;
(iii) Receipt of an improper personal benefit;
(iv) Acts or omissions that show reckless disregard for the director's duty to the corporation or its shareholders, where the director in the ordinary course of performing a director's duties should be aware of a risk of serious injury to the corporation or its shareholders;
(v) Acts or omissions that constitute an unexcused pattern of inattention that amounts to an abdication of the director's duty to the corporation and its shareholders;
(vi) Transactions between the corporation and a director who has a material financial interest in such transaction; or
(vii) Liability for improper distributions, loans or guarantees.

The California Articles eliminate the liability of directors for monetary damages to the fullest extent permissible under California law.

Substantially similar. Delaware law permits a corporation to eliminate the personal liability of directors for monetary damages, except where such liability is based on:
(i) Breaches of the director's duty of loyalty to the corporation or its stockholders;
(ii) Acts or omissions not in good faith or involving intentional misconduct or knowing violations of law;
(iii) The payment of unlawful dividends or unlawful stock repurchases or redemption; or
(iv) Transactions in which the director received an improper personal benefit.

Such a limitation of liability provision also may not limit a director's liability for violation of, or otherwise relieve the company or directors from the necessity of complying with, federal or state securities laws, or affect the availability of non-monetary remedies such as injunctive relief or rescission.

To the fullest extent permitted by Delaware statutory or decisional law, the Delaware Certificate eliminates the liability of directors to the Company or its stockholders for monetary damages for breach of duty as a director.

Indemnification

Indemnification is permitted by California law, provided the requisite standard of conduct is met. California law requires indemnification when the indemnitee has defended the action successfully on the merits. Indemnification is permitted under California law only for acts taken in good faith and believed to be in the best interests of the company and its shareholders.

Expenses incurred by an officer or director in defending an action may be paid in advance, if the director or officer undertakes to repay such amounts if it is ultimately determined that he or she is not entitled to indemnification. California law authorizes a corporation to purchase indemnity insurance for the benefit of its officers, directors, employees and agents whether or not the corporation would have the power to indemnify against the liability covered by the policy.

California law permits a corporation to provide rights to indemnification beyond those provided therein to the extent such additional indemnification is authorized in the corporation's articles of incorporation. Thus, if so authorized, rights to indemnification may be provided pursuant to agreements or bylaw provisions which make mandatory the permissive indemnification provided by California law.

The California Certificate and Bylaws authorize indemnification to the fullest extent permissible under California law and includes additional substantive and procedural provisions to clarify the application of indemnification rights.

Substantially similar. Indemnification is permitted by Delaware law, provided the requisite standard of conduct is met. Delaware law requires indemnification of expenses when the individual being indemnified has successfully defended any action on the merits or otherwise. Indemnification is permitted under Delaware law for acts in good faith and in a manner reasonably believed to be in or not opposed to the best interests of the company.

Delaware law generally permits indemnification of expenses, including attorneys' fees, actually and reasonably incurred in the defense or settlement of a derivative or third party action, provided there is a determination by a majority vote of a disinterested quorum of the directors, by independent legal counsel or by the stockholders that the person seeking indemnification acted in good faith and in a manner reasonably believed to be in the best interests of the corporation. Without court approval, however, no indemnification may be made in respect of any derivative action in which such person is adjudged liable for negligence or misconduct in the performance of his or her duty to the corporation. Expenses incurred by an officer or director in defending an action may be paid in advance, if the director or officer undertakes to repay such amounts if it is ultimately determined that he or she is not entitled to indemnification. Delaware law authorizes a corporation to purchase indemnity insurance for the benefit of its directors, officers, employees and agents whether or not the corporation would have the power to indemnify against the liability covered by the policy. Delaware law permits a Delaware corporation to provide indemnification in excess of that provided by statute.

The Delaware Bylaws authorize indemnification to the fullest extent permissible under Delaware law and include additional substantive and procedural provisions to clarify the application of indemnification rights that are substantially similar to the California Certificate and Bylaws.

\section*{Interest of the Company's Directors and Executive Officers in the Reincorporation}

The shareholders should be aware that the Company's directors and executive officers in voting on the Reincorporation proposal may have interests in the transaction that are different from, or in addition to, the interests of the shareholders generally. For example, the Reincorporation may provide officers and directors of the Company with more clarity and certainty in the reduction of their potential personal liability, and strengthen the ability of directors to resist takeover bids. The Board has considered these interests, among other matters, in reaching its decision to approve the Reincorporation and to recommend that our shareholders vote in favor of this Proposal.

\section*{Certain U.S. Federal Income Tax Consequences}

The following discussion summarizes certain U.S. federal income tax consequences of the Reincorporation to holders of our Common Stock. The discussion is based on the Internal Revenue Code of 1986, as amended (the "Code"), regulations promulgated under the Code by the U.S. Treasury Department (including proposed and temporary regulations), rulings, current administrative interpretations and official pronouncements of the Internal Revenue Service (the "IRS"), and judicial decisions, all as currently in effect and all of which are subject to differing interpretations or to change, possibly with retroactive effect. Such change could materially and adversely affect the tax consequences described below. No assurance can be given that the IRS would not assert, or that a court would not sustain, a position contrary to any of the tax consequences described herein.

This discussion is for general information only, and does not purport to discuss all aspects of U.S. federal income taxation that may be important to a particular holder in light of its investment or tax circumstances or to holders subject to special tax rules, such as partnerships, subchapter S corporations or other pass-through entities, banks, financial institutions, tax-exempt entities, insurance companies, regulated investment companies, real estate investment trusts, trusts and estates, dealers in stocks, securities or currencies, traders in securities that have elected to use the mark-to-market method of accounting for their securities, persons holding our Common Stock as part of an integrated transaction, including a "straddle," "hedge," "constructive sale," or "conversion transaction," persons whose functional currency for tax purposes is not the U.S. dollar and persons subject to the alternative minimum tax provisions of the Code. This discussion does not include any description of the tax laws of any state or local governments, or of any foreign government, that may be applicable to a particular holder.

This discussion is directed solely to holders that hold our Common Stock as capital assets within the meaning of Section 1221 of the Code, which generally means as property held for investment. In addition, the following discussion only addresses "U.S. persons" for U.S. federal income tax purposes, generally defined as beneficial owners of our Common Stock who are:
- Individuals who are citizens or residents of the United States;
- Corporations (including an entity treated as a corporation for U.S. federal income tax purposes) created or organized in or under the laws of the United States or of any state of the United States or the District of Columbia;
- Estates, the income of which is subject to U.S. federal income taxation regardless of its source;
- Trusts, if a court within the United States is able to exercise primary supervision over the administration of any such trust and one or more U.S. persons have the authority to control all substantial decisions of such trust; or
- Trusts in existence on August 20, 1996 that have valid elections in effect under applicable Treasury regulations to be treated as U.S. persons.

If an entity or arrangement treated as a partnership for U.S. federal income tax purposes holds our Common Stock, the U.S. federal income tax treatment of a partner generally will depend on the status of the partner and the activities of the partnership. A partner of a partnership holding our Common Stock should consult its own tax adviser regarding the U.S. federal income tax consequences to the partner of the Reincorporation.

This discussion does not purport to be a complete analysis of all of the tax consequences of the Reincorporation that may be relevant to holders. We urge you to consult your own tax adviser regarding your particular circumstances and the U.S. federal income and other federal tax consequences to you of the Reincorporation, as well as any tax consequences arising under the laws of any state, local, foreign or other tax jurisdiction and the possible effects of changes in U.S. federal or other tax laws.

We have not requested a ruling from the IRS or an opinion of counsel regarding the U.S. federal income tax consequences of the Reincorporation. However, we believe:
- The Reincorporation will constitute a tax-free reorganization under Section 368(a) of the Code;
- No gain or loss will be recognized by holders of Southwest Gas California Common Stock on receipt of Southwest Gas Delaware common stock pursuant to the Reincorporation;
- The aggregate tax basis of Southwest Gas Delaware common stock received by each holder will equal the aggregate tax basis of the Southwest Gas California Common Stock surrendered by such holder in exchange therefor; and
- The holding period of the Southwest Gas Delaware common stock received by each holder will include the period during which such holder held the Southwest Gas California Common Stock surrendered in exchange therefor.

\section*{Vote Required}

The affirmative vote of the majority of the outstanding shares of Common Stock of the Company is required to approve the proposal for Reincorporation.

Shareholders are urged to read this proposal carefully, including all of the related appendices attached to this Proxy Statement, before voting on the Reincorporation. The discussion above summarizes material provisions of the Reincorporation and is subject to and qualified in its entirety by the Merger Agreement in substantially the form attached hereto as Appendix A, the Delaware Certificate of Incorporation in substantially the form attached hereto as Appendix B; and the Delaware Bylaws in substantially the form attached hereto as Appendix C. Copies of the California Articles and California Bylaws are filed with the SEC as exhibits to the Company's periodic or current reports and will be sent to shareholders free of charge upon written request to Southwest Gas Holdings, Inc., Attention: Corporate Secretary, 5241 Spring Mountain Rd., Las Vegas, Nevada 89150.

\section*{EXECUTIVE COMPENSATION}

\section*{COMPENSATION DISCUSSION AND ANALYSIS}

This Compensation Discussion and Analysis describes our 2018 executive compensation program, the compensation decisions made by the Compensation Committee (the "Committee") under our executive compensation program and the factors considered in making such decisions. This section focuses on the compensation of the Company's named executive officers ("NEOs") for fiscal 2018, who were:
" John P. Hester, President and Chief Executive Officer (the "CEO")
- Gregory J. Peterson, Senior Vice President/Chief Financial Officer
- Paul M. Daily, President and Chief Executive Officer, Centuri Construction Group, Inc.
- Karen S. Haller, Executive Vice President/Chief Legal and Administrative Officer and Corporate Secretary
- Eric DeBonis, Senior Vice President/Operations, Southwest Gas Corporation
- Roy R. Centrella, former Senior Vice President/Chief Financial Officer (retired March 30, 2018)

Through our reorganization in 2017, Southwest Gas Corporation (the predecessor publicly held parent company, "Southwest") and Centuri Construction Group, Inc. (previously a subsidiary of Southwest, "Centuri") became subsidiaries of the Company, a newly created holding company. Southwest is the primary entity in our natural gas operations business segment (the "utility segment"), and Centuri is the primary entity in our utility infrastructure services segment (the "utility infrastructure services segment").

In connection with the reorganization, Messrs. Hester and Centrella and Ms. Haller retained officer positions with Southwest, while also becoming officers of the Company. Also, during 2017, Mr. DeBonis, Senior Vice President/ Operations of Southwest, and Mr. Daily, President and Chief Executive Officer of Centuri, were designated executive officers of the Company based on the significance of their positions within the overall organization. On March 30, 2018, Mr. Centrella retired from Southwest and the Company. On April 1, 2018, Mr. Peterson was designated as an executive officer based upon his assumption of the role of Senior Vice President/Chief Financial Officer of both the Company and Southwest. Each of these officers were determined to be NEOs due to their position as CEO, Chief Financial Officer or one of the other three most highly compensated officers of the Company during 2018. Therefore, this Compensation Discussion and Analysis addresses the compensation programs of the Company, including elements of Southwest and Centuri compensation, where and as applicable to each of the NEOs. In this Compensation Discussion and Analysis, we sometimes refer to Messrs. Hester, Peterson and DeBonis and Ms. Haller as the "Southwest Officers," which term also includes Mr. Centrella for periods prior to April 2018.

\section*{Executive Summary}

\section*{2018 Business Results}

Calendar year 2018 reflects not only a year of strong operational and financial performance, but the advancement of many strategic initiatives, which are laying the groundwork for our continued success. We believe that our compensation programs, by focusing on the core fundamentals of our businesses and incentivizing long-term financial performance, have been and will continue to be successful at motivating the operational and strategic achievements that foster the creation of shareholder value. Recent accomplishments include the following:
- Basic earnings per share in 2018 of \$3.69.
- Annualized dividends declared per share were \(\$ 1.80\) in 2016, \(\$ 1.98\) in 2017 and \(\$ 2.08\) in 2018. In February 2019, the Board increased the quarterly dividend from 52 cents per share to 54.5 cents per share ( \(\$ 2.18\) on an annual basis and a \(4.8 \%\) increase), effective with the June 2019 payment.
- Centuri record revenues of \(\$ 1.5\) billion were experienced in 2018, an increase of \(\$ 276\) million, or 22\%, compared to 2017.
- Southwest Gas Corporation added 32,000 net new customers (1.6\% growth rate) in 2018.

We have continued to deliver positive returns to our shareholders, generating total shareholder returns (stock price appreciation and reinvested dividends) as shown in the following chart. Over the three-, five- and ten-year periods ending December 31, 2018, we have delivered more value, as expressed by annualized total shareholder return, than the S\&P 500 Index.


\section*{Incentive Compensation Structure}

The Committee believes our incentive compensation program (i) is a competitive program relative to our competitors for executive talent, (ii) aligns with best practices recommended by our compensation consultant, (iii) responds to shareholder expectations for pay-for-performance alignment and (iv) provides the appropriate linkage between executive compensation and the Company's long-term business strategy. The structure provides for cash-based annual incentive awards. Also, for Southwest Officers, long-term equity compensation comprised of performancebased equity compensation measured over the three-year performance period ("Performance Shares") and timelapse restricted stock units ("time-lapse RSUs") are provided, and for Centuri officers, long-term incentives based on Centuri's financial performance is included. Under this structure, a greater portion of our NEOs' total compensation is at-risk and variable based on performance relative to metrics that are more directly aligned with customer and shareholder interests. Beginning in 2019, Mr. Daily, the Centuri CEO, will also be eligible to receive performancebased and time-based equity compensation.

\section*{Annual Incentive Compensation Paid for 2018 Performance}

The Company and Southwest exceeded their respective net income targets of adjusted consolidated net income of \(\$ 168.5\) million for the Company and adjusted utility segment net income of \(\$ 129\) million for Southwest in fiscal 2018. Centuri surpassed its target pretax income goal of \(\$ 60.9\) million and exceeded threshold performance under this metric. These performances, coupled with achievements under applicable operational, safety and individual goals, resulted in Messrs. Hester, Peterson and Centrella and Ms. Haller receiving annual incentive awards equal to \(125 \%\) of their respective target awards, Mr. DeBonis receiving an award equal to \(124 \%\) of his target award and Mr. Daily receiving an award equal to \(145 \%\) of his target award (each as a specified percentage of base salary).

In the calculation of actual results under the adjusted net income measures for the Company and Southwest, the Committee excluded the benefits of the change to the federal corporate income tax rate pursuant to the Tax Cuts and Jobs Act of 2017 (the "TCJA"), and impacts of changes in the cash surrender value of Company-owned life insurance policies. See "Details of Compensation Program—Annual Incentive Compensation" below.

Past Company performance has established a strong financial platform for sustainable growth into the future, and these recent accomplishments are expected to contribute to our ability to provide total shareholder returns over the long term. Going forward, we expect further alignment between executive compensation and shareholder returns under our incentive compensation structure, as well as Centuri's long-term incentive plan (as discussed in more detail below).

\section*{Commitment to Best Practices}

We maintain executive compensation policies that are consistent with sound corporate governance and best practices. We annually review our executive compensation program and make changes where appropriate for our business, customers, and shareholders. Key policies include:
- Stock ownership (or equivalent) guidelines for NEOs and directors, with retention thresholds set at a competitive and meaningful multiple of annual base salary or Board retainer fees.
- Compensation Committee composed only of Independent Directors.
- Independent compensation consultant retained by the Committee, which has no other business with the Company.
- Change in control arrangements which do not provide for excise tax gross-ups or severance amounts greater than three times base salary.
- Double trigger equity acceleration following a change in control.
- No dividends paid on unvested stock-based awards until the underlying awards have vested.
- No tax reimbursements or gross-ups for benefits or perquisites.
- Clawback policy that is broader than current draft SEC regulations and which permits the Company to recover from our NEOs cash or equity incentive compensation in certain circumstances.
- Annual review of peer group used to assess executive compensation.
- Annual say-on-pay vote for shareholders.
- Anti-pledging and anti-hedging policies that apply to all of our executives and directors.

\section*{Compensation Program Objectives, Key Considerations and Principles}

\section*{Philosophy and Objectives}

The overall objectives of our executive compensation program are to:
- Recruit, retain, reward and motivate executive talent;
- Align the interests of the NEOs with those of the Company, its customers and its shareholders;
- Provide internally equitable and externally competitive compensation opportunities; and
- Recognize and reward performance that meets or exceeds the Company's targets.

Specifically, the Committee developed our executive compensation program to address the key business considerations and related compensation principles discussed below:
- Executive pay should be highly aligned with Company performance. The Committee is firmly committed to providing the Company's executives with incentive compensation opportunities that are directly tied to the measures of performance that it believes lead to shareholder value creation. We recognize that the compensation program should reward strong performance. Accordingly, a significant portion of each NEO's total direct compensation is earned only by achieving annual and long-term performance goals.
- Use of equity-based incentives, combined with stock ownership requirements, is key to aligning management interests with the Company's shareholders. The Committee seeks to align Southwest Officer interests with customers and shareholders by (i) delivering long-term incentive compensation in the form of equity, (ii) requiring meaningful officer stock ownership, and (iii) providing significant components of incentive compensation based on total shareholder return and financial performance measures, which foster growth in both our regulated and unregulated business segments. Centuri's annual and long-term incentives are also primarily based on Centuri financial performance metrics that are meaningful for shareholders, and Mr. Daily is required to invest in a deferral plan option with returns based on Centuri's financial performance. Beginning in 2019, Mr. Daily will also be eligible to receive performance-based and time-based equity compensation and be required to hold a multiple of his base salary in Company stock.
- Performance for our customers fosters enhanced shareholder value. In our utility segment, we strive to work collaboratively with regulators to achieve positive results for both customers and shareholders, and we recognize that customer satisfaction and the Company's safety record are both essential elements in the regulatory process. Safety is also critical to the success of our utility infrastructure services segment, and safety goals carry significant weight under Centuri's annual incentive plan. By emphasizing our core mission and values of safety, service and reliability, the Committee believes that it motivates achievements that are the platform for increased shareholder returns.
- Compensation programs should discourage undue risk-taking. The performance measures employed in the Company's incentive compensation programs, in addition to being reflective of the Company's core mission and business strategies, are also interdependent such that overemphasis by management in one area (such as cost containment) has the potential to negatively impact performance in other areas (such as customer satisfaction ratings and incident response times). We believe that the tension between the measures mitigates risk. We further mitigate risk by capping incentive award payouts and by setting target opportunities at levels that strike a reasonable balance among base salary and both annual and long-term incentives.
- The executive compensation program should be prospective. The Committee does not take into consideration the results of previously earned performance awards and the deferral of cash compensation in establishing the appropriate level of future compensation. The Committee does, however, take into consideration the Company's past performance in determining the long-term performance awards and in setting new performance targets.

\section*{Pay for Performance}

With respect to each of our NEOs, all annual cash incentives and long-term incentives were "at risk" performancebased compensation, as those awards are either variable based on the level of performance against incentive targets or are subject to continued employment and stock price performance during a three-year vesting period. The portion of total direct compensation designed to be at risk pay depends upon the NEO's position and the ability of that position to influence outcomes, as well as compensation market factors and risk mitigation considerations. Mr. Hester, the Company's CEO, has the largest portion of pay at risk. In 2018, the percentage of his targeted total direct compensation opportunity at risk was approximately \(75 \%\). For the other NEOs, the average percentage of such compensation at risk was approximately \(59 \%\).

\section*{Chief Executive Officer Target Compensation}


\section*{Other NEOs \\ Target Compensation}

\section*{Compensation Program Administration}

\section*{Role of the Committee}

The Committee administers our executive compensation programs. The Committee annually reviews and approves the corporate goals and objectives relevant to the CEO's compensation, the CEO's performance in relation to such goals and objectives and, together with the other Independent Directors of the Board, the CEO's actual compensation. The Committee also reviews, together with the CEO, and approves the salaries and incentive compensation for the other executive officers. The Committee's Charter is available on the Company's website at www.swgasholdings.com.

\section*{Role of Management}

Management, including the NEOs, provides guidance to, and receives direction from, the Committee regarding executive compensation. Management annually provides information to the Committee regarding what it believes to be appropriate levels of the various elements of direct compensation (including target awards for incentive compensation), as well as the thresholds, targets and maximums of the performance measures. Information is gathered from Company operating data, external independent surveys and publicly available compensation comparisons. Decisions regarding CEO compensation are made solely by the Committee in executive session.

\section*{Role of Independent Compensation Consultant}

While consultants may be retained by management to assess executive compensation, the Committee has the authority, independent of management, to employ and retain consultants to assist it in establishing the executive compensation objectives and in determining whether the objectives have been satisfied. In 2018, the Committee engaged Pay Governance as an independent consultant to perform a competitive pay benchmarking analysis of the Southwest Officers, independent from management's recommendations. Pay Governance's engagement with the Committee also included a review and analysis of director compensation and Centuri CEO compensation. Pay Governance did not receive any fees from the Company for services other than the fees paid with respect to executive and director compensation services.

For 2018, the Committee analyzed whether the work of Pay Governance or any other executive compensation adviser raised any conflict of interest, taking into consideration all relevant factors, including those set forth in Rule 10C-1(b)(4)(i) through (vi) under the Exchange Act. The Committee determined, based on its analysis of all relevant factors, that no conflicts of interest were present. One compensation consultant engaged by management, Korn Ferry, provided services in the area of executive compensation, but also performed more than \(\$ 120,000\) of services for the Company in other areas. In 2018, the Company paid Korn Ferry \(\$ 33,785\) for executive officer compensation consulting and a total of \(\$ 214,366\) in the areas of rate case support, executive coaching, organization design and executive succession.

\section*{How We Determine Amounts Paid for Each Element of Compensation}

We operate in a competitive environment for talented executives, and the Committee analyzes a variety of information as it seeks to identify competitive levels of compensation within the relevant markets in which we operate.

\section*{Peer Group}

The companies in the compensation peer group for the Southwest Officers were selected because they represent those companies considered by the Committee to be the most comparable to the Company in terms of business operations, operational complexity, revenue, market capitalization and overall financial performance. For 2018, the peer group was composed of 13 companies in the utility industry, which at the time of selection had no less than half and no more than twice the reported revenue of the Company.
- Atmos Energy Corporation
- Avista Corporation
- Black Hills Corporation
- Great Plains Energy, Inc.
- New Jersey Resources Corporation
- Northwestern Corporation
- ONE Gas, Inc.
- Pinnacle West Capital Corporation
- PNM Resources, Inc.
- Portland General Electric Company
- Spire Inc.
- Vectren Corporation
- Westar Energy, Inc.

\section*{Compensation Review}

Pay Governance performed comprehensive competitive compensation benchmarking, which included assessments of all elements of compensation for the Southwest Officers. The competitive compensation benchmarking data reviewed by the Committee included base salary, annual incentive compensation and long-term incentive compensation found in the proxy statements filed by companies in the peer group. The structures of the incentive, deferred compensation and supplemental retirement programs of the Company were also reviewed in comparison to peer company programs.

To supplement the executive compensation information derived from its study of the peer group with respect to the Southwest Officers, as well as to identify the relevant market for Mr. Daily, the Committee also reviewed and considered executive compensation benchmarking data provided by management and compensation surveys prepared by FMI Compensation and Meridian Compensation Partners LLC. Statistical analysis was employed based on relative total annual revenues in order to adjust for size differences and to determine competitive pay rates for our NEOs based upon the data derived from the surveys.

\section*{Benchmarking of Compensation}

In reference to the data and analyses discussed above, the Committee reviewed competitive target compensation levels for each NEO relative to the 50th percentile of the relevant market. For each NEO position, base salary, target total cash compensation (base salary plus annual incentive award) and target total direct compensation (base salary plus annual incentive award plus the target value of long-term incentive compensation) were benchmarked and analyzed at the median level. The Committee found that base salaries, target total cash compensation and target total direct compensation for each of the Southwest Officers were generally aligned with the relevant market benchmarks.

In 2017, the Committee determined that Mr. Daily's target annual incentive opportunity was above the median level for peer companies and that his target long-term opportunity was below the median level, but that his target total direct compensation was competitive with the relevant market. The levels of the various elements of Mr. Daily's compensation were originally determined through the negotiation of Mr. Daily's employment agreement in 2016.

For 2018, Mr. Daily agreed to a rebalancing of his annual and long-term incentive compensation. In 2018, Mr. Daily received an increase to his base salary, while his short-term incentive opportunity decreased. Beginning in 2019, Mr. Daily will be required to hold two times his base pay in Company stock as part of an increase to his long-term incentive opportunity. This requirement aligns Mr. Daily's and shareholder interests by providing a link to Company performance, while still retaining the link to Centuri performance via the requirement that Mr. Daily defer cash compensation in the Centuri salary deferral plan.

Other elements of overall compensation for the NEOs (perquisites, welfare benefits, retirement benefits and posttermination benefits) were implemented at various times over the past several years to remain competitive with the relevant market. In determining the Company's overall compensation, we annually compare elements of direct compensation and the level of other benefits with those of the relevant market to ensure the Company remains competitive.

\section*{Consideration of 2018 Say-on-Pay Vote}

The Company holds an annual say-on-pay advisory vote regarding executive compensation. At the 2018 annual meeting of shareholders, approximately \(98 \%\) of the votes cast were in favor of the compensation of the NEOs as described in the proxy statement for the 2018 annual meeting. The Board and Committee reviewed these final vote results and determined that, given the significant level of support, no changes to our executive compensation philosophy, policies and decisions were necessary based solely on the vote results. Nevertheless, as discussed in this Compensation Discussion and Analysis, the Committee's activities in fiscal year 2018 demonstrate our ongoing commitment to ensure our executive compensation remains aligned with the interests of our shareholders and current market practices. Additionally, we determined that our shareholders should vote on a say-on-pay proposal each year. The Board recommends that you vote FOR Proposal 4 at the Annual Meeting. For more information, see "ADVISORY VOTE TO APPROVE THE COMPANY'S EXECUTIVE COMPENSATION" in this Proxy Statement.

\section*{Details of Compensation Program}

The nature of the Company's operations and competitive considerations have led the Committee to design and employ compensation programs that we believe are comparable to compensation programs widely used in the natural gas operations and utility infrastructure services industries, as applicable. To accomplish our objectives, our programs are designed to respond to changing market conditions and to offer a broad spectrum of compensation opportunities. Performance is the critical component of our programs, and both individual and overall Company performance can impact an NEO's level of compensation on an annual basis.

\section*{Why We Pay Each Element}

The elements of executive compensation for the NEOs and the purpose for providing each element are described below:
\begin{tabular}{lll} 
Element & \multicolumn{1}{c}{ Purpose } & \multicolumn{1}{c}{ Summary of Features } \\
\hline Base Salary & - Recognize leadership responsibilities & - \begin{tabular}{l} 
Targeted at 50th percentile of relevant \\
and value of executive's position to the \\
peer group companies.
\end{tabular} \\
& - Company. & - Adjustments are made based upon the \\
& forve as a competitive compensation & \begin{tabular}{l} 
value of the position to the business, \\
individual performance and pay
\end{tabular} \\
& & relative to the appropriate market.
\end{tabular}

\section*{Base Salaries}

Salaries for the Company's NEOs are established based on the scope of their responsibilities, taking into account competitive market compensation paid by the peer group and additional salary survey data for similar positions. The competitive market processes discussed above were used by the Committee to help ensure that salaries are reasonable, competitive and properly address position responsibility. The range of salaries available through this review provides an objective standard to determine the appropriate level of salary for a given executive position. Salaries are reviewed annually and are subject to mid-year adjustment to realign salaries with market levels after taking into consideration individual responsibilities, performance, inflation and experience.

\section*{Annual Incentive Compensation}

We establish cash incentive opportunities on an annual basis, expressed as a percentage of each individual's base salary. The target level of annual incentive opportunities granted to Southwest Officers is based primarily on the competitive compensation benchmarking. The value of Mr. Daily's incentive was largely the product of the negotiation of his employment agreement, as discussed above, but based on recent rebalancing the Committee determined that it falls within a reasonable range for his position. The target incentive opportunities for the NEOs were set at the following percentages of base salary for 2018:
\begin{tabular}{lr} 
& \begin{tabular}{c} 
Incentive \\
Opportunities \\
\((\%\) of salary)
\end{tabular} \\
\hline John P. Hester & \(100 \%\) \\
\hline Gregory J. Peterson & \(60 \%\) \\
\hline Paul M. Daily & \(100 \%\) \\
\hline Karen S. Haller & \(65 \%\) \\
\hline Eric DeBonis & \(50 \%\) \\
\hline Roy R. Centrella (Retired) & \(60 \%\) \\
\hline
\end{tabular}

Southwest Annual Incentives. Annual incentive opportunities are payable entirely in cash.
The 2018 performance measures for Southwest Officers were tied to measures of financial performance, customer satisfaction, productivity and safety. For 2018, the Committee derived the targets for our four performance measures as follows:
- Adjusted Net Income. The primary financial measure is adjusted net income, which is measured on a consolidated basis for Messrs. Hester, Peterson, and Centrella and Ms. Haller because of their influence over both of the Company's business segments, and measured solely for the utility segment for Mr. DeBonis. Both adjusted net income measures were designed to exclude the impact of Company-owned life insurance and benefits of TCJA tax reform to more closely represent Company-driven outcomes. The target for the adjusted net income component was \(\$ 168.5\) million on a consolidated basis and \(\$ 129\) million for the utility segment, which were derived from Company and Southwest business plans and budgets.
- Customer Satisfaction. The customer satisfaction measure is based on independent customer surveys conducted in each of our utility operating divisions. The target for this component was \(92 \%\) customer satisfaction, the same as 2017's target.
- Productivity. The productivity measure was designed to reward success in reaching a predetermined level of operations and maintenance expense per customer. The target was \(\$ 213\) per customer (including non-service pension costs), which represents a \(2 \%\) increase from the Company's 2017 target.
- Safety. The Committee chose the two components of the safety performance measure because they are oriented toward incidents associated with the Company's gas distribution systems and thereby linked to risks in areas such as regulation, operations, reputation and franchise value. The Company's 2018 target for damage per 1,000 tickets is 1.50, a higher level of achievement than the American Gas Association peer median. The target for incident response time within 30 minutes was 70\%, representing a 1\% improvement from the Company's 2017 target.

For plan year 2018, the weighting of the measures was as follows: Adjusted Net Income: 40\%; Customer Satisfaction: 20\%; Productivity: 20\%; and Safety: 20\%. Actual awards for each measure are determined as of year-end by comparing the Company's performance to the threshold, target and maximum levels set by the Committee at the beginning of the year for each performance measure. When threshold performance for any measure is achieved, an award with respect to that measure is earned. Award payouts can range from \(70 \%\) (at threshold) to \(100 \%\) (at target) to
\(140 \%\) (at maximum) of the assigned incentive opportunity for each measure, based on where actual results fall in the range from threshold to target to maximum. No awards are paid with respect to any measure if \(80 \%\) of target adjusted net income is not achieved. We determine actual payouts through linear interpolation.

The thresholds, targets and maximums and actual results under the four core performance measures for 2018 are set forth below:
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Measure & Threshold & Target & Maximum & Actual & Weighting & Payout \% \\
\hline \multicolumn{7}{|l|}{Adjusted Net Income:} \\
\hline Consolidated (000s) \({ }^{(1)}\) & \$151,650 & \$168,500 & \$185,350 & \$179,927 & 40\% & 50.85\% \\
\hline Utility (000s) \({ }^{(1)}\) & \$119,970 & \$129,000 & \$138,030 & \$134,632 & 40\% & 49.98\% \\
\hline Customer Satisfaction & 88\% & 92\% & 95\% & 95.10\% & 20\% & 28.00\% \\
\hline Productivity (O\&M/Customer) & \$ 216 & \$ 213 & \$ 210 & \$ 211.04 & 20\% & 25.23\% \\
\hline \multicolumn{7}{|l|}{Safety:} \\
\hline Damage per 1,000 Tickets & 1.80 & 1.50 & 1.20 & 1.43 & 10\% & 10.93\% \\
\hline Response Times w/in 30 Min. & 67\% & 70\% & 73\% & 70.10\% & 10\% & 10.13\% \\
\hline
\end{tabular}

\section*{Total:}
\begin{tabular}{ll} 
Consolidated & \(125 \%\) \\
\hline Utility & \(124 \%\)
\end{tabular}
(1) In the calculation of actual results under the adjusted net income measures, the Committee excluded the aggregate impact of the TCJA and earnings impacts of Company-owned life insurance policy value changes. Additionally, for consolidated adjusted net income, the Committee excluded net costs related to the acquisition of Linetec Services LLC in November 2018 and IntelliChoice Energy, LLC expense accruals.

The Committee has the discretion to reduce an NEO's overall award that would otherwise be earned for failure to satisfy individual performance goals. The Committee reviews the CEO's individual performance to determine whether there will be any downward adjustment. For 2018, individual performance goals for the CEO centered on promoting fundamental business strategies, maximizing customer and shareholder value, pursuing regulatory initiatives and overseeing the utility infrastructure services segment.

The CEO reviews the other executive officers' individual performances to determine whether there will be any downward adjustment in the performance awards. As a result of such review, if the CEO recommends a downward adjustment in the performance awards, the CEO will bring the matter before the Committee for review and approval. Mr. Peterson's goals were centered on investor relations activities, financial planning and execution, external reporting, regulatory compliance and strategic planning matters. Ms. Haller's goals pertain to legal matters, corporate ethics and compliance, enterprise risk management and the corporate secretary, gas resources, human resources and administrative functions. Mr. DeBonis' goals were directed to maintaining system safety and reliability, controlling operating costs and enhancing customer service. The individual performance goals for the CEO and other eligible Southwest Officers were satisfied, and there were no reductions in their awards in respect to 2018.

Adjusted net income, both on a consolidated and utility segment basis, exceeded \(80 \%\) of our target, and achievements under the performance measures aggregated for a payout of \(125 \%\) of the target incentive award opportunity for Ms. Haller and Messrs. Hester, Peterson and Centrella and \(124 \%\) of target for Mr. DeBonis. These aggregated percentage payouts are multiplied by the total incentive opportunity (expressed above as a percentage of base salary) to determine the overall dollar value of the annual award. The following table details the actual payouts associated with the 2018 annual incentive awards for the eligible Southwest Officers:
\begin{tabular}{|c|c|c|c|c|}
\hline & Incentive Opportunities (\% of salary) & Total Achievement of Performance Measures (\% of target) & Incentive Earned (\% of salary) & Incentive Earned \\
\hline John P. Hester & 100\% & 125\% & 125.0\% & \$1,125,000 \\
\hline Gregory J. Peterson & 60\% & 125\% & 75.0\% & \$ 279,120 \\
\hline Karen S. Haller & 65\% & 125\% & 81.3\% & \$ 341,250 \\
\hline Eric DeBonis & 50\% & 124\% & 62.0\% & \$ 207,700 \\
\hline Roy R. Centrella (Retired) \({ }^{(1)}\) & 60\% & 125\% & 18.8\% & \$ 80,625 \\
\hline
\end{tabular}
(1) Mr. Centrella's incentive award was prorated based on his retirement date.

Centuri Annual Incentives. For Centuri, the Committee selected financial performance and safety goals for the 2018 annual incentive opportunities.
- Financial Measure. The primary financial measure is pretax income, with a target of \(\$ 60.9\) million, which was derived from Centuri's business plans and budgets.
- Safety. The safety goal is based on the American Gas Association days away from work, restricted or transferred (DART) incident rate, the industry standard measurement for safety. The target of 1.0 represents a significantly better score than the median of Centuri's competitors.

For plan year 2018, the weighting of the measures was as follows: Pretax Income: 75\% and Safety: 25\%.
Actual awards for each measure are determined as of year-end by comparing Centuri performance to the threshold, target and maximum levels set by the Committee at the beginning of the year for each performance measure. When threshold performance for any measure is achieved, an award with respect to that measure is earned. Award payouts can range from \(65 \%\) (at threshold) to \(100 \%\) (at target) to \(170 \%\) (at maximum) of the assigned incentive opportunity for each measure, based on where actual results fall in the range from threshold to target to maximum. We determine actual payouts through linear interpolation.

The thresholds, targets and maximums and actual results under the two performance measures for 2018 are set forth below:
\begin{tabular}{lrrrrrr} 
Measure & Threshold & Target & Maximum & Actual \({ }^{1}\) ) & Weighting & Payout \(\%\) \\
\hline Pretax Income & \(\$ 42.6\) million & \(\$ 60.9\) million & \(\$ 76.1\) million & \(\$ 71.7\) million & \(75 \%\) & \(150 \%\) \\
\hline Safety (DART) & 1.62 & 1.00 & 0.31 & 0.69 & \(25 \%\) & \(131 \%\) \\
\hline Total & & & & & & \(\mathbf{1 4 5 \%}\) \\
\hline
\end{tabular}
(1) In the calculation of actual results under the pretax income measure, the Committee excluded net costs related to the acquisition of Linetec Services LLC in November 2018 and IntelliChoice Energy, LLC expense accruals.

No awards are paid in any year unless \(50 \%\) of target pretax income is achieved. In 2018, pretax income exceeded \(50 \%\) of target, and achievements under the other performance measure aggregated for a payout of \(145 \%\) of the target incentive award opportunity for Mr. Daily. The aggregated percentage payout is multiplied by the total incentive opportunity (expressed above as a percentage of base salary) to determine the overall dollar value of the annual award. The following table details the potential and actual payouts associated with the 2018 annual incentive award to Mr. Daily:
\begin{tabular}{lrrrr} 
& \begin{tabular}{c} 
Incentive \\
Opportunities \\
(\% of salary)
\end{tabular} & \begin{tabular}{r} 
Total Achievement of \\
Performance Measures \\
(\% of target)
\end{tabular} & \begin{tabular}{r} 
Incentive Earned \\
(\% of salary)
\end{tabular} & \begin{tabular}{r} 
Incentive Earned \\
(\$)
\end{tabular} \\
\hline Paul M. Daily & \(100 \%\) & \(145.16 \%\) & \(145.16 \%\) & \(\$ 830,315\) \\
\hline
\end{tabular}

\section*{Long-Term Incentive Compensation}

Our long-term incentive compensation is designed to provide incentives for maintaining long-term performance and strengthening customer and shareholder value over a three-year performance period. Southwest Officers are incentivized with equity compensation. Centuri maintains a cash based long-term incentive plan for Centuri executives, including Mr. Daily, but beginning in 2019, Mr. Daily will also be eligible to be awarded Company equity as a long-term incentive. The Committee based the value of incentive awards granted to Southwest Officers primarily on the competitive compensation benchmarking, while the value of Mr. Daily's incentive award was largely the product of the negotiation of his employment agreement, but was rebalanced in 2018. For 2018, the target long-term incentive opportunities for the NEOs were set at the following percentages of base salary:
\begin{tabular}{lcccc} 
& \multicolumn{4}{c}{ Incentive Opportunities (\% of salary) } \\
\cline { 2 - 5 } & RSUs & \begin{tabular}{c} 
Performance \\
Shares
\end{tabular} & Cash & Total \\
\hline John P. Hester & \(60 \%\) & \(140 \%\) & - & \(200 \%\) \\
\hline Gregory J. Peterson & \(15 \%\) & \(15 \%\) & - & \(30 \%\) \\
\hline Paul M. Daily & - & - & \(70 \%\) & \(70 \%\) \\
\hline Karen S. Haller & \(30 \%\) & \(70 \%\) & - & \(100 \%\) \\
\hline Eric DeBonis & \(30 \%\) & \(60 \%\) & - & \(90 \%\) \\
\hline Roy R. Centrella (Retired) \({ }^{(1)}\) & \(30 \%\) & \(70 \%\) & - & \(100 \%\) \\
\hline
\end{tabular}
(1) Mr. Centrella's long-term incentive payment will be prorated based on his retirement date.

Southwest Long-Term Incentives. Long-term incentives for the Southwest Officers are composed of time-lapse RSUs and Performance Shares. The CEO's target long-term opportunity for the three-year performance period beginning in 2018 is \(200 \%\) of base salary, \(70 \%\) in the form of Performance Shares and \(30 \%\) granted as time-lapse RSUs.
- RSUs. The Committee believes that grants of time-lapse RSUs promote and encourage long-term retention and service to the Company, align the interests of our NEOs with those of our customers and shareholders through increased share ownership, and provide a balanced approach to long-term compensation. At its February 2018 meeting, the Committee approved the 2018 grants under this program, which the Board approved. The number of RSUs granted was determined based on the closing price for our Common Stock for the last trading day of 2017 ( \(\$ 80.48\) per share). The time-lapse RSUs granted in 2018 vest \(40 \%\) one year after the award date and \(30 \%\) following each of the next two years, assuming continued service.

The table below illustrates the target long-term incentive opportunity granted as time-lapse RSUs, and the number granted:
\begin{tabular}{lrrr} 
& \begin{tabular}{r} 
RSU Component \\
(\% of salary)
\end{tabular} & \begin{tabular}{r} 
RSU Component \\
(\$)
\end{tabular} & \begin{tabular}{r} 
RSUs Granted \\
(\#)
\end{tabular} \\
\hline John P. Hester & \(60 \%\) & \(\$ 495,000\) & 6,151 \\
\hline Gregory J. Peterson & \(15 \%\) & \(\$ 37,200\) & 462 \\
\hline Karen S. Haller & \(30 \%\) & \(\$ 113,100\) & 1,405 \\
\hline Eric DeBonis & \(30 \%\) & \(\$ 96,600\) & 1,200 \\
\hline Roy R. Centrella (Retired) & \(30 \%\) & \(\$ 129,000\) & 1,603 \\
\hline
\end{tabular}
- Performance Shares. The Committee believes that the payment of long-term incentive compensation in the form of Performance Shares, measured over a three-year performance period, rewards our NEOs for improved financial performance of the Company, thereby giving them an incentive to enhance long-term customer and shareholder value. The target number of Performance Shares granted was determined based on the closing price for our Common Stock for the last trading day of 2017 ( \(\$ 80.48\) per share). Performance Shares granted in 2018 are earned upon achievement of financial performance goals for the three-year period from 2018 through 2020.

The table below illustrates the target long-term incentive opportunity granted as Performance Shares, and the number of Performance Shares granted:
\begin{tabular}{lrrr} 
& \begin{tabular}{r} 
PS Component \\
(\% of salary)
\end{tabular} & Target PS Component \\
(\$)
\end{tabular}\(\quad\)\begin{tabular}{r} 
Target PSs \begin{tabular}{r} 
Granted \\
(\#)
\end{tabular} \\
\hline John P. Hester \\
\hline Gregory J. Peterson \\
\hline Karen S. Haller \\
Eric DeBonis
\end{tabular}
(1) Mr. Centrella will be paid a prorated amount based on his time of service during the performance period. He will receive his award after the performance periods conclude.

For Performance Shares granted in 2018 to Messrs. Hester and Centrella and Ms. Haller, 60\% are earnable based on a consolidated earnings per share ("EPS") performance measure, and \(40 \%\) are earnable based on a utility segment return on equity ("ROE") performance measure. For Mr. DeBonis and Mr. Peterson, 60\% of the Performance Shares are based on utility segment net income, and \(40 \%\) are based on ROE. Since Mr. Peterson became an NEO after the Performance Share grant was made, his grant was made based on utility segment net income and ROE. Each of these measures is adjusted to remove the impact of Company-owned life insurance.

At its meeting in February 2018, the Committee established the threshold, target and maximum performance levels upon which Performance Share awards would be based for the 2018 through 2020 performance period and awarded grants of Performance Shares to the Southwest Officers, which were later approved by the Board. The target levels were based on Company and Southwest business plans and budgets and took into account such factors as budgeted capital expenditures, expected growth within the markets that the Company serves, competitive factors from other service providers, and other business considerations embedded in the Company's annual business planning process. The following table shows the three-year performance criteria for such period:
\begin{tabular}{lrrrr} 
Performance Level & EPS (\$) & \begin{tabular}{c} 
Utility Net \\
Income (000s)
\end{tabular} & \begin{tabular}{c} 
Return on \\
Equuty (\%)
\end{tabular} & \begin{tabular}{c} 
Base Percentage (\%) of \\
Target Award Earned (1)
\end{tabular} \\
\hline Below Threshold & \(<\$ 9.45\) & \(<\$ 379,440\) & \(<6.50 \%\) & No award \\
\hline Threshold & \(\$ 9.45\) & \(\$ 379,440\) & \(6.50 \%\) & \(50 \%\) \\
\hline Target & \(\$ 10.50\) & \(\$ 408,000\) & \(7.50 \%\) & \(100 \%\) \\
\hline Maximum & \(\$ 11.55\) & \(\$ 436,560\) & \(8.50 \%\) & \(150 \%\) \\
\hline
\end{tabular}
(1) Subject to upward or downward adjustment based on total shareholder return performance relative to a peer group.

Linear interpolation will be used to compute the percentage of the target award earned. The awards are payable in the form of Common Stock with the Southwest Officers also receiving cumulative dividend equivalents over the three-year performance period on such awards to the extent the underlying shares are earned.

If threshold performance is met, a base number of Performance Shares in a range of \(50 \%\) to \(150 \%\) of the target number will be earned, subject to modification based on total shareholder return relative to a peer group. Total shareholder return of the Company over the three-year period, plus dividends will be compared to total shareholder returns of peer companies in the Bloomberg Transmission Distribution List. Relative performance that places the Company at or above the 75th percentile of the peer group would result in maximum upward adjustment of the number of shares of Common Stock earned by \(30 \%\), performance in the range between the 25th and 75th percentiles would result in no adjustment, and performance at or below the 25th percentile of the peer group would result in maximum downward adjustment by \(15 \%\) (provided that if a base number of shares is earned, the lowest percentage of the target number that will vest is \(50 \%\) ).

The Committee included the total shareholder return feature to link performance under the respective performance measures with the market's reaction to that performance. The Committee determined that the modifier should not be symmetrical because Performance Shares are 100\% at risk as currently designed.

Centuri Long-Term Incentives. Because Centuri typically accounted for less than 20\% of the Company's business on a net income basis, we have not historically granted Company equity awards to Centuri executives. However, the Committee recognized that the Centuri share of the business mix is increasing and determined to strengthen the link to Company performance through granting Company equity to the Centuri Chief Executive Officer for part of his longterm incentives commencing in 2019. For other Centuri officers, long-term incentives for Centuri are paid solely in the form of cash awards based on the achievement of Centuri-specific performance goals to provide Centuri executives with an incentive to enhance the significant component of shareholder value over which they have the most influence. The table below illustrates the target long-term incentive opportunity granted to Mr. Daily for the performance period from 2018 through 2020:
\begin{tabular}{lrr} 
& \begin{tabular}{r} 
Target Cash Long- \\
Term Incentive \\
(\% of salary)
\end{tabular} & \begin{tabular}{r} 
Target Cash Long- \\
Term Incentive \\
(\$)
\end{tabular} \\
\hline Paul M. Daily & \(70 \%\) & \(\$ 385,000\) \\
\hline
\end{tabular}

The payment of incentive compensation under Centuri's long-term cash plan is measured by Centuri's compounded enterprise value ("EV") growth rate over a three-year performance period. EV is defined as earnings before interest taxes and depreciation ("EBITDA") for Centuri multiplied by an EBITDA multiple determined by the Committee at the beginning of the performance period minus Centuri net debt.

At its meeting in May 2018, the Committee established the threshold, target and maximum performance levels of EV growth for Centuri from the baseline of Centuri's EV as of 2017 year-end. The target EV growth rate level was based on Centuri's business plan and budget and took into account such factors as budgeted capital expenditures, expected growth within the markets that Centuri serves, competitive factors from other service providers and other business considerations embedded in Centuri's annual business planning process. The following table summarizes the performance goals for the performance period from 2018 through 2020:
\begin{tabular}{lrr} 
Performance Level & \begin{tabular}{c} 
Three-Year \\
Compounded \\
EV Growth
\end{tabular} & \begin{tabular}{c} 
Percentage (\%) of \\
Target Award Earned
\end{tabular} \\
\hline Below Threshold & \(<6.1 \%\) & No award \\
\hline Threshold & \(6.1 \%\) & \(25 \%\) \\
\hline Target & \(15.8 \%\) & \(100 \%\) \\
\hline Maximum & \(33.1 \%\) & \(200 \%\) \\
\hline
\end{tabular}

Linear interpolation will be used to compute the percentage of the target award earned. Awards under the plan are to be paid in cash following the end of the performance period.

For the performance period from 2019 through 2021, Mr. Daily's long-term incentive opportunity will be 120\% of base salary in connection with the ability to earn Company equity for part of his long-term incentive.

\section*{Perquisites}

The Company provides a limited number of perquisites to its executive officers. The NEOs receive car allowances, annual allowances for physical examinations, and an allowance once every three years to assist in financial and estate planning. Senior executive officers are also provided social club memberships. The CEO of Centuri also receives life insurance as a perquisite.

\section*{Retirement Benefits}

Southwest Retirement Benefits. Four retirement benefit plans are available to the Southwest Officers. Two of the plans, the Retirement Plan for Employees of Southwest ("Retirement Plan") and the Employee Investment Plan ("EIP"), both tax-qualified plans, are available to all Southwest employees. Two additional plans are offered to officers, the Supplemental Executive Retirement Plan ("SERP") and the Executive Deferral Plan ("EDP"). These additional plans were established to attract and retain qualified executives and to address the dollar limitations imposed on the two tax-qualified plans.
- Retirement Plan. Benefits under the Retirement Plan are based on (i) the executive's years of service with the Company, up to a maximum of 30 years, and (ii) the average of the executive's highest five consecutive years' salaries, within the final 10 years of service, not to exceed a maximum compensation level established by the Internal Revenue Service.
- SERP. The SERP is designed to supplement the benefits under the Retirement Plan to a level of 50-60\% of salary. To qualify for benefits under the SERP, which is based on a 12 -month average of the highest consecutive 36 -months of salary, an executive is required to have reached (i) age 55 , with 20 years of service with the Company, or (ii) age 65 , with 10 years of service.
- EIP. Southwest Officers may participate in the EIP and defer salary up to the maximum annual dollar amount permitted for \(401(\mathrm{k})\) plans under the Code. Investments of these deferrals are controlled by the individual executives from a selection of investment options offered through the EIP. There are no employer matching contributions for executive deferrals into the EIP.
- EDP. The EDP supplements the deferral opportunities by permitting executives to defer up to \(100 \%\) of their annual salary and non-equity incentive compensation. As part of the EDP, the Company provides matching contributions up to \(3.5 \%\) of annual salary, which vest immediately. Amounts deferred and Company matching contributions bear interest at \(150 \%\) of the Moody's Seasoned Corporate Bond Rate (the "Bond Rate"). At retirement or termination, with five years of service with the Company, the Southwest Officers will receive EDP balances paid out at the election of the participant over a period of 10,15 or 20 years and will be credited during the applicable payment period with interest at \(150 \%\) of the average of the Bond Rate on each January 1st for the five years prior to the start of retirement.

Centuri Retirement Benefits. Centuri maintains three plans which provide retirement benefits for the Centuri executives, including Mr. Daily: a 401(k) plan, a non-qualified deferred compensation plan and the Centuri LongTerm Capital Investment Plan ("LTCIP").
- Centuri 401(k) Plan. Mr. Daily receives matching contributions from Centuri to his account in the Centuri 401(k) Plan, consistent with all other employees participating in the plan. Centuri matches 100\% of Mr. Daily's pre-tax contributions up to the first \(3 \%\) of his base salary and \(50 \%\) on the next \(2 \%\). All matching contributions are subject to certain limits as determined by law.
- Non-Qualified Deferred Compensation Plan. Under a nonqualified deferred compensation plan maintained by Centuri, certain employees, including Mr. Daily, are permitted to voluntarily defer receipt of up to \(80 \%\) of base salary and up to \(80 \%\) of other cash compensation. Employer matching contributions in the deferred compensation plan were equal to the first \(4 \%\) of the compensation deferred by the employee under the plan. Matching contributions vest immediately. Participants may allocate deferred cash amounts among (i) a group of notional accounts that mirror the gains and/or losses of various investment alternatives that do not provide for abovemarket or preferential earnings and (ii) an account with returns based on Centuri's financial performance ("Performance Fund") pursuant to the LTCIP.
- LTCIP. The LTCIP requires Mr. Daily to invest at least \(50 \%\) of his annual incentive compensation in the Performance Fund until he meets the established investment requirement of three times his base salary. Beginning in 2019, the LTCIP investment requirement will be two times his salary as part of the rebalancing process. Performance Fund investments grow or depreciate based on the average of the Centuri's period to period EBITDA growth rate over the three most recently completed fiscal years. The maximum annual loss of the Performance Fund is negative five percent and the maximum annual gain is fifteen percent. As an incentive to Mr. Daily joining Centuri, Centuri agreed to make contributions on Mr. Daily's behalf to the Performance Fund in the amount of \(\$ 250,000\) on both the first and second anniversaries of his hire date. The Centuri contribution counts towards Mr. Daily's total investment requirement under the LTCIP, but it does not negate his obligation to contribute at least \(50 \%\) of his annual incentive compensation each year until the investment requirement is met.

\section*{Executive Agreements}

Southwest Change in Control Agreements. The Company offers change in control agreements to the Southwest Officers to align their interests with shareholders and to retain and motivate high caliber executive talent. Providing change in control benefits is designed to reduce the reluctance of management to pursue potential change in control transactions that may be in the best interests of shareholders and helps ensure stability and continued performance during the potentially protracted process of merging with or acquiring entities subject to utility regulation. These change in control agreements do not include gross-up payments to reimburse the executive for certain excise taxes imposed under Internal Revenue Code Section 4999. Instead, the change in control agreements employ a "best net" approach whereby change in control benefits would be reduced if a reduced benefit would result in a greater after-tax benefit to the officer after the application of the excise taxes under Code Section 4999.

In February 2018, the Committee removed the value of long-term incentives from the calculation of cash severance payable under the change in control agreements. The Committee believes this modification better aligns the agreements with the relevant market and best practices.

The terms of the change in control agreements, as well as an estimate of the compensation that would have been payable had they been triggered as of fiscal year-end, are discussed in more detail under "Post-Termination Benefits" below.

Centuri CEO Employment Agreement. Centuri is currently a party to an employment agreement with Mr. Daily ("Employment Agreement"). Under the terms of the Employment Agreement, Mr. Daily is entitled to payments and benefits upon certain terminations of employment both in the absence of and following certain change in control events of Centuri or the Company. The termination provisions of the Employment Agreement provide Mr. Daily with a fixed amount of compensation upon termination as an incentive to forgo other opportunities in order to join or maintain employment with Centuri. At the time of entering into this agreement, we considered our aggregate potential obligations in the context of the desirability of hiring Mr. Daily, as well as the benefits of securing non-competition and other restrictive covenants included in the Employment Agreement. The Employment Agreement does not contain excise tax gross-up provisions and employs a "best net" approach to potential change in control severance payments.

More detailed discussion of the Employment Agreement, as well as an estimate of the compensation that would have been payable had various provisions been triggered as of fiscal year-end, are described in "Post-Termination Benefits" below.

On an annual basis, the Committee reviews, analyzes and considers whether the Company's compensation policies and practices create risks that are reasonably likely to have a material adverse effect on the Company. In 2018, the Committee concluded that the Company's compensation policies and practices do not encourage executives or other employees to take inappropriate risks that are reasonably likely to have a material adverse effect on the Company.

\section*{Deductibility of Compensation}

Section 162(m) of the Internal Revenue Code currently imposes a \(\$ 1\) million limit on the amount that a public company may deduct for compensation paid to an employee who is chief executive officer, chief financial officer, or another "covered employee" (as defined by Section 162(m)), or was such an employee beginning in any year after 2017. Prior to 2018, the Compensation Committee designed certain payments and awards intended to be exempt from this deduction limit as "performance-based compensation." The Tax Cuts and Jobs Acts, however, eliminated the "performance-based compensation" exception under Section 162(m) effective January 1, 2018, subject to a special rule that "grandfathers" certain awards or arrangements that were in effect on or before November 2, 2017. There can be no assurance that compensation structured prior to 2018 with the intent of qualifying as performancebased compensation will be deductible under Section 162(m), depending on the application of the grandfather rule. Additionally, compensation awarded in 2018 and future years to covered employees in excess of \(\$ 1\) million also will generally not be deductible. The Compensation Committee retains the discretion to establish the compensation paid or intended to be paid or awarded to the NEOs as the Committee may determine is in the best interest of the Company and its shareholders, and without regard to any limitation provided in Section 162(m). This discretion is an important feature of the Committee's compensation practices because it provides the Committee with sufficient flexibility to respond to specific circumstances facing the Company.

\section*{COMPENSATION COMMITTEE REPORT}

As a part of the Committee's duties, it is charged with the responsibility of producing a report on executive compensation for inclusion in the Annual Report on Form 10-K and this Proxy Statement. This report is based on the Committee's review of the Compensation Discussion and Analysis and the discussion of its content with management.

The Committee, based on its review of the Compensation Discussion and Analysis and its discussions with management, recommended to the Board (and the Board has approved and directed) that this Compensation Discussion and Analysis be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, and this Proxy Statement.

\author{
Compensation Committee \\ Stephen C. Comer (Chair) \\ Thomas E. Chestnut \\ LeRoy C. Hanneman, Jr. \\ Anne L. Mariucci \\ Michael J. Melarkey \\ A. Randall Thoman \\ Leslie T. Thornton
}

\section*{EXECUTIVE COMPENSATION TABLES}

The following table includes information concerning compensation during 2018, 2017 and 2016 for the named executive officers, whom we refer to as the "NEOs."
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Name and Principal Position & Year & \begin{tabular}{l}
Salary \\
(\$) \({ }^{(1)}\)
\end{tabular} & \[
\underset{(\$)^{(2)}}{\substack{\text { Bonus }}}
\] & \[
\begin{array}{r}
\text { Stock } \\
\text { Awards } \\
(\$)^{(3)}
\end{array}
\] & Non-Equity Incentive Plan Compensation \((\$)^{(1)(4)}\) & Change in Pension Value and Nonqualified Deferred Compensation Earnings (\$) \({ }^{(5)}\) & All Other Compensation \((\$)^{(6)(7)(10)}\) & Total (\$) \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
John P. Hester \\
President and Chief Executive Officer
\end{tabular}} & 2018 & 858,288 & - & 1,418,123 & 1,125,000 & 651,174 & 43,900 & 4,096,485 \\
\hline & 2017 & 783,082 & - & 2,519,453 & 998,250 & 2,212,905 & 48,592 & 6,562,282 \\
\hline & 2016 & 699,344 & 250,000 & 954,002 & 553,725 & 1,289,082 & 40,127 & 3,786,280 \\
\hline \multirow[t]{3}{*}{Gregory J. Peterson \({ }^{(8)}\) Senior Vice President/ Chief Financial Officer} & 2018 & 335,353 & - & 63,944 & 279,120 & 274,074 & 23,783 & 976,274 \\
\hline & 2017 & - & - & - & - & - & - & - \\
\hline & 2016 & - & - & - & - & - & - & - \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
Paul M. Daily \({ }^{(8)}\) \\
President and Chief Executive Officer for Centuri Construction, Inc.
\end{tabular}} & 2018 & 564,556 & - & - & 830,315 & 32,557 & 318,223 & 1,745,651 \\
\hline & 2017 & 535,570 & - & - & 609,310 & 20,114 & 302,058 & 1,467,052 \\
\hline & 2016 & - & - & - & - & - & - & - \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
Karen S. Haller \\
Executive Vice President/ Chief Legal and Administrative Officer and Corporate Secretary
\end{tabular}} & 2018 & 402,742 & - & 324,020 & 341,250 & 56,380 & 35,183 & 1,159,575 \\
\hline & 2017 & 365,822 & - & 625,499 & 273,702 & 672,820 & 39,113 & 1,976,956 \\
\hline & 2016 & 343,492 & 125,000 & 332,155 & 171,896 & 328,869 & 35,655 & 1,337,067 \\
\hline \multirow[t]{3}{*}{\begin{tabular}{l}
Eric DeBonis \\
Senior Vice President/ Operations Southwest Gas Corporation
\end{tabular}} & 2018 & 327,770 & - & 249,074 & 207,700 & 26,831 & 36,951 & 848,326 \\
\hline & 2017 & 314,734 & - & 504,208 & 207,690 & 502,799 & 31,318 & 1,560,749 \\
\hline & 2016 & 301,683 & - & 181,412 & 147,393 & 161,968 & 33,031 & 825,487 \\
\hline \multirow[t]{3}{*}{Roy R. Centrella \({ }^{(9)}\) Senior Vice President/ Chief Financial Officer (Retired)} & 2018 & 104,849 & - & 369,571 & 80,625 & 96,449 & 238,350 & 889,845 \\
\hline & 2017 & 418,822 & - & 709,292 & 312,180 & 555,690 & 40,632 & 2,036,616 \\
\hline & 2016 & 398,743 & 125,000 & 348,350 & 197,415 & 264,002 & 38,944 & 1,372,454 \\
\hline
\end{tabular}
(1) Amounts shown in this column include any amounts deferred by the NEOs into 401(k) and nonqualified deferral plans.
(2) Amounts shown in this column represent the cash portion of the additional compensation provided to Messrs. Hester and Centrella and Ms. Haller in November 2016.
(3) Amounts shown in this column represent the aggregate grant date fair value of awards of Performance Shares and time-lapse RSUs granted in 2016, 2017 and 2018. In each case, the amounts were determined in accordance with Financial Accounting Standards Board ("FASB") Accounting Standards Codification ("ASC") Topic 718 based on the Common Stock share price on the date of grant. The value ultimately realized by the NEO upon actual vesting of the awards may or may not be equal to this determined value. The assumptions used to calculate these amounts are included in "Note 12 - Share-Based Compensation" of Exhibit 13.01 to our 2018 Annual Report on Form 10-K. However, as required, the amounts shown exclude the impact of estimated forfeitures. Performance Share values were calculated based on the probable outcome of the performance condition as of the grant date, which was determined to equal target performance. Performance Shares generally vest upon completion of a three-year performance period, with the amount that vests based on the achievement of certain company financial targets and shareholder returns. The final amount of earned Performance Shares can range from \(0 \%\) to a maximum of \(195 \%\) (assuming the highest level of performance) of the amount of unearned Performance Shares granted, and upon settlement, shares of Common Stock are issued for each earned Performance Share. The value of Performance Shares granted in 2018, assuming achievement of the highest level of performance for the threeyear performance period ending December 31, 2020 and using the closing price of Common Stock as of the date of grant in accordance with ASC Topic 718, would be as follows: for Mr. Hester, \$1,935,722; for Mr. Peterson, \$62,322; for Ms. Haller, \$442,273; for Mr. DeBonis, \(\$ 323,785\); and for Mr. Centrella, \(\$ 504,457\). Due to his retirement, Mr. Centrella's Performance Share value will be a prorated amount based on his time of service during the performance period. The time-lapse RSUs granted in 2018 vest either three years after grant or in annual installments over the course of the three years following the grant, depending on the applicable award program and assuming the NEO continues to meet the requirements for vesting. Award agreements for Performance Shares and timelapse RSUs give holders the right to receive dividend equivalent payments as and when dividends are paid on Common Stock, which dividends are reallocated into additional equity awards of the same type and with the same vesting schedule as the original award.
(4) Amounts shown in this column represent the cash awards paid in 2017, 2018 and 2019 for services performed in 2016, 2017 and 2018, respectively.
(5) The aggregate change in the actuarial present value of the Southwest Officers' accumulated benefit under the Retirement Plan and the SERP for 2018 and the above-market interest (in excess of \(120 \%\) of the applicable federal long-term rate with compounding) earned by NEOs on executive deferral plan balances for 2018 are as follows:
\begin{tabular}{lrr}
\hline Mr. Hester & \begin{tabular}{r} 
Increase in \\
Pension Values (\$)
\end{tabular} & \begin{tabular}{r} 
Above-Market \\
Interest (\$)
\end{tabular} \\
\hline Mr. Peterson & 519,110 & 132,064 \\
\hline Mr. Daily & 249,156 & 24,918 \\
\hline Ms. Haller & - & 32,557 \\
\hline Mr. DeBonis & 23,819 & 32,561 \\
\hline Mr. Centrella (Retired) & - & 26,831 \\
\hline
\end{tabular}

No amounts are payable from the pension plans before a participant attains age 55 and experiences a separation in service from the Company.
(6) Centuri's LTCIP contribution and employer matching contributions under the EDP for Southwest Officers and Centuri's 401(k) and nonqualified deferral plan for Mr. Daily in 2018, were as follows:
\begin{tabular}{lrr} 
& \begin{tabular}{c} 
LTCIP \\
Contribution (\$)
\end{tabular} & \begin{tabular}{c} 
Matching \\
Contributions (\$)
\end{tabular} \\
\hline Mr. Hester & - & 28,875 \\
\hline Mr. Peterson & - & 11,614 \\
\hline Mr. Daily & 250,000 & 35,245 \\
\hline Ms. Haller & - & 14,008 \\
\hline Mr. DeBonis & - & 8,410 \\
\hline Mr. Centrella (Retired) & - & 6,024 \\
\hline
\end{tabular}

As discussed in our Compensation Discussion and Analysis, Centuri agreed to make \(\$ 250,000\) in contributions to the LTCIP on Mr. Daily's behalf on the first and second anniversaries of his hire date pursuant to Mr. Daily's employment agreement to incentivize his employment with Centuri. Centuri matches \(100 \%\) of Mr. Daily's pre-tax contributions up to the first \(3 \%\) of his base salary under its 401 (k) plan. Thereafter, Centuri matches \(50 \%\) of Mr. Daily's pre-tax contributions up to the next \(2 \%\) of his base salary. All matching contributions are subject to certain limits as determined by law, and Mr. Daily received \(\$ 11,000\) of matching contributions in the \(401(\mathrm{k})\). Employer matching contributions in Centuri's nonqualified deferral plan are equal to the first \(4 \%\) of the compensation deferred under the plan, and Mr. Daily received \(\$ 24,245\) of matching contributions in the nonqualified deferral plan. Matching contributions to Southwest Officers under the EDP equal \(50 \%\) of the amount deferred by each officer up to \(3.5 \%\) of the officer's respective annual salary.
(7) The aggregate incremental costs of the perquisites and personal benefits to the NEOs are based on the taxable value of the personal use of company cars, while the car allowance, club dues, life insurance, financial planning and physicals are based on the cost to the Company. Certain NEOs also received nominal amounts for home internet access. The life insurance benefit provided to the Southwest Officers is available generally to all salaried employees, so cost information is omitted from the table below. For Mr. Daily, the life insurance cost relates to purchase of \(\$ 1,010,000\) in coverage for him. The perquisites and personal benefits, by type and amount, for 2018 are as follows:
\begin{tabular}{|c|c|c|c|c|c|}
\hline & \[
\begin{array}{r}
\text { Car } \\
\text { Allowance (\$) }
\end{array}
\] & \[
\begin{array}{r}
\text { Club } \\
\text { Dues (\$) }
\end{array}
\] & Physicals (\$) & Financial Planning (\$) & \[
\begin{array}{r}
\text { Life } \\
\text { Insurance (\$) }
\end{array}
\] \\
\hline Mr. Hester & 10,050 & 2,475 & 2,500 & - & - \\
\hline Mr. Peterson & 9,419 & - & 2,500 & - & - \\
\hline Mr. Daily & 28,265 & - & - & - & 4,713 \\
\hline Ms. Haller & 14,040 & 4,635 & 2,500 & - & - \\
\hline Mr. DeBonis & 16,906 & 7,635 & 2,500 & 1,500 & - \\
\hline Mr. Centrella (Retired) & 2,864 & 1,860 & - & 5,000 & - \\
\hline
\end{tabular}
(8) In April 2016, Mr. Daily was appointed as President and Chief Executive Officer of Centuri Construction Group, Inc. Prior to 2017, he was not a named executive officer of the Company. Mr. Peterson became Senior Vice President/Chief Financial Officer of the Company in 2018. Prior to that date he was not a named executive officer of the Company.
(9) Mr. Centrella retired from the Company, effective March 30, 2018. The amount in the "All Other Compensation" column includes for Mr. Centrella (i) \(\$ 35,136\) for the value of his Company car, \(\$ 57,884\) in paid-out vacation, \(\$ 7,500\) for a retirement gift, \(\$ 1,819\) for the value of his electronic devices; and (ii) retirement benefits of \(\$ 94,807\) and \(\$ 25,456\) received in 2018 under the Retirement Plan and SERP.
(10) A charitable donation of \(\$ 250\) made by the Company on behalf of Mr. Peterson is included in the amount shown for Mr. Peterson in the "All Other Compensation" column.

The following table sets forth information regarding each grant of an award made under our Incentive Plans to our NEOs during the fiscal year ended December 31, 2018. All awards were granted on February 23, 2018, except for Mr. Daily's long-term cash incentive, which was granted on May 2, 2018.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Name} & \multirow[b]{2}{*}{Award Type} & \multicolumn{3}{|l|}{Estimated Future Payouts Under Non-Equity Incentive Plan Awards \({ }^{(1)}\)} & \multicolumn{3}{|l|}{Estimated Future Payouts Under Equity Incentive Plan Awards \({ }^{(2)}\)} & \multirow[t]{2}{*}{All Other Stock Awards (\#)} & \multirow[t]{2}{*}{Grant Date Fair Value Of Stock Awards(3) (\$)} \\
\hline & & Threshold
\(\qquad\) & \[
\begin{array}{r}
\text { Target } \\
(\$)
\end{array}
\] & \[
\begin{array}{r}
\text { Maximum } \\
(\$)
\end{array}
\] & Threshold
\(\qquad\) & \[
\begin{array}{r}
\text { Target } \\
\text { (\#) }
\end{array}
\] & \[
\begin{array}{r}
\text { Maximum } \\
(\#)
\end{array}
\] & & \\
\hline \multirow[t]{3}{*}{John P. Hester} & Annual Cash \({ }^{(1)}\) & 630,000 & 900,000 & 1,260,000 & - & - & - & - & - \\
\hline & Performance Shares & - & - & - & 7,176 & 14,351 & 27,985 & - & 992,686 \\
\hline & RSUs & - & - & - & - & - & - & 6,151 \({ }^{(4)}\) & 425,437 \\
\hline \multirow[t]{3}{*}{Gregory J. Peterson} & Annual Cash \({ }^{(1)}\) & 156,307 & 223,296 & 312,614 & - & - & - & - & - \\
\hline & Performance Shares & - & - & - & 231 & 462 & 901 & - & 31,972 \\
\hline & RSUs & - & - & - & - & - & - & \(462(4)\) & 31,972 \\
\hline \multirow[t]{2}{*}{Paul M. Daily} & Annual Cash \({ }^{(1)}\) & 371,800 & 572,000 & 972,400 & - & - & - & - & - \\
\hline & Long-Term Cash \({ }^{(5)}\) & 96,250 & 385,000 & 770,000 & - & - & - & - & - \\
\hline \multirow[t]{3}{*}{Karen S. Haller} & Annual Cash \({ }^{(1)}\) & 191,100 & 273,000 & 382,200 & - & - & - & - & - \\
\hline & Performance Shares & - & - & - & 1,640 & 3,279 & 6,394 & - & 226,814 \\
\hline & RSUs & - & - & - & - & - & - & 1,405(4) & 97,206 \\
\hline \multirow[t]{3}{*}{Eric DeBonis} & Annual Cash \({ }^{(1)}\) & 117,250 & 167,500 & 234,500 & - & - & - & - & - \\
\hline & Performance Shares & - & - & - & 1,200 & 2,401 & 4,681 & - & 166,049 \\
\hline & RSUs & - & - & - & - & - & - & 1,200(4) & 83,025 \\
\hline \multirow[t]{3}{*}{Roy R. Centrella (Retired)} & Annual Cash \({ }^{(1)}\) & 180,600 & 258,000 & 361,200 & - & - & - & - & - \\
\hline & Performance Shares & - & - & - & 1,870 & 3,740 & 7,293 & - & 258,700 \\
\hline & RSUs & - & - & - & - & - & - & 1,603(4) & 110,871 \\
\hline
\end{tabular}
(1) The amounts reflect the estimated payments which could have been made under the annual cash component of our incentive compensation program, based upon the participant's annual salary as of the date presented. The program provides that executive officers may receive annual cash incentive awards based on performance and profitability measures. The committee establishes annual target awards for each such officer. The actual amounts received by the NEOs for 2018 performance under the program are set forth under the "Non-Equity Incentive Plan Compensation" column in the "Summary Compensation Table." Annual cash incentives are described in further detail under "Compensation Discussion and Analysis - Incentive Compensation - Annual Incentive Compensation."
(2) The amounts shown represent the number of shares of Common Stock that could be earned with respect to Performance Shares granted in 2018 under the long-term performance component of our incentive compensation program. The number of Performance Shares that will become earned and vested, and the resulting number of shares of Common Stock to be issued, will be determined after completion of the three-year performance period ending December 31, 2020, and the number of shares can range from \(50 \%\) at threshold to a maximum of \(150 \%\) of the target number, subject to \(30 \%\) upward, or \(15 \%\) downward, adjustment based on a total shareholder return modifier. When threshold performance is achieved, the number of shares earned will not be adjusted below \(50 \%\) of the target number. Mr. Centrella will be paid a prorated amount based on his time of service during the performance period. Performance Shares are described in further detail under "Compensation Discussion and Analysis - Incentive Compensation -Long-Term Incentive Compensation."
(3) The amounts shown reflect the aggregate grant date fair value (based on the closing price of Common Stock on the date of grant) of time-lapse RSUs or Performance Shares granted on February 23, 2018 to the NEOs, calculated in accordance with FASB ASC Topic 718. With respect to the Performance Shares granted, the amount represents the grant date fair value of the target award.
(4) The amounts shown represent the number of time-lapse RSUs that were granted in 2018 under the long-term component of our incentive compensation program. Except for Mr. Centrella, the RSUs awarded vest over three years, \(40 \%\) at the end of the first year and \(30 \%\) at the end of each of the second and third years, assuming the NEO continues to meet the requirements for vesting, and the initial vesting occurred in the first quarter of 2019. For further details regarding the 2018 long-term components of our incentive compensation program, see "Compensation Discussion and Analysis - Incentive Compensation - Long-Term Incentive Compensation."
(5) The amounts reflect the estimated payments which could be made under the long-term cash component of Mr. Daily's incentive compensation, based upon his annual salary as of December 31, 2017 as required under the Centuri LTIP for 2018. The program provides that Mr. Daily may receive a cash incentive award based on performance and profitability measures. The amount of the award that will become earned and payable will be determined after completion of the three-year performance period ending December 31, 2020, and the value can range from \(10 \%\) of the target value at threshold to a maximum of \(170 \%\) of the target value. This program is described in further detail under "Compensation Discussion and Analysis - Incentive Compensation - Long-Term Incentive Compensation."

The following table sets forth information regarding unvested time-lapse RSUs and Performance Share awards for each of the NEOs, in each case, outstanding as of December 31, 2018.
\begin{tabular}{|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Name} & \multicolumn{4}{|c|}{Stock Awards \({ }^{(1)}\)} \\
\hline & Number of Shares or Units of Stock That Have Not Vested (\#) \({ }^{(2)}\) & Market Value of Shares or Units of Stock That Have Not Vested (\$) \({ }^{(3)}\) & Equity Incentive
Plan Awards:
Number of
Unearned Shares,
Units or Other
Rights That
Have Not Vested
\((\#)^{(4)}\) & Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested \\
\hline John P. Hester & 25,978 & 1,987,347 & 29,167 & 2,231,276 \\
\hline Gregory J. Peterson & 2,993 & 228,930 & 965 & 73,823 \\
\hline Paul M. Daily & - & - & - & - \\
\hline Karen S. Haller & 7,155 & 547,387 & 6,801 & 520,277 \\
\hline Eric DeBonis & 6,211 & 475,130 & 5,013 & 383,495 \\
\hline Roy R. Centrella (Retired) \({ }^{(5)}\) & - & - & 7,785 & 595,553 \\
\hline
\end{tabular}
(1) There were no securities underlying either unexercised stock options, which were exercisable or unexercisable, or unexercised unearned options granted under any equity incentive plan at the end of fiscal 2018.
(2) Represents time-lapse RSUs, which vest either three years after grant or in annual installments over the course of the three years following the grant, depending on the applicable award program and assuming the NEO continues to meet the requirements for vesting, as reflected in the following tables. Grants in 2018 reflected below include amounts discussed in footnote (4) to the "Grants of Plan-Based Awards (2018)" table.

Outstanding time-lapse RSUs with three-year cliff vesting, including dividends reinvested, vest as follows:
\begin{tabular}{lrrr} 
& \begin{tabular}{r} 
Grants in 2016 \\
Vests in \\
January 2019 (\#)
\end{tabular} & \begin{tabular}{r} 
Grants in 2017 \\
Vests in \\
January 2020 (\#)
\end{tabular} & \begin{tabular}{r} 
Grants in 2018 \\
Vests in \\
January 2021 (\#)(*)
\end{tabular} \\
\hline Mr. Hester & 5,510 & 5,027 & - \\
\hline Mr. Peterson & 909 & - \\
\hline Mr. Daily & - & - \\
\hline Ms. Haller & 2,008 & - \\
\hline Mr. DeBonis & 1,785 & - \\
\hline Mr. Centrella (Retired) & - & 1,560 \\
\hline
\end{tabular}
(*) The incentive program was changed in 2017 to provide for payouts in cash only, so after 2020 there will be no more outstanding unvested time-lapse RSUs under the program with three-year cliff vesting.

Outstanding time-lapse RSUs vesting over three years, \(40 \%\) at the end of the first year and \(30 \%\) at the end of each of the second and third years, granted in 2016, 2017 and 2018, including dividends reinvested, vest as follows:
\begin{tabular}{|c|c|c|c|c|}
\hline & Grant Year & \[
\begin{array}{r}
\text { Vests } \\
\text { January } 2019 \text { (\#) }
\end{array}
\] & \[
\begin{array}{r}
\text { Vests } \\
\text { January } 2020 \text { (\#) }
\end{array}
\] & \[
\begin{array}{r}
\text { Vests } \\
\text { January } 2021 \text { (\#) }
\end{array}
\] \\
\hline Mr. Hester & 2018 & 2,529 & 1,896 & 1,896 \\
\hline & 2017 & 3,474 & 3,474 & - \\
\hline & 2016 & 2,173 & - & - \\
\hline Mr. Peterson & 2018 & 190 & 143 & 143 \\
\hline & 2017 & 329 & 329 & - \\
\hline & 2016 & 263 & - & - \\
\hline Mr. Daily & 2018 & - & - & - \\
\hline & 2017 & - & - & - \\
\hline & 2016 & - & - & - \\
\hline Ms. Haller & 2018 & 578 & 433 & 433 \\
\hline & 2017 & 813 & 813 & - \\
\hline & 2016 & 517 & - & - \\
\hline Mr. DeBonis & 2018 & 493 & 370 & 370 \\
\hline & 2017 & 698 & 698 & - \\
\hline & 2016 & 459 & - & - \\
\hline Mr. Centrella (Retired) & 2018 & - & - & - \\
\hline & 2017 & - & - & - \\
\hline & 2016 & - & - & - \\
\hline
\end{tabular}

Vesting provisions of time-lapse RSUs following certain termination events are discussed below under "Post-Termination Benefits."
(3) The market value of Common Stock was \(\$ 76.50\) per share, the closing price on the last trading day of 2018.
(4) Represents Performance Shares. See footnote (2) to the "Grants of Plan-Based Awards (2018)" table and "Post-Termination Benefits" for a discussion of the vesting terms of our Performance Shares. As of fiscal year-end 2018, two tranches of Performance Shares had been granted. Assuming achievement of target performance, the number of Performance Shares indicated (plus accumulated dividends reinvested) will vest following the three-year performance period ending December 31, 2020.
(5) Mr. Centrella will be paid a prorated amount based on his time of service during the performance period. He will receive his award after the performance periods conclude.

\section*{Stock Vested During 2018}

The number of shares of Company Common Stock that vested during 2018 and the value realized on vesting (the market price at vesting) are shown in the table. There were no options to purchase Common Stock outstanding during 2018.
\begin{tabular}{lrr} 
& \multicolumn{2}{c}{ Stock Awards } \\
\cline { 2 - 3 } Name & \begin{tabular}{r} 
Number of \\
Shares \\
Acquird on \\
Vesting (\#)
\end{tabular} & \begin{tabular}{r} 
Value Realized \\
on Vesting \((\$(1))\)
\end{tabular} \\
\hline John P. Hester & 17,307 & \(1,382,456\) \\
\hline Gregory J. Peterson & 2,343 & 187,288 \\
\hline Paul M. Daily & - & - \\
\hline Karen S. Haller & 6,855 & 548,955 \\
\hline Eric DeBonis & 4,546 & 363,476 \\
\hline Roy R. Centrella (Retired) \({ }^{(2)}\) & 15,550 & \(1,236,927\) \\
\hline
\end{tabular}
(1) For purposes of this table, such shares were valued based on the closing share price on the date of distribution.
(2) Mr. Centrella's stock awards include shares vested according to the normal vesting schedule as well as his retirement distribution.

\section*{Pension Benefits}

We offer two defined benefit retirement plans to the Southwest Officers. They include the Retirement Plan, which is available to all employees of Southwest, and the SERP.

Benefits under the Retirement Plan are based on each Southwest Officer's (i) years of service with Southwest, up to a maximum of 30 years, and (ii) highest average annual salary over a period of five consecutive years within the final 10 years of service, not to exceed a maximum compensation level established by the Internal Revenue Service. Vesting in the Retirement Plan occurs after five years of service with Southwest.

The SERP is designed to supplement the benefits under the Retirement Plan to a level of \(50-60 \%\) of salary, as shown in the "Salary" column of the Summary Compensation Table. Salary is based on the 12-month average of the highest 36 months of salary at the time of retirement. Vesting in the SERP occurs at age 55 , with 20 years of service with Southwest.

Upon retirement, the plans will provide a lifetime annuity to the Southwest Officers, with a \(50 \%\) survivor benefit to their spouses. No lump sum payments are permitted under the plans.

Messrs. Hester and Peterson are vested in both plans. Mr. Hester would receive full benefits if he were to retire as of the date of this Proxy Statement, while Mr. Peterson's benefits would be reduced by \(0.25 \%\). Ms. Haller is vested in both plans, and her benefits would be reduced by \(13.75 \%\) if she retired as of the date of this Proxy Statement. Mr. DeBonis is vested only in the Retirement Plan and, if he left the Company as of the date of this Proxy Statement, his accrued benefit under the Retirement Plan would be reduced by \(58.56 \%\) assuming benefits commenced at age 55. Mr. Centrella was vested to receive full benefits upon his retirement on March 30, 2018.

\section*{Pension Benefits as of December 31, 2018}

The following table sets forth the number of years of credited service and present value of accumulated benefits as of December 31, 2018, and payments received during the last fiscal year, under both the Retirement Plan and the SERP for each NEO.
\begin{tabular}{lcrrr} 
Name & Plan Name & \begin{tabular}{r} 
Number of Years \\
Credited \\
Service (\#)
\end{tabular} & \begin{tabular}{r} 
Present Value of \\
Accumulated \\
Benefit (\$)
\end{tabular} & \begin{tabular}{r} 
Payments During \\
Last Fiscal \\
Year (\$)
\end{tabular} \\
\hline John P. Hester & Retirement Plan & 29 & \(2,089,470\) & - \\
\cline { 2 - 5 } & SERP & 29 & \(5,342,036\) & - \\
\hline Gregory J. Peterson & Retirement Plan & 21 & \(1,178,106\) & - \\
\cline { 2 - 5 } & SERP & 21 & \(1,216,037\) & - \\
\hline Paul M. Daily & N/A & \(\mathrm{N} / \mathrm{A}\) & \(\mathrm{N} / \mathrm{A}\) & N/A \\
\hline Karen S. Haller & Retirement Plan & 21 & \(1,205,730\) & - \\
\hline Eric DeBonis & SERP & 21 & \(1,557,004\) & - \\
\hline Roy R. Centrella (Retired) & Retirement Plan & 25 & \(1,419,431\) & - \\
\cline { 2 - 5 } & Retirement Plan & 25 & 933,748 & - \\
\hline
\end{tabular}
(1) The valuation method and all material assumptions applied in quantifying the present value of the accrued benefits are described in "Note 11—Pension and Other Postretirement Benefits" of Exhibit 13.01 to our 2018 Annual Report on Form 10-K.

We maintain nonqualified deferred compensation plans under which our NEOs are permitted to defer base salary and other cash compensation. These plans are described in detail under "Compensation Discussion \& AnalysisRetirement Benefits." The following table describes the nonqualified deferred compensation activity for each of our NEOs during fiscal year 2018.
\begin{tabular}{|c|c|c|c|c|c|}
\hline Name & Executive Contributions in Last Fiscal Year(\$) \({ }^{(1)}\) & Registrant Contributions in Last Fisca Year (\$) \({ }^{(2)}\) & Aggregate Earnings in Last Fiscal Year (\$) \({ }^{(2)}\) & Aggregate Withdrawals Distributions (\$) &  \\
\hline John P. Hester & 499,125 & 28,875 & 245,245 & - & 3,901,929 \\
\hline Gregory J. Peterson & 138,498 & 11,614 & 45,676 & - & 754,284 \\
\hline Paul M. Daily & 334,962 & 274,245 & 121,719 & - & 1,308,314 \\
\hline Karen S. Haller & 180,443 & 14,008 & 60,483 & - & 1,014,060 \\
\hline Eric DeBonis & 73,682 & 8,410 & 51,774 & - & 854,574 \\
\hline Roy R. Centrella (Retired) & 211,289 & 6,024 & 163,383 & 83,084 & - \\
\hline
\end{tabular}
(1) Amounts shown in this column are included in the "Salary" and "Non-Equity Incentive Compensation" columns of the "Summary Compensation Table."
(2) Deferred compensation earnings, which were above-market, and Company contributions are also reported in the "Change in Pension Value and Nonqualified Deferred Compensation Earnings" and the "All Other Compensation" columns, respectively, of the "Summary Compensation Table." Those amounts for the NEOs are as follows:
\begin{tabular}{lrrr}
\hline Mr. Hester & \begin{tabular}{r} 
Above-Market \\
Interest
\end{tabular} & \begin{tabular}{r} 
Company \\
Contributions
\end{tabular} & Total \\
\hline Mr. Peterson & \(\$ 132,064\) & \(\$ 28,875\) & \(\$ 160,939\) \\
\hline Mr. Daily & 24,918 & 11,614 & 36,532 \\
\hline Ms. Haller & 32,557 & 274,245 & 306,802 \\
\hline Mr. DeBonis & 32,561 & 14,008 & 46,569 \\
\hline Mr. Centrella (Retired) & 26,831 & 8,410 & 35,241 \\
\hline
\end{tabular}
(3) The amounts reported in this column that were previously reported as compensation to the NEOs in the Summary Compensation Table for previous years are as follows:
\begin{tabular}{lrrr} 
& \(\mathbf{2 0 1 6}\) & \(\mathbf{2 0 1 7}\) & \(\mathbf{2 0 1 8}\) \\
\hline Mr. Hester & \(\$ 544,387\) & \(\$ 699,362\) & \(\$ 660,064\) \\
\hline Mr. Peterson \({ }^{(4)}\) & - & - & 175,030 \\
\hline Mr. Daily \({ }^{(4)}\) & - & 561,750 & 641,764 \\
\hline Ms. Haller & 124,495 & 148,885 & 227,012 \\
\hline Mr. DeBonis & 104,387 & 115,781 & 108,923 \\
\hline Mr. Centrella (Retired) & 277,122 & 277,507 & 313,762 \\
\hline
\end{tabular}
(4) Mr. Peterson became an NEO in 2018, so 2016 and 2017 values are not reported. Mr. Daily became an NEO in 2017, so a 2016 value is not reported.

\section*{Post-Termination Benefits}

Each Southwest Officer has a change in control agreement, which provides benefits upon certain termination events following a change in control. Centuri is party to an employment agreement with Mr. Daily pursuant to which he is entitled to benefits upon the occurrence of specified termination events, both following and in the absence of a change in control. Incentive programs for the NEOs also provide for vesting of awards upon the occurrence of specified termination events in the absence of a change in control. Regardless of the manner in which an NEO's employment is terminated, the officer is entitled to receive the amount of any accrued but unpaid base salary, amounts contributed (or otherwise vested) under 401(k) or nonqualified deferral plans and amounts accrued and vested through Southwest's Retirement Plan and SERP.

\section*{Following Change in Control}

The Southwest Officers' change in control agreements are triggered by certain termination events following a change in control of either the Company or Southwest, and the change in control provision of Mr. Daily's employment agreement is triggered by certain termination events following a change in control of Centuri or the Company. Covered termination events include (i) the termination of employment by the employer without cause and
(ii) termination by the employee as a result of a significant reduction in duties, responsibilities or compensation or a change in location. If a termination event occurs within two years after a change in control (collectively referred to as a "Double Trigger Event"), the affected NEOs would receive the following benefits (as applicable):
- Salary for three years for our CEO, two and one-half years for all other Southwest Officers and two years for Mr. Daily;
- Annual incentive compensation for three years for our CEO, two and one-half years for all other Southwest Officers, and two years of incentive compensation for Mr. Daily;
- Welfare benefits including the cost of medical, dental, disability, and life insurance coverage under the current employer plans (for three years for our CEO, two and one-half years for all other Southwest Officers and two years for Mr. Daily);
- Vesting of unvested pre-2017 time-lapse RSUs;
- Additional credit that may affect eligibility, vesting and the calculation of benefits under the SERP; and
- Outplacement services of up to \(\$ 30,000\).

A change in control with respect to the Company includes an acquisition by one person or a group of persons of at least \(30 \%\) of the ownership of the Company, replacement of a majority of incumbent Board members or a merger or similar transaction resulting in more than a \(50 \%\) change of ownership of the Company. Any of the foregoing events with respect to Southwest constitutes a change in control of Southwest. A change in control with respect to Centuri includes an acquisition by one person or a group of persons of at least \(50 \%\) of the ownership of Centuri or the sale of substantially all of the assets of Centuri.

Pursuant to their change in control agreements, Southwest Officers agreed not to publicly disparage the Company. In addition, severance payable under the agreements is subject to the Southwest Officers' execution of a release of claims against the Company, which includes a covenant prohibiting disclosure of the Company's confidential information. Mr. Daily's employment agreement contains non-compete and non-solicitation provisions, which apply during his employment and for a period of two years after his employment ends, and also contains confidentiality and non-disparagement provisions.

In addition to benefits provided under the change in control agreements, Performance Share and time-lapse RSU awards of Southwest Officers provide for vesting of awards following a change in control (as described in footnote (1) to the following table).

Under the assumption that a Double Trigger Event occurred on December 31, 2018, based on the terms of the change in control agreements for the NEOs, it is estimated that the NEOs would have received the compensation presented in the following table.
\begin{tabular}{|c|c|c|c|c|c|c|c|c|}
\hline Name & Salary & Incentive Compensation & Welfare Benefits & Stock Acceleration \({ }^{(1)}\) & Outplacement Services & & Additional SERP Benefits \({ }^{(2)}\) & Total \\
\hline John P. Hester & \$2,700,000 & \$2,700,000 & \$52,965 & \$2,731,106 & \$30,000 & \$ & 336,583 & \$8,550,654 \\
\hline Gregory J. Peterson & 930,400 & 558,240 & 41,123 & 253,538 & 30,000 & & - & 1,813,301 \\
\hline Paul M. Daily & 1,350,000 & 2,295,000 & 55,134 & N/A & 30,000 & & N/A & 3,730,134 \\
\hline Karen S. Haller & 1,050,000 & 682,500 & 51,573 & 720,813 & 30,000 & & 962,092 & 3,496,978 \\
\hline Eric DeBonis & 837,500 & 418,750 & 51,278 & 602,962 & 30,000 & & 1,280,577 & 3,221,067 \\
\hline
\end{tabular}

\footnotetext{
(1) All time-lapse RSUs of the Southwest Officers would vest upon a Double Trigger Event. A pro rata portion of the target number of Performance Shares based on the number of months of service relative to the three-year performance period would vest upon a Double Trigger Event. As of December 31, 2018, the pro rata amount equaled one-third of the target number. The value of Performance Shares and time-lapse RSUs set forth above is based on the closing price of Common Stock on the last trading day of 2018 (\$76.50).
(2) Additional SERP benefits are shown on a present value basis, using the valuation method and all material assumptions described in "Note 11—Pension and Other Postretirement Benefits" of Exhibit 13.01 to our 2018 Annual Report on Form 10-K.
}

Southwest Officers. Incentive programs for the Southwest Officers provide for vesting of awards upon the occurrence of specified termination events in the absence of a change in control.
- Annual Incentive Plan. Southwest's annual cash incentive plan states that if employment terminates as a result of death or disability, or when the officer is eligible for retirement under our Retirement Plan, the officer will receive a prorated incentive plan payout for the portion of the performance period that the officer was employed. As of December 31, 2018, Messrs. Hester and Peterson and Ms. Haller were age 55 or older and eligible for retirement, but Mr. DeBonis was not. Accordingly, if any Southwest Officer had terminated employment on December 31, 2018 as a result of death, disability or retirement, the officer would have been entitled to receive a full incentive plan award because December 31, 2018 was the final day of the applicable performance period. The values for these payouts are set forth in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table.
- RSUs. As of December 31, 2018, each Southwest Officer held unvested time-lapse RSUs. The respective award agreements generally require the officer to be employed by us on the applicable vesting dates to receive the awarded shares, but if employment terminates earlier as a result of death or disability, or when the officer is eligible for retirement under our Retirement Plan, the officer will receive all of the unvested shares. Accordingly, if any Southwest Officer had terminated employment on December 31, 2018 as a result of death, disability or retirement, the value of the time-lapse RSUs, based on a stock price of \(\$ 76.50\) per share (the closing price of Common Stock on the last trading day of 2018), that the officer would have been entitled to is: for Mr. Hester, \(\$ 1,987,347\); for Mr. Peterson, \(\$ 228,930\); for Ms. Haller, \(\$ 547,387\); and for Mr. DeBonis, \(\$ 475,130\).
" Performance Shares. As described above under "Grants of Plan-Based Awards During 2018," we granted Performance Share awards to the Southwest Officers in February 2018 under which shares of Common Stock (plus accumulated cash dividends) will be issued to them based on Company performance from 2018 through 2020. The award agreements generally require the officer to be employed by us on the last day of the performance period to receive an award payout, but if employment terminates earlier as a result of death, disability, or retirement after reaching age 55 , the officer will be entitled to a prorated award payout. In the case of disability or death, a pro rata portion of the target number of Performance Shares would be paid promptly. Following retirement, an officer would receive a payout at the end of the applicable performance period based on the Company's actual performance against the performance goals. If any Southwest Officer had terminated employment on December 31, 2018 as a result of death, disability or retirement, his or her target award for the performance period from 2018 through 2020 would have been reduced to one-third of the original target award reflecting employment for one year of the three-year performance period. The value of the prorated award payouts, based on a stock price of \(\$ 76.50\) per share (which was the closing price of Common Stock on the last trading day of 2018), for each Southwest Officer is: for Mr. Hester, \$743,759; for Mr. Peterson, \$24,608; for Ms. Haller, \(\$ 173,426\); and for Mr. DeBonis, \(\$ 127,832\). For purposes of the retirement scenario, whereby pro rata payouts would occur based on actual performance at the end of the three-year performance period, the above amounts assume achievement of target performance and do not include any estimated amounts for accumulated dividends.

\section*{Mr. Centrella's Retirement}

Mr. Centrella retired from his position as Senior Vice President/Chief Financial Officer effective March 30, 2018. Due to his retirement, he received the following payments:
- an annual incentive award of \(\$ 80,625\), which reflects proration for his three months of service during 2018;
- after the required waiting period under Internal Revenue Code Section 409A, 4,966 unvested time-lapse RSUs with a value of \(\$ 392,487\) based on the closing price of Common Stock at the end of the waiting period ( \(\$ 79.03\) on September 28, 2018); and
- 7,785 Performance Shares with a value of \(\$ 595,553\) based on the closing price of Common Stock on the last trading day of 2018 (\$76.50), assuming achievement of target performance and without any estimated amounts for accumulated dividends. Mr. Centrella's Performance Share payout will be prorated to account for his retirement before the end of the performance period.

Centuri. In the event of termination of Mr. Daily's employment by reason of retirement, death, disability, termination \(\overline{\text { for cause or without good reason, or termination without cause or for good reason, he would be provided with the }}\) benefits described below.
- Payments Made Upon Retirement, Death or Disability. Centuri's annual incentive and long-term incentive plans generally require the officer to be employed by Centuri on the date that the awards are paid to receive the cash awards, but if employment terminates earlier as a result of death or disability, or when the officer is retirement age, the officer will receive a prorated award. As of December 31, 2018, Mr. Daily was eligible for retirement under both Centuri incentive plans. If Mr. Daily had terminated employment on December 31, 2018 as a result of death, disability or retirement, he would have been entitled to receive a full annual incentive plan award because December 31, 2018 was the final day of the applicable performance period. The value for this payout is set forth in the "Non-Equity Incentive Plan Compensation" column of the Summary Compensation Table. If Mr. Daily had terminated employment on December 31, 2018 as a result of death, disability or retirement, his target award under Centuri's long-term incentive plan for the performance period from 2018 through 2020 would have been reduced to one-third of the original target award reflecting employment for one year of the three-year performance period, and he would have been eligible to receive a payout at the end of the applicable performance period based on Centuri's actual performance. Assuming achievement of target performance for the performance period from 2018 through 2020, the value of the cash long-term incentive that Mr. Daily would be entitled to receive would be \(\$ 157,484\). In addition, in the event of termination for disability, Mr. Daily's employment agreement provides for a severance benefit equal to one year of base salary. Under the assumption that termination occurred on December 31, 2018, Mr. Daily would have been entitled to a benefit of \(\$ 675,000\) pursuant to his employment agreement.
- Payments Made Upon Termination for Cause or Without Good Reason. In the event of termination for cause by Centuri or voluntary resignation by Mr. Daily without good reason, his employment agreement and incentive plans provide for no severance benefits. The employment agreement defines "good reason" as (i) any requirement that Mr. Daily relocate, (ii) material failure by the employer to comply with the compensation provisions of the employment agreement or (iii) a significant reduction in duties, responsibilities or compensation.
- Payments Made Upon Termination Without Cause or For Good Reason. In the event of a voluntary termination for good reason or termination by Centuri without cause, Mr. Daily's employment agreement provides for a severance benefit equal to two years of base salary, the value of any unpaid annual incentive from the year prior to the termination and two years of welfare benefits, including the cost of medical, dental and life insurance coverage under the current Centuri plans. Under the assumption that termination occurred on December 31, 2018, Mr. Daily would have been entitled to a benefit of \(\$ 1,394,718\), including \(\$ 1,350,000\) in base salary and \(\$ 44,178\) in welfare benefits.

\section*{Pay Ratio Disclosure}

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, and Item 402(u) of Regulation S-K of the Exchange Act, we are providing the following information about the relationship of the median annual total compensation of our employees and the annual total compensation of Mr. John P. Hester, our CEO. The pay ratio included in this information is a reasonable estimate calculated in a manner consistent with Item 402(u) of Regulation S-K. For 2018, our last completed fiscal year:
- the median annual total compensation of all employees of the Company and its consolidated subsidiaries (other than our CEO) was \(\$ 87,740\); and
- the annual total compensation of our CEO was \(\$ 4,096,485\).
- Based on this information, for 2018 the ratio of the annual total compensation of Mr. Hester, our Chief Executive Officer and President, to the median annual total compensation of all employees, as determined pursuant to Item 402(u) of Regulation S-K, was 47 to 1, which is a reasonable estimate calculated consistent with applicable rules.

To identify the median of the annual total compensation of all our employees, as well as to determine the annual total compensation of our median employee and our CEO, we took the following steps:
- Given the distribution of our employee population between the United States and Canada and both of our business segments, we use a variety of pay elements to structure the compensation arrangements of our employees. Consequently, for purposes of measuring the compensation of the employees, we selected elements of compensation that represent "base salary" (compensation paid at the normal hourly rate, excluding overtime, for hourly employees and base cash salary for salaried employees) as the most appropriate measure of compensation to reflect annual compensation of our employees. Such compensation elements represent the fixed portion of each employee's compensation arrangements and are paid without regard to our financial or operational performance or individual employee workloads in a given year. This compensation measure was consistently applied to all of our employees. Approximately 732 employees were omitted from the employee population because they became employees due to the acquisition of Linetec Services, LLC in November 2018.
- Relevant compensation values of our Canadian employees were converted into U.S. dollars based on the same methodology employed in the financial statements included in our Annual Report. We identified the median employee as of December 31, 2018. The median employee is different than in 2017 due to an increase in salary for that employee. All of our employees are located in either the United States or Canada and our CEO is based in the United States. Therefore, we did not make any cost-of-living adjustments in identifying the "median employee."
- For our median employee, we combined all of the elements of such employee's compensation for 2018 in accordance with the requirements of Item 402(c)(2)(x) of Regulation S-K, resulting in annual total compensation of \(\$ 87,740\). The difference between such employee's base salary and the employee's annual total compensation represents the value of such employee's annual cash bonus, overtime pay, employer contributions to a 401(k) plan, and the value of the employer portion of such employee's health care, disability and life insurance benefits (estimated for the employee and such employee's eligible dependents at \(\$ 6,551\) ).
- With respect to the annual total compensation of our CEO, we used the amount reported in the "Total" column of our 2018 Summary Compensation Table included in this Proxy Statement plus \$13,377 in value for the employer paid portion of our CEO's health care, disability, and life insurance benefits.
- The difference between the pay ratio for 2017 and 2018 is due largely to a change in the discount rate used to calculate the present value of the change in pension value for our CEO. A relatively small change in the discount rate may significantly affect pension plan obligations and costs, and although the methodology utilized to determine the discount rate was consistent with prior years, the change in the discount rate itself had a large negative impact on the CEO's total compensation as calculated for the 2018 Summary Compensation Table. Because we do not maintain a defined benefit or other actuarial plan for employees of the business that employs the median employee, our median employee's annual total compensation was not affected by the change in discount rate.

\section*{DIRECTOR COMPENSATION}

\section*{2018 Director Compensation Table}
\begin{tabular}{lrrrrr} 
\\
Name & \begin{tabular}{r} 
Fees \\
Earned \\
or Paid in \\
Cash (\$)
\end{tabular} & \begin{tabular}{r} 
Change in \\
Stock \\
\((\$)^{(1)(2)(3)}\)
\end{tabular} & \begin{tabular}{r} 
Pension Value \\
and \\
Nonqualified \\
Deferred \\
Compensation \\
Earnings \\
\((\$)^{(4)}\)
\end{tabular} & \begin{tabular}{r} 
All Other \\
Compensation \\
\((\$)^{(5)}\)
\end{tabular} & Total (\$) \\
\hline Robert L. Boughner & 82,500 & 111,731 & 31,423 & 160 & 225,814 \\
\hline José A. Cárdenas & 90,000 & 111,731 & - & 160 & 201,891 \\
\hline Thomas E. Chestnut & 82,500 & 111,731 & 48,335 & 160 & 242,726 \\
\hline Stephen C. Comer & 95,000 & 111,731 & 39,018 & 1,660 & 247,409 \\
\hline LeRoy C. Hanneman, Jr. & 82,500 & 111,731 & - & 160 & 194,391 \\
\hline Anne L. Mariucci & 82,500 & 111,731 & 33,157 & 160 & 227,548 \\
\hline Michael J. Melarkey & 140,000 & 111,731 & 49,807 & 160 & 301,698 \\
\hline A. Randall Thoman & 97,500 & 111,731 & 22,895 & 160 & 232,286 \\
\hline Thomas A. Thomas & 82,500 & 111,731 & 24,218 & 160 & 218,609 \\
\hline
\end{tabular}
(1) On February 23, 2018 each director serving at that time received 1,615 restricted stock units. Because the last option awards were made in 2006, there is no need to maintain the "Options" column.
(2) The restricted stock units are valued at the closing price of Common Stock on the date of grant. The grant date fair value of the restricted stock units granted in 2018 was based on the closing price of Common Stock of \(\$ 69.17\) on February 23, 2018. The amounts were determined in accordance with FASB ASC Topic 718. The assumptions used to calculate these amounts are included in "Note 12 - Share-Based Compensation" of Exhibit 13.01 to our 2018 Annual Report on Form 10-K.
(3) Stock and option awards outstanding at December 31, 2018, for each of the listed directors are as follows:
\begin{tabular}{l|c} 
& \begin{tabular}{c} 
Stock \\
Awards
\end{tabular} \\
\hline Mr. Boughner & 23,413 \\
\hline Mr. Cárdenas & 16,688 \\
\hline Mr. Chestnut & 23,143 \\
\hline Mr. Comer & - \\
\hline Mr. Hanneman & \(-23,143\) \\
\hline Ms. Mariucci & 21,353 \\
\hline Mr. Melarkey & 23,143 \\
\hline Mr. Thoman & 24,804 \\
\hline Mr. Thomas & 19,344 \\
\hline
\end{tabular}
(4) The amounts in this column also reflect above-market interest on nonqualified deferred compensation balances for 2018.
(5) The All Other Compensation column represents the cost of life insurance for directors (\$160 for each of the directors) and the amount of charitable donations \((\$ 1,500)\) made on behalf of Mr . Comer by the Company.

\section*{Director Compensation Narrative}

Based on a review conducted by the Compensation Committee's independent consultant, Pay Governance, in 2017 of compensation paid to non-employee directors at the companies included in the peer group utilized in the Company's executive compensation processes, the committee established director compensation as a balance of cash and equity compensation. The committee adopted a retainer-based model for director cash compensation (without regular individual meeting fees) and fixed the value of annual equity grants for directors based on a set dollar amount.

The annual cash retainer for non-employee directors is \(\$ 82,500\). Additional annual cash retainers for the Chairs of the Audit, Compensation, and Nominating and Corporate Governance Committees are \(\$ 15,000, \$ 12,500\) and \(\$ 7,500\), respectively. The annual cash retainer paid to our Chairman of the Board is \(\$ 140,000\). Individual cash meeting fees of \(\$ 1,650\) are only payable when the number of meetings of the Board or a committee exceeds regularly scheduled meetings by three or more.

Cash compensation received by the outside directors may be deferred until retirement or termination of their status as directors pursuant to the Directors Deferral Plan. Amounts deferred bear interest at \(150 \%\) of the Bond Rate. At retirement or termination, such deferrals will be paid out over \(5,10,15\) or 20 years, and will be credited during the applicable payment period with interest at \(150 \%\) of the average of the Bond Rate on January 1 for the five years prior to retirement or termination.

A fixed dollar value ( \(\$ 130,000\) for 2019) will be granted annually in the form of equity compensation under the Company's Omnibus Incentive Plan during the February Board meeting. The fixed dollar value is converted into awards representing a number of shares of Common Stock based on the closing share price for the last trading session of the most recently completed fiscal year. Under this program, each member of the Board was granted the equivalent of 1,699 shares of Common Stock on February 26, 2019.

Outside director equity compensation vests immediately upon grant, and the directors are provided the option to defer receipt of equity compensation until they leave the Board. Deferred stock units are credited with notional dividends at the same time, in the same form, and in equivalent amounts as dividends that are payable from time to time on Common Stock. Such notional dividends are valued as of the date on which they are credited to the director and are reallocated into additional deferred stock units. When a director leaves the Board, any deferred stock units of such director will be converted into shares of Common Stock.

Directors who are full-time employees of the Company or its subsidiaries receive no additional compensation for serving on the Board.

\title{
ADVISORY VOTE TO APPROVE THE COMPANY'S EXECUTIVE COMPENSATION \\ (Proposal 4 on the Proxy Card)
}

The Board Recommends a Vote "FOR" The Proposal to Approve The Company's Executive Compensation

\section*{General}

The Company seeks your advisory vote on our executive compensation programs as described in this Proxy Statement. The Board has determined to submit an annual advisory vote on our executive compensation programs to our shareholders at each annual meeting until the Company seeks another advisory vote on the frequency of the advisory vote on executive compensation. The Board asks that you support the compensation of our NEOs as disclosed in the Compensation Discussion and Analysis section and the accompanying tables and narratives contained in this Proxy Statement. Because your vote is advisory, it will not be binding on the Board or the Company. However, the Board will review the voting results and take them into consideration when making future decisions regarding executive compensation.

Accordingly, the Board recommends that our shareholders vote "FOR," on an advisory basis, the compensation paid to our NEOs, as disclosed in this Proxy Statement pursuant to the compensation disclosure rules of the SEC, and adopt the following resolution at the Annual Meeting:

RESOLVED, that the compensation paid to the Company's NEOs, as disclosed in the Company's Proxy Statement for the 2019 Annual Meeting of Shareholders pursuant to the compensation disclosure rules of the Securities and Exchange Commission, including the Compensation Discussion and Analysis, the compensation tables, and the narrative disclosures that accompany the compensation tables, is hereby APPROVED.

The Company's compensation program is designed and administered by the Compensation Committee of the Board, which is composed entirely of Independent Directors and carefully considers many different factors, as described in the Compensation Discussion and Analysis, in order to provide appropriate compensation for the Company's executives. As discussed in the Compensation Discussion and Analysis, the compensation package for the Company's NEOs (who are the officers listed in the Summary Compensation Table in the Executive Compensation section) is designed to support the Company's objectives of attracting, motivating and retaining the executive talent required to achieve our corporate objectives and increase shareholder value.

The compensation program is based on the Board-approved executive compensation philosophy of (i) paying base salary at the median (50th percentile) of the amounts paid by our peer group of companies (the "relative market"), (ii) providing annual and long-term incentive awards that are designed to motivate the NEOs to focus on specific annual and long-term financial and operational performance goals and achieve superior performance while placing a significant amount of total compensation at risk, and (iii) paying total direct compensation (base salary and annual and long-term incentive awards) to be competitive with the relative market.

Consistent with the SEC rule implementing the requirement that the Company periodically include a say-on-pay proposal in its proxy statement, the vote on this proposal is advisory and is not binding on the Company, the Compensation Committee or the Board. The Compensation Committee and the Board value the opinions that shareholders express in their votes and to the extent there is any significant vote against the named executive officer compensation, we will consider the outcome of the vote when making future executive compensation decisions and evaluate whether any actions are necessary to address shareholder concerns expressed by such vote. It is expected that the next advisory vote on executive compensation will occur at the 2020 Annual Meeting of Shareholders.

We encourage you to review the complete description of the Company's executive compensation programs provided in this Proxy Statement, including the Compensation Discussion and Analysis and the accompanying compensation tables.

\section*{AUDIT COMMITTEE INFORMATION}

\section*{SELECTION OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM (Proposal 5 on the Proxy Card)}

The Board Recommends a Vote "FOR" Auditor Ratification

\section*{General}

The Audit Committee ("Committee") selected PricewaterhouseCoopers LLP as the independent registered public accounting firm for the Company for the year ending December 31, 2019, subject to ratification of the selection by the shareholders. PricewaterhouseCoopers LLP has been the Company's independent public accounting firm since 2002. To the Committee's knowledge, at no time has PricewaterhouseCoopers LLP had any direct or indirect financial interest in or connection with the Company or any of our subsidiaries other than for services rendered to the Company as described below.

The Committee is composed of Independent Directors and meets periodically with the Company's internal auditors and independent registered public accounting firm to review the scope and results of the audit function and the policies relating to auditing procedures. In making its annual recommendation, the Committee reviews both the audit scope and proposed fees for the coming year.
The affirmative vote of a majority of the shares represented and voting at the Annual Meeting in person or by proxy is necessary to ratify the selection of PricewaterhouseCoopers LLP as the independent registered public accounting firm for the Company. If the shareholders do not ratify our selection, other certified public accounting firms will be considered and one will be selected by the Committee to be the Company's independent registered public accounting firm for 2019.

During fiscal years 2017 and 2018, PricewaterhouseCoopers LLP provided the following audit, audit-related and other professional services for the Company. The cost and description of these services are as follows:
\begin{tabular}{lrr}
\hline Audit Fees \({ }^{(1)}\) & 2017 & \(\$ 2,801,100\) \\
\hline Audit-Related Fees \({ }^{(2)}\) & \(\$ 3,017,000\) \\
\hline Tax Fees \({ }^{(3)}\) & 24,500 & 258,400 \\
\hline All Other Fees(4) & 24,000 & 357,300 \\
\hline (1) \begin{tabular}{l} 
The services include the audit of the annual financial statements included in the Company's Annual Report on Form 10-K; the reviews \\
of unaudited quarterly financial statements included in the Company's Quarterly Reports on Form 10-Q; subsidiary audits, \\
consultation, and comfort letters and consents for various financings and SEC filings; and the assessment of the Company's internal \\
control over financial reporting.
\end{tabular} \\
(2) \begin{tabular}{l} 
The services include benefit plan audits, regulatory audits, and regulatory compliance, including the impact of U.S. tax reform on \\
financial information and adoption of new accounting standards.
\end{tabular} \\
(3) \begin{tabular}{l} 
The services include corporate tax return reviews and corporate tax planning and advice. The independent registered public \\
accounting firm's independence is assessed with respect to tax planning and advice services to be provided, and in light of the \\
prohibition on representing the Company on tax matters before any regulatory or judicial proceeding or providing tax services to \\
Company executives or directors.
\end{tabular} \\
(4) \begin{tabular}{l} 
The services include permitted advisory services with regard to use of an automated disclosure checklist, which was not the subject of \\
audit or audit-related services performed.
\end{tabular}
\end{tabular}

Under the Committee's charter, the Committee must pre-approve all Company engagements of PricewaterhouseCoopers LLP, unless an exception exists under the provisions of the Exchange Act or applicable SEC rules. At the beginning of each audit cycle, the Committee evaluates the anticipated engagements of the independent registered public accounting firm, including the scope of work proposed to be performed and the proposed fees, and approves or rejects each service, consistent with its preapproval policy, taking into account whether the services are permissible under applicable laws and the possible impact of each nonaudit service on PricewaterhouseCoopers LLP's independence from management. The Committee also considers whether the independent registered public accounting firm is best positioned to provide effective and efficient service, and whether the service may enhance the Company's ability to manage and control risk or improve audit quality. Throughout the year, the Committee reviews updates of the services actually provided and fees charged by PricewaterhouseCoopers LLP.

Requests for the independent registered public accounting firm to provide additional services are presented to the Committee by the Company's Chief Financial or Accounting Officer, on an as-needed basis. The Committee has delegated to the chairperson of the Committee the authority to evaluate and approve engagements on the Committee's behalf in the event that a need arises for preapproval between Committee meetings. Approval of additional services will be made consistent with the preapproval policy and will be reported to the Committee at its next scheduled meeting.

Since the effective date of the preapproval process, the Committee has approved, in advance, each new engagement of PricewaterhouseCoopers LLP, and none of those engagements made use of the de minimis exception to the preapproval requirement contained in the SEC rules.

Representatives of PricewaterhouseCoopers LLP will be present at the Annual Meeting of Shareholders. They will have the opportunity to make statements, if they are so inclined, and will be available to respond to appropriate questions.

\section*{AUDIT COMMITTEE REPORT}

The Committee is composed of eight members of the Board. The Board determined that each member of the Committee qualifies as independent under the independence standards of the NYSE and the SEC. The members of the Committee are also financially literate as defined by the NYSE.

The Committee assists the Board in fulfilling its oversight responsibility by reviewing the financial information provided to shareholders and others, the system of internal control which management and the Board have established, and the audit process. Management is responsible for the Company's consolidated financial statements, for maintaining internal control over the Company's financial reporting, and for assessing the effectiveness of that control. PricewaterhouseCoopers LLP, the Company's independent registered public accounting firm, is responsible for performing an integrated audit of the Company's consolidated financial statements in accordance with generally accepted auditing standards, attesting to the effectiveness of the Company's internal control over financial reporting based on the audit, and issuing a report thereon. The Committee's role and responsibilities are to monitor and oversee these processes as set forth in a written Committee charter adopted by the Board. The Committee charter is available on the Company's website at www.swgasholdings.com. The Committee reviews and assesses the adequacy of the charter at least annually and recommends any changes to the Board for approval.

In fulfilling the Committee's responsibilities for 2018, the Committee:
- Reviewed and discussed the audited consolidated financial statements for the year ended December 31, 2018, with management and PricewaterhouseCoopers LLP;
- Discussed with PricewaterhouseCoopers LLP the matters required to be discussed by Auditing Standard No. 1301, Communications with Audit Committees, as adopted by the Public Company Accounting Oversight Board ("PCAOB"); and
- Received the written disclosures and the letter from PricewaterhouseCoopers LLP required by the applicable requirements of the PCAOB regarding their communications with the Committee concerning independence, and the Committee has discussed with PricewaterhouseCoopers LLC its independence.

Based the review and discussions referred to above, the Committee recommended to the Board that the audited consolidated financial statements for the year ended December 31, 2018 be included in the Company's Annual Report on Form 10-K for the year ended December 31, 2018, filed with the SEC.

\section*{Audit Committee}
A. Randall Thoman (Chair)

Robert L. Boughner
José A. Cárdenas
Stephen C. Comer
LeRoy C. Hanneman, Jr.
Jane Lewis-Raymond
Thomas A. Thomas
Leslie T. Thornton

\title{
APPROVAL OF ADJOURNMENT OF THE ANNUAL MEETING, IF NECESSARY, TO SOLICIT ADDITIONAL PROXIES
}

\section*{General}

Although it is not expected, the Annual Meeting may be adjourned for the purpose of soliciting additional proxies. Any such adjournment of the Annual Meeting may be made by approval of the affirmative vote of a majority of shares of Common Stock represented and voting at a duly held Annual Meeting in person or by proxy (which shares of Common Stock voting affirmatively also constitute at least a majority of the required quorum).

We are soliciting proxies to grant discretionary authority to adjourn the Annual Meeting, if necessary, for the purpose of soliciting additional proxies in favor of the proposal to amend the Articles of Incorporation of the Company to increase the authorized shares of Common Stock from 60,000,000 to 120,000,000 shares (Proposal 2) or the proposal to approve the Company's reincorporation from California to Delaware by means of a merger with and into a wholly-owned Delaware subsidiary (Proposal 3).

If our shareholders approve this proposal, we could adjourn or postpone the Annual Meeting to use the additional time to solicit additional proxies in favor of Proposals 2 or 3.

\section*{SUBMISSION OF SHAREHOLDER PROPOSALS}

Our Bylaws establish an advance notice procedure for shareholders to make director nominations for consideration at the Company's annual meetings of shareholders. Director nominee proposals for the 2020 Annual Meeting must be received in writing by the Company on or before November 22, 2019. Any proposal to nominate a director to our Board of Directors must set forth the information required by the Company's Bylaws. See "GOVERNANCE OF THE COMPANY—Selection of Directors" for a summary of these requirements.

Shareholders may submit other business proposals for consideration at the Company's annual meetings of shareholders. In order for a shareholder business proposal to be considered for inclusion in the Company's proxy statement for the 2020 Annual Meeting, it must be in such form as is required by Rule 14a-8 of the Exchange Act and received by the Company on or before November 22, 2019.

A business proposal submitted by a shareholder pursuant to our Bylaws and outside of the process of Rule 14a-8 for the 2020 Annual Meeting must be received by us no later than November 22, 2019 and must set forth the information required by the Company's Bylaws.

\section*{OTHER MATTERS TO COME BEFORE THE MEETING}

If any business not described in this Proxy Statement should come before the Annual Meeting for your consideration, it is intended that the shares represented by our proxies will be voted at their discretion. As of the date of this Proxy Statement, we know of no other matter which might be presented for shareholder action at the meeting.

By Order of the Board of Directors


Karen S. Haller
Executive Vice President/Chief Legal and Administrative Officer and Corporate Secretary
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\section*{APPENDIX A}

\section*{AGREEMENT AND PLAN OF MERGER OF SOUTHWEST GAS HOLDINGS, INC. (a California corporation) AND \\ SOUTHWEST GAS HOLDINGS, INC. (a Delaware corporation)}

This Agreement and Plan of Merger, dated as of [ \(\qquad\) ], 2019 (the "Agreement"), is made by and between Southwest Gas Holdings, Inc., a California corporation ("Southwest Gas California"), and Southwest Gas Holdings, Inc., a Delaware corporation and wholly-owned subsidiary of Southwest Gas California ("Southwest Gas Delaware"). Southwest Gas California and Southwest Gas Delaware are sometimes referred to herein as the "Constituent Corporations."

\section*{RECITALS}

Whereas, Southwest Gas Delaware is a corporation duly organized and existing under the laws of the State of Delaware and has an authorized capital of \(127,000,000\) shares, \(120,000,000\) of which are designated common stock, par value \(\$ 1.00\) per share, \(5,000,000\) of which are designated preferred stock, no par value per share and \(2,000,000\) of which are designated preference stock, par value \(\$ 20.00\) per share. As of the date of this Agreement, 100 shares of common stock were issued and outstanding, all of which were held by Southwest Gas California, and no shares of preferred stock or preference stock were issued and outstanding.

Whereas, Southwest Gas California is a corporation duly organized and existing under the laws of the State of California and has an authorized capital of \(127,000,000\) shares, \(120,000,000\) of which are designated common stock, par value \(\$ 1.00\) per share, \(5,000,000\) of which are designated preferred stock, no par value per share and \(2,000,000\) of which are designated preference stock, par value \(\$ 20.00\) per share. As of the date of this Agreement,
\(\qquad\) ] shares of common stock were issued and outstanding, and no shares of preferred stock or preference stock were issued and outstanding.

Whereas, the Board of Directors of Southwest Gas California has determined that, for the purpose of effecting the reincorporation of Southwest Gas California in the State of Delaware, it is advisable and in the best interests of Southwest Gas California and its shareholders that Southwest Gas California merge with and into Southwest Gas Delaware upon the terms and conditions herein provided.

Whereas, the respective Boards of Directors of Southwest Gas Delaware and Southwest Gas California have approved and declared the advisability of this Agreement, and have directed that this Agreement be submitted to a vote of their respective sole stockholder and shareholders and executed by the undersigned officers.

Whereas, shareholders holding a majority of the outstanding common stock of Southwest Gas California approved this Agreement on [May 2], 2019.

Whereas, the Merger is intended to qualify as a transaction governed by Section 368(a) of the Internal Revenue Code of 1986, as amended.

\section*{AGREEMENT}

In consideration of the mutual agreements and covenants set forth herein, Southwest Gas Delaware and Southwest Gas California hereby agree, subject to the terms and conditions hereinafter set forth, as follows:

\section*{1. MERGER}
1.1 Merger. In accordance with the provisions of this Agreement, the Delaware General Corporation Law ("DGCL") and the California General Corporation Law ("CGCL"), Southwest Gas California shall be merged with and into Southwest Gas Delaware (the "Merger"), the separate existence of Southwest Gas California shall cease and Southwest Gas Delaware shall survive the Merger and shall continue to be governed by the laws of the State of Delaware, and Southwest Gas Delaware shall be, and is herein sometimes referred to as, the "Surviving Corporation." The name of the Surviving Corporation shall be "Southwest Gas Holdings, Inc."
1.2 Filing and Effectiveness. Subject to applicable law, the Merger shall become effective when the following actions shall have been completed:
(a) This Agreement shall have been adopted by the sole stockholder of Southwest Gas Delaware and the principal terms of this Agreement shall have been approved by the shareholders of Southwest Gas California in accordance with the requirements of the DGCL and the CGCL, which adoption and approval by such sole stockholder of Southwest Gas Delaware and by the shareholders of Southwest Gas California has occurred as of [ \(\qquad\) ], 2019 and [May 2], 2019, respectively;
(b) All of the conditions precedent to the consummation of the Merger specified in this Agreement shall have been satisfied or duly waived by the party entitled to satisfaction thereof; and
(c) A certificate of merger meeting the requirements of the DGCL (the "Certificate of Merger") shall have been filed with the Secretary of State of the State of Delaware and this Agreement, together with a Certificate of Ownership as provided in Section 1110 of the CGCL or the Certificate of Merger, shall have been filed with the Secretary of State of the State of California or, in the case of the applicable requirements of California law, as otherwise provided by the CGCL.

The date and time when the Merger shall become effective, as aforesaid, is herein called the "Effective Date of the Merger."
1.3 Effect of the Merger. Upon the Effective Date of the Merger, the separate existence of Southwest Gas California shall cease and Southwest Gas Delaware, as the Surviving Corporation, (i) shall continue to possess all of its assets, rights, powers and property as constituted immediately prior to the Effective Date of the Merger, (ii) shall be subject to all actions previously taken by its and Southwest Gas California's Board of Directors, (iii) shall succeed, without other transfer, to all of the assets, rights, powers and property of Southwest Gas California in the manner more fully set forth in Section 259 of the DGCL, (iv) shall continue to be subject to all of the debts, liabilities and obligations of Southwest Gas Delaware as constituted immediately prior to the Effective Date of the Merger, and (v) shall succeed, without other transfer, to all of the debts, liabilities and obligations of Southwest Gas California in the same manner as if Southwest Gas Delaware had itself incurred them, all as more fully provided under the applicable provisions of the DGCL and the CGCL.

\section*{2. CHARTER DOCUMENTS, DIRECTORS AND OFFICERS}
2.1 Certificate of Incorporation. The Certificate of Incorporation of Southwest Gas Delaware as in effect immediately prior to the Effective Date of the Merger shall continue in full force and effect as the Certificate of Incorporation of the Surviving Corporation until duly amended in accordance with the provisions thereof and applicable law.
2.2 Bylaws. The Bylaws of Southwest Gas Delaware as in effect immediately prior to the Effective Date of the Merger shall continue in full force and effect as the Bylaws of the Surviving Corporation until duly amended in accordance with the provisions thereof and applicable law.
2.3 Directors and Officers. The directors and officers of Southwest Gas California immediately prior to the Effective Date of the Merger shall be the directors and officers of the Surviving Corporation, which such directors serving as directors until their successors shall have been duly elected and qualified or until as otherwise provided by law or the Certificate of Incorporation of the Surviving Corporation or the Bylaws of the Surviving Corporation.

\section*{3. MANNER OF CONVERSION OF STOCK}
3.1 Southwest Gas California Common Stock. Upon the Effective Date of the Merger, each share of Southwest Gas California common stock, par value \(\$ 1.00\) per share, issued and outstanding immediately prior thereto shall, by virtue of the Merger and without any action by the Constituent Corporations, the holder of such shares or any other person, be converted into one (1) fully paid and nonassessable share of common stock, par value \(\$ 1.00\) per share, of the Surviving Corporation.

\subsection*{3.2 Southwest Gas California Options, Equity Incentive Plan Awards, Restricted Stock and Other Convertible Securities.}
(a) Upon the Effective Date of the Merger, the Surviving Corporation shall assume and continue the Southwest Gas California 2006 Restricted Stock/Unit Plan (as amended from time to time, the "2006 Plan"), the Southwest

Gas California Management Incentive Plan (as amended from time to time, the "MIP"), the Southwest Gas California Omnibus Incentive Plan (together with the 2006 Plan and the MIP, the "Incentive Plans") and all awards then outstanding thereunder. Each Incentive Plan and each such award shall have the same terms and conditions, including the same number of shares of stock reserved or covered thereunder, as applicable, except that (i) the stock reserved or covered thereunder (or, with respect to performance goals, related thereto) shall be the common stock of the Surviving Corporation, (ii) any performance goals thereunder related to Southwest Gas California shall relate to the Surviving Corporation, and (iii) the Surviving Corporation shall have the duties, responsibilities and authorities of Southwest Gas California thereunder. Upon the Effective Date of the Merger, the Surviving Corporation shall become the successor to Southwest Gas California, and shall assume the duties, responsibilities and authorities, under each Change in Control Agreement to which Southwest Gas California is then a party.
(b) A number of shares of the Surviving Corporation's common stock shall be reserved for issuance under the Incentive Plans equal to the number of shares of Southwest Gas California common stock so reserved immediately prior to the Effective Date of the Merger.
3.3 Southwest Gas Delaware Common Stock. Upon the Effective Date of the Merger, each share of common stock, par value \(\$ 1.00\) per share, of Southwest Gas Delaware issued and outstanding immediately prior thereto shall, by virtue of the Merger and without any action by Southwest Gas Delaware, the holder of such shares or any other person, be canceled and returned to the status of authorized but unissued shares, without any consideration being delivered in respect thereof.
3.4 Exchange of Certificates. After the Effective Date of the Merger, each holder of a certificate representing shares of Southwest Gas California common stock outstanding immediately prior to the Effective Date of the Merger may, at such shareholder's option, surrender the same for cancellation to an exchange agent designated by the Surviving Corporation (the "Exchange Agent'), and each such holder shall be entitled to receive in exchange therefor a certificate or certificates representing the number of shares of the Surviving Corporation's common stock into which the shares formerly represented by the surrendered certificate were converted as herein provided. Unless and until so surrendered, each certificate representing shares of Southwest Gas California common stock outstanding immediately prior to the Effective Date of the Merger shall be deemed for all purposes, from and after the Effective Date of the Merger, to represent the number of shares of the Surviving Corporation's common stock into which such shares of Southwest Gas California common stock were converted in the Merger.

The registered owner on the books and records of the Surviving Corporation or the Exchange Agent of any shares of stock represented by such certificate shall, until such certificate shall have been surrendered for transfer or conversion or otherwise accounted for to the Surviving Corporation or the Exchange Agent, have and be entitled to exercise any voting and other rights with respect to and to receive dividends and other distributions upon the shares of common stock of the Surviving Corporation represented by such certificate as provided above.

Each certificate representing common stock of the Surviving Corporation so issued in the Merger shall bear the same legends, if any, with respect to the restrictions on transferability as the certificates of Southwest Gas California so converted and given in exchange therefor, unless otherwise determined by the Board of Directors of the Surviving Corporation in compliance with applicable laws, or other such additional legends as agreed upon by the holder and the Surviving Corporation.

\section*{4. CONDITIONS}
4.1 The obligations of Southwest Gas California under this Agreement shall be conditioned upon the occurrence of the following events:
(a) Shareholder Approval. The principal terms of this Agreement shall have been duly approved by the shareholders of Southwest Gas California, which approval was duly obtained on [May 2], 2019;
(b) Consents, Approvals or Authorizations. Any consents, approvals or authorizations that Southwest Gas California deems necessary or appropriate to be obtained in connection with the consummation of the Merger shall have been obtained, including, but not limited to, approvals with respect to federal and state securities laws; and
(c) Stock Market Listing. The Surviving Corporation's common stock to be issued and reserved for issuance in connection with the Merger shall have been approved for listing by the New York Stock Exchange.

\section*{5. GENERAL}
5.1 Covenants of Southwest Gas Delaware. Southwest Gas Delaware covenants and agrees that it will, on or before the Effective Date of the Merger:
(a) Qualify to do business as a foreign corporation in the State of California and in connection therewith appoint an agent for service of process as required under the provisions of Section 2105 of the CGCL;
(b) File the Certificate of Merger with the Secretary of State of the State of Delaware;
(c) File this Agreement, together with the Certificate of Ownership, or the Certificate of Merger, with the Secretary of State of the State of California; and
(d) Take such other actions as may be required by the CGCL.
5.2 Further Assurances. From time to time, as and when required by Southwest Gas Delaware or by its successors or assigns, there shall be executed and delivered on behalf of Southwest Gas California such deeds and other instruments, and there shall be taken or caused to be taken by Southwest Gas Delaware and Southwest Gas California such further and other actions as shall be appropriate or necessary to vest or perfect in or conform of record or otherwise by Southwest Gas Delaware the title to and possession of all the property, interests, assets, rights, privileges, immunities, powers, franchises and authority of Southwest Gas California and otherwise to carry out the purposes of this Agreement, and the officers and directors of Southwest Gas Delaware are fully authorized in the name and on behalf of Southwest Gas California or otherwise to take any and all such action and to execute and deliver any and all such deeds and other instruments.
5.3 Abandonment. At any time before the Effective Date of the Merger, this Agreement may be terminated and the Merger may be abandoned for any reason whatsoever by the Board of Directors of either Southwest Gas California or of Southwest Gas Delaware, or of both, notwithstanding the approval of the principal terms of this Agreement by the shareholders of Southwest Gas California or the adoption of this Agreement by the sole shareholder of Southwest Gas Delaware, or by both.
5.4 Amendment. The Boards of Directors of the Constituent Corporations may amend this Agreement at any time prior to the Effective Date of the Merger, provided that an amendment made subsequent to applicable shareholder or shareholder approval shall not, unless approved by such shareholders or shareholders as required by law:
(a) Alter or change the amount or kind of shares, securities, cash, property and/or rights to be received in exchange for or on conversion of all or any of the shares of any class or series thereof of such Constituent Corporation;
(b) Alter or change any term of the Certificate of Incorporation of the Surviving Corporation to be effected by the Merger; or
(c) Alter or change any of the terms and conditions of this Agreement if such alteration or change would adversely affect the holders of any class or series of capital stock of any Constituent Corporation.
5.5 Governing Law. This Agreement shall in all respects be construed, interpreted and enforced in accordance with and governed by the laws of the State of Delaware and, so far as applicable, the merger provisions of the CGCL.
5.6 Counterparts. This Agreement may be executed in any number of counterparts, each of which shall be deemed to be an original and all of which together shall constitute one and the same instrument.

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IN WITNESS WHEREOF, this Agreement having first been approved by the resolutions of the Board of Directors of Southwest Gas Holdings, Inc., a California corporation, and Southwest Gas Holdings, Inc., a Delaware corporation, is hereby executed on behalf of each of such two corporations and attested by their respective officers thereunto duly authorized.

SOUTHWEST GAS HOLDINGS, INC.
a California corporation
By:
Name: Karen S. Haller
Title: Executive Vice President/Chief Legal and Administrative Officer and Corporate Secretary

SOUTHWEST GAS HOLDINGS, INC.
a Delaware corporation
By:
Name: Karen S. Haller
Title: Executive Vice President/Chief Legal and Administrative Officer and Corporate Secretary

\title{
CERTIFICATE OF INCORPORATION OF \\ SOUTHWEST GAS HOLDINGS, INC. \\ a Delaware corporation
}

\section*{ARTICLE 1}

The name of the Corporation is Southwest Gas Holdings, Inc. (the "Corporation").

\begin{abstract}
ARTICLE 2
The address of the Corporation's registered office in the State of Delaware is 1209 Orange Street, in the City of Wilmington, 19801, County of New Castle. The name of its registered agent at such address is The Corporation Trust Company.
\end{abstract}

\begin{abstract}
ARTICLE 3
The nature of the business of the Corporation and the objects or purposes to be transacted, promoted or carried on by it are to engage in any lawful act or activity for which corporations may be organized under the General Corporation Law of the State of Delaware ("Delaware General Corporation Law").
\end{abstract}

\section*{ARTICLE 4}
A. The total number of shares of all classes of stock that the Corporation is authorized to issue is one hundred and twenty seven million \((127,000,000)\) shares.
B. The Corporation is authorized to issue three classes of shares of stock, to be designated respectively, as "Preferred Stock;" "Preference Stock;" and "Common Stock." The number of shares of Preferred Stock shall be five million \((5,000,000)\) and shall have no par value for each share; the number of shares of Preference Stock shall be two million \((2,000,000)\) and shall have a par value of each share of said class of \(\$ 20.00\) per share; the number of shares of Common Stock shall be one hundred and twenty million \((120,000,000)\) and shall have a par value of each share of said class of \(\$ 1.00\) per share.
C. Except as otherwise provided by law, shares of Preferred Stock, in preference to the holders of the Preference Stock and the Common Stock, may be issued from time to time, in one or more series. Subject to the limitations and restrictions set forth in this Article 4, the Board of Directors of the Corporation (the "Board of Directors") or a committee of the Board of Directors, to the extent permitted by law and the Bylaws of the Corporation or a resolution of the Board of Directors, by resolution or resolutions, is authorized to create or provide for any such series, and to fix or alter the designations, rights, preferences, privileges and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including, without limitation, the authority to fix or alter the dividend rights, dividend rates, conversion rights, exchange rights, voting rights, rights and terms of redemption (including sinking and purchase fund provisions), the redemption price or prices, the dissolution preferences and the rights in respect to any distribution of assets of any wholly unissued series of Preferred Stock and the number of shares constituting any such series, and the designation thereof, or any of them and to increase or decrease the number of shares of any series so created, subsequent to the issue of that series but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.
D. Except as otherwise provided by law, any of the shares of Preference Stock, in preference to the holders of the Common Stock, may be issued from time to time, in one or more series. Subject to the limitations and restrictions set forth in this Article 4, the Board of Directors or a committee of the Board of Directors, to the extent permitted by law and the Bylaws of the Corporation or a resolution of the Board of Directors, by resolution or resolutions, is authorized to create or provide for any such series, and to fix or alter the designations, rights, preferences, privileges and relative, participating, optional or other special rights, and qualifications, limitations or restrictions thereof, including, without limitation, the authority to fix or alter the dividend rights, dividend rates, conversion rights, the exchange rights, voting rights, rights and terms of redemption (including sinking and purchase fund provisions), the redemption
price or prices, the dissolution preferences and the rights in respect to any distribution of assets of any wholly unissued series of Preference Stock and the number of shares constituting any such series, and the designation thereof, or any of them and to increase or decrease the number of shares of any series so created, subsequent to the issue of that series but not below the number of shares of such series then outstanding. In case the number of shares of any series shall be so decreased, the shares constituting such decrease shall resume the status which they had prior to the adoption of the resolution originally fixing the number of shares of such series.
E. There shall be no limitation or restriction on any variation between any of the different series of Preferred Stock or Preference Stock, as applicable, as to the designations, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof; and the several series of Preferred Stock or Preference Stock, as applicable, may, except as hereinafter in this Article 4 otherwise expressly provided, vary in any and all respects as fixed and determined by the resolution or resolutions of the Board of Directors or by a committee of the Board of Directors, providing for the issuance of the various series; provided, however, that all shares of any one series of Preferred Stock or Preference Stock, as applicable, shall have the same designation, preferences and relative, participating, optional or other special rights and qualifications, limitations and restrictions.
F. Except as otherwise required by law, and subject to the voting rights and other rights, preferences and privileges above provided in this Article 4 with respect to the Preferred Stock and/or the Preference Stock or as otherwise fixed by resolution or resolutions of the Board of Directors with respect to one or more series of Preferred Stock and/or Preference Stock, as applicable, shares of Common Stock and/or the holders thereof shall have full voting rights and powers for the election of directors and for all other purposes, voting together as a single class, and each holder of the Common Stock who at the time possesses voting power for any purpose shall be entitled to one vote for each share of such stock standing in his name on the books of the Corporation. Each holder of the Common Stock shall be entitled to receive dividends as and when they are declared by the Board of Directors. Upon liquidation, distribution or winding up of the Corporation, the assets of the Corporation available for distribution to the holders of the Common Stock shall be distributed ratably among the holders of all shares of the Common Stock at the time outstanding. The Common Stock shall have no conversion, subscription or preemptive rights, nor shall it be subject to redemption, call or assessment.

\section*{ARTICLE 5}

In furtherance and not in limitation of the powers conferred by law, the Board of Directors is expressly authorized to adopt, amend and repeal the Bylaws of the Corporation.

\section*{ARTICLE 6}

Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

\section*{ARTICLE 7}
A. Supermajority of Shares Required to Approve Certain Transactions. Notwithstanding any other provisions of this Certificate of Incorporation, and notwithstanding that a lesser percentage may be permitted from time to time by applicable law, the affirmative vote of the holders of not fewer than eighty-five percent (85\%) of the outstanding shares of "Voting Stock" (as hereinafter defined) of the Corporation shall be required for the approval or authorization of any "Business Combination" (as hereinafter defined) of the Corporation with any "Dominant Stockholder" (as hereinafter defined); provided, however, that the eighty-five percent (85\%) voting requirement shall not be applicable if any of the following shall occur:
(i) The Board of Directors, by the affirmative vote of not fewer than sixty-five percent (65\%) of the members thereof, expressly approves in advance the acquisition of the outstanding shares of Voting Stock that caused such Dominant Stockholder to become a Dominant Stockholder; or
(ii) The Board of Directors, by the affirmative vote of not fewer than sixty-five percent (65\%) of the members thereof, expressly approves such Business Combination in advance of such Dominant Stockholder becoming a Dominant Stockholder; or
(iii) The Board of Directors, by the affirmative vote of not fewer than eighty-five percent (85\%) of the members thereof, approves such Business Combination subsequent to such Dominant Stockholder becoming a Dominant Stockholder; or
(iv) The Board of Directors, by the affirmative vote of not fewer than eighty-five percent (85\%) of the members thereof, shall determine that the cash or fair market value of the property, securities or other consideration
to be received per share by holders of Voting Stock of the Corporation (which shall include, without limitation, all Voting Stock of the Corporation retained by them) in the Business Combination is not less than the "Highest Per Share Price" or the "Highest Equivalent Per Share Price" (as these terms are hereinafter defined) paid by the Dominant Stockholder in acquiring any of its holdings of the Corporation's Voting Stock.
B. Definitions. For the purposes of this Article 7;
(i) Business Combination. The term "Business Combination" shall include, without limitation, (a) any merger or consolidation of the Corporation with or into any Dominant Stockholder or any entity controlled by or under common control with a Dominant Stockholder, (b) any merger or consolidation of a Dominant Stockholder with or into the Corporation or any entity controlled by or under common control with the Corporation, (c) any sale, lease, exchange, transfer or other disposition of all or substantially all of the property and assets of the Corporation to a Dominant Stockholder, or any entity controlled by or under common control with a Dominant Stockholder, (d) any purchase, lease, exchange, transfer or other acquisition by the Corporation of all or substantially all of the property and assets of a Dominant Stockholder, or any entity controlled by or under common control with a Dominant Stockholder, (e) any recapitalization of the Corporation that would have the effect of increasing the voting power of a Dominant Stockholder, and (f) any agreement, contract or other arrangement providing for any of the transactions described in this definition of Business Combination.
(ii) Dominant Stockholder. The term "Dominant Stockholder" shall mean and include any individual, corporation, partnership or other person or entity which, together with its "Affiliates" and "Associates," "Beneficially Owns" (as these terms are hereinafter defined) in the aggregate 10 percent or more of the outstanding Voting Stock of the Corporation, and any Affiliate or Associate of any such individual, corporation, partnership or other person or entity.
A Dominant Stockholder shall be deemed to have acquired a share of Voting Stock of the Corporation at the time when such Dominant Stockholder became the Beneficial Owner thereof. Without limitation, any share of Voting Stock of the Corporation that any Dominant Stockholder has the right to acquire at any time pursuant to any agreement, or upon exercise of conversion rights, warrants or options, or otherwise, shall be deemed to be Beneficially Owned by the Dominant Stockholder and to be outstanding for purposes of this subparagraph (ii).
(iii) Affiliate. An "affiliate" of, or a person "affiliated" with, a specified person such as a Dominant Stockholder, is a person that directly, or indirectly through one or more intermediaries, controls, or is controlled by, or is under common control with, the person specified.
(iv) Associate. The term "associate," used to indicate a relationship with any person such as a Dominant Stockholder, means (a) any corporation or organization of which such person is an officer or partner or is, directly or indirectly, the beneficial owner of 10 percent or more of any class of equity securities, (b) any trust or other estate in which such person has a substantial beneficial interest or as to which such person serves as trustee or in a similar fiduciary capacity, and (c) any relative or spouse of such person, or any relative of such spouse, who has the same home as such person or who is a director or officer of such person or any of its parents or subsidiaries.
(v) Beneficially Owns or Beneficial Owner. A "beneficial owner" of, or one who "beneficially owns," a security includes any person who, directly or indirectly, through any contract, arrangement, understanding, relationship or otherwise, (a) has the right to acquire such security through the exercise of any option, warrant or right or through the conversion of another security into such security, or (b) has or shares voting power which includes the power to vote, or to direct the voting of, such security, and/or (c) has or shares investment power which includes the power to dispose of, or to direct the disposition of, such security.
(vi) Voting Stock. The term "Voting Stock" shall mean all of the outstanding shares of Common Stock (together, solely for the purpose of identifying a Dominant Stockholder, with certain authorized but unissued shares that a Dominant Stockholder is deemed to Beneficially Own), and each reference to a proportion of shares of Voting Stock shall refer to such proportion of the votes entitled to be cast by such shares.
(vii) Highest Per Share Price and Highest Equivalent Per Share Price. The terms "Highest Per Share Price" and "Highest Equivalent Per Share Price" as used in this Article 7 shall mean the following:

The Highest Per Share Price shall mean the highest price that can be determined to have been paid at any time by the Dominant Stockholder for any share of Voting Stock. If there are any securities of the Corporation outstanding ("related securities" herein) that entitle the holder thereof to purchase, or that are convertible into, Voting Stock, the Highest Equivalent Per Share Price shall mean, with respect to each
type, class and/or series of related securities, the amount in each case determined by the affirmative vote of not fewer than eighty-five percent ( \(85 \%\) ) of the members of the Board of Directors, on whatever basis they believe in good faith to be appropriate, to be the highest per share price equivalent of the highest price that can be determined to have been paid at any time by the Dominant Stockholder for any such related securities. In determining the Highest Per Share Price and Highest Equivalent Per Share Price, all purchases of Voting Stock and related securities of the Corporation by the Dominant Stockholder shall be taken into account regardless of whether they occurred before or after the Dominant Stockholder became a Dominant Stockholder. With respect to shares of Voting Stock owned by Affiliates, Associates or other persons whose ownership is attributed to a Dominant Stockholder, if the price paid by such Dominant Stockholder for such shares is not determined by the affirmative vote of not fewer than eighty-five percent ( \(85 \%\) ) of the members of the Board of Directors, the price so paid shall be deemed to be the higher of (a) the price paid upon the acquisition thereof by the Affiliate, Associate or other person or (b) the market price of the shares in question at the time when the Dominant Stockholder became the Beneficial Owner thereof. The Highest Per Share Price and the Highest Equivalent Per Share Price shall include any brokerage commissions, transfer taxes and soliciting dealers' fees or other value paid by the Dominant Stockholder with respect to all Voting Stock and related securities acquired by the Dominant Stockholder.
C. Supermajority of Shares Required to Amend or Repeal This Certificate of Incorporation. Notwithstanding any other provisions of this Certificate of Incorporation, and notwithstanding that a lesser percentage may be permitted from time to time by applicable law, the provisions set forth in this Article 7 may not be amended, altered, changed or repealed in any respect unless approved by the affirmative vote of the holders of not fewer than sixty-five percent \((65 \%)\) of the outstanding shares of Voting Stock at a meeting of the shareholders duly called and unless the consideration of any such amendment, alteration, change or repeal shall have been included as an agenda item in the notice of such meeting; provided, however, that if there is a Dominant Stockholder on the record date for determining the holders of Voting Stock entitled to vote at such meeting, any such amendment, alteration, change or repeal must be approved by the affirmative vote of the holders of not fewer than eighty-five percent ( \(85 \%\) ) of the outstanding shares of Voting Stock.

\section*{ARTICLE 8}

The Corporation shall not be subject to the provisions of Section 203 of Delaware General Corporation Law.

\section*{ARTICLE 9}

The directors of the Corporation need not be stockholders.

\begin{abstract}
ARTICLE 10
To the fullest extent permitted by Delaware statutory or decisional law, as amended or interpreted, no director of the Corporation shall be personally liable to the Corporation or its stockholders for monetary damages for breach of fiduciary duty as a director. No amendment to, or modification or repeal of, this Article 10 shall adversely affect any right or protection of a director of the Corporation existing hereunder with respect to any act or omission occurring prior to such amendment, modification or repeal. This Article 10 does not affect the availability of equitable remedies for breach of fiduciary duties.
\end{abstract}

\section*{ARTICLE 11}

No stockholder shall be entitled to cumulative voting rights as to any election of directors.

\section*{ARTICLE 12}

Except as otherwise required by law and subject to the rights of the holders of any series of stock with respect to such series of stock, unless the Board of Directors otherwise determines, newly created directorships resulting from any increase in the authorized number of directors or any vacancies on the Board of Directors resulting from the death, resignation, retirement, disqualification, removal from office or other cause shall be filled only by a majority vote of the directors then in office, though less than a quorum, or by a sole remaining director, and not by the stockholders.

\section*{ARTICLE 13}

Whenever a compromise or arrangement is proposed between the Corporation and its creditors or any class of them and/or between the Corporation and its stockholders or any class of them, any court of equitable jurisdiction within the State of Delaware may, on the application in a summary way of the Corporation or of any creditor or stockholder thereof, or on the application of any receiver or receivers appointed for the Corporation under the provisions of Section 291 of Delaware General Corporation Law or on the application of trustees in dissolution or of any receiver or receivers appointed for the Corporation under the provisions of Section 279 of Delaware General Corporation Law order a meeting of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, to be summoned in such manner as the said court directs. If a majority in number representing three-fourths in value of the creditors or class of creditors, and/or of the stockholders or class of stockholders of the Corporation, as the case may be, agree to any compromise or arrangement and to any reorganization of the Corporation as a consequence of such compromise or arrangement, the said compromise or arrangement and the said reorganization shall, if sanctioned by the court to which the said application has been made, be binding on all the creditors or class of creditors, and/or on all the stockholders or class of stockholders, of the Corporation, as the case may be, and also on the Corporation.

\section*{ARTICLE 14}

Subject to the requirements of Article 7.C., the Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and all rights conferred upon stockholders herein are granted subject to this reservation.

\section*{ARTICLE 15}

Except for (i) actions in which the Court of Chancery in the State of Delaware concludes that an indispensable party is not subject to the jurisdiction of the Delaware courts, and (ii) actions in which a federal court has assumed exclusive jurisdiction of a proceeding, any derivative action brought by or on behalf of the Corporation, and any direct action brought by a stockholder against the Corporation or any of its directors or officers, alleging a violation of the Delaware General Corporation Law, the Corporation's Certificate of Incorporation or Bylaws or breach of fiduciary duties or other violation of Delaware decisional law relating to the internal affairs of the Corporation, shall be brought in the Court of Chancery in the State of Delaware, which shall be the sole and exclusive forum for such proceedings; provided, however, that the Corporation may consent to an alternative forum for any such proceedings upon the approval of the Board of Directors.

\section*{ARTICLE 16}

The name and mailing address of the sole incorporator is as follows:
\begin{tabular}{ll} 
Name & Mailing Address \\
\hline Karen S. Haller & \begin{tabular}{l}
5241 Spring Mountain Road Post Office \\
Box 98510 Las Vegas, Nevada
\end{tabular}
\end{tabular}

I, the undersigned, being the sole incorporator hereinbefore named, for the purpose of forming a corporation pursuant to the General Corporation Law of the State of Delaware, do make this certificate, hereby declaring and certifying that this is my act and deed and the facts herein stated are true, and, accordingly, have hereunto set my hands this \(\qquad\) day of \(\qquad\) , 2019.

Karen S. Haller
Sole Incorporator

\section*{APPENDIX C}

\section*{BYLAWS OF}

\section*{SOUTHWEST GAS HOLDINGS, INC.}

\section*{ARTICLE I OFFICES}

\section*{Section 1.1 Registered Office.}

The registered office of Southwest Gas Holdings, Inc., a Delaware corporation (the "Corporation") in the State of Delaware shall be set forth in the Certificate of Incorporation of the Corporation.

Section 1.2 Other Offices.
The Corporation may also have offices at such other places, either within or without the State of Delaware, as the Board of Directors may from time to time determine or the business of the Corporation may require.

Section 1.3 Terminology.
All personal pronouns used herein are employed in a generic sense and are intended and deemed to be neutral in gender.

\section*{ARTICLE II}

MEETING OF STOCKHOLDERS
Section 2.1 Place of Meetings.
(a) Meetings of stockholders may be held at such place, either within or without the State of Delaware, as may be designated by or in the manner provided in these Bylaws or, if not so designated, as the officers of the Corporation may deem convenient and appropriate; provided, however, that the Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as authorized by Section 2.1(b).
(b) If authorized by the Board of Directors in its sole discretion, and subject to such guidelines and procedures as the Board of Directors may adopt, stockholders and proxyholders not physically present at a meeting of stockholders may, by means of remote communication:
(1) Participate in a meeting of stockholders; and
(2) Be deemed present in person and vote at a meeting of stockholders whether such meeting is to be held at a designated place or solely by means of remote communication, provided that ( \(A\) ) the Corporation shall implement reasonable measures to verify that each person deemed present and permitted to vote at the meeting by means of remote communication is a stockholder or proxyholder of the Corporation, (B) the Corporation shall implement reasonable measures to provide such stockholders and proxyholders a reasonable opportunity to participate in the meeting and to vote on matters submitted to the stockholders, including an opportunity to read or hear the proceedings of the meeting substantially concurrently with such proceedings, and (C) if any stockholder or proxyholder votes or takes other action at the meeting by means of remote communication, a record of such vote or other action shall be maintained by the Corporation.
(c) For purposes of these Bylaws, "remote communication" shall include (1) telephone, internet, webcast or any other voice or video communications and (2) electronic mail or other form of written or visual electronic communications satisfying the requirements of Section 2.11(b).

Section 2.2 Regular Meetings.
The regular annual meetings of the stockholders of the Corporation, for the purpose of electing a Board of Directors and transacting such other business as properly and lawfully may come before the meeting, shall be held on such date and at such time as may be designated from time to time by the Board of Directors.

Section 2.3 Special Meetings.
Except in those instances where a particular manner of calling a meeting of the stockholders is prescribed by law or elsewhere in these Bylaws, a special meeting of the stockholders of the Corporation may be called at any time, for any purpose or purposes, by the Chief Executive Officer of the Corporation or other officers acting for the Chief Executive Officer, or by the Board of Directors, or by the holders of not less than one-third (1/3) of the voting shares then issued and outstanding. Each call for a special meeting of the stockholders shall state the time, place, and the purpose of such meeting; if made by the Board of Directors, it shall be by resolution duly adopted by a majority vote and entered in the minutes; if made by an authorized officer or by the stockholders, it shall be in writing and signed by the person or persons making the same, and unless the office of Secretary be vacant, delivered to the Secretary. No business shall be transacted at a special meeting other than as is stated in the call and the notice based thereon.

Section 2.4 Notice of Regular and Special Meetings of the Stockholders.
(a) Except as otherwise provided by law or the Certificate of Incorporation, written notice of each regular and special meeting of the stockholders of the Corporation, specifying the date and hour, place (if any), and purpose or purposes of such meeting, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such meeting, and the record date for determining the stockholders entitled to vote at the meeting, if such date is different from the record date for determining stockholders entitled to notice of the meeting, shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote thereat, addressed to such stockholder at such stockholder's address as it appears upon the books of the Corporation.
(b) When a meeting is adjourned to another time or place, notice need not be given of the adjourned meeting if the time, place, if any, thereof, and the means of remote communication, if any, by which stockholders and proxyholders may be deemed to be present in person and vote at such adjourned meeting, are announced at the meeting at which the adjournment is taken unless the adjournment is for more than thirty (30) days, or unless after the adjournment a new record date is fixed for the adjourned meeting, in which event a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting; provided, however, that the Board of Directors may fix a new record date for determination of stockholders entitled to vote at the adjourned meeting, and in such case shall also fix as the record date for stockholders entitled to notice of such adjourned meeting the same or a different date as that fixed for determination of stockholders entitled to vote at the adjourned meeting.
(c) Without limiting the manner by which notice otherwise may be given effectively to stockholders (including, without limitation, electronic notices permitted by Sections 204(g) and 242(b)(1) of the Delaware General Corporation Law) any notice to stockholders given by the Corporation under any provision of Delaware General Corporation Law, the Certificate of Incorporation, or these Bylaws shall be effective if given by a form of electronic transmission consented to by the stockholder to whom the notice is given. Any such consent shall be revocable by the stockholder by written notice to the Corporation. Any such consent shall be deemed revoked if (i) the Corporation is unable to deliver by electronic transmission two consecutive notices given by the Corporation in accordance with such consent, and (ii) such inability becomes known to the Secretary or an Assistant Secretary of the Corporation or to the transfer agent or other person responsible for the giving of notice; provided, however, the inadvertent failure to treat such inability as a revocation shall not invalidate any meeting or other action. An affidavit of the Secretary or an Assistant Secretary or of the transfer agent or other agent of the Corporation that the notice has been given by a form of electronic transmission shall, in the absence of fraud, be prima facie evidence of the facts stated therein. Notice given pursuant to this subparagraph (c) shall be deemed given: (1) if by facsimile telecommunication, when directed to a number at which the stockholder has consented to receive notice; (2) if by electronic mail, when directed to an electronic mail address at which the stockholder has consented to receive notice; (3) if by a posting on an electronic network together with separate notice to the stockholder of such specific posting, upon the later of (A) such posting and (B) the giving of such separate notice; and (4) if by any other form of electronic transmission, when directed to the stockholder. For purposes of these Bylaws, "electronic transmission" means any form of communication, not directly involving the physical transmission of paper, that creates a record that may be retained, retrieved and reviewed by a recipient thereof, and that may be directly reproduced in paper form by such a recipient through an automated process.

Section 2.5 Quorum and Voting.
(a) At any meeting of the stockholders, except where otherwise provided by law, the Certificate of Incorporation or these Bylaws, the presence, in person or by proxy, of the holders of a majority of the outstanding shares of stock entitled to vote at any meeting shall constitute a quorum for the transaction of business. Shares of stock, the voting of which at said meeting have been enjoined, or which for any reason cannot be lawfully voted at such meeting, shall not be counted to determine a quorum at said meeting. Any regular or special meeting of the stockholders, whether
or not a quorum is present, may be adjourned from day to day or from time to time by the chairman of the meeting or by the vote of the holders of a majority of the shares entitled to vote at said meeting, but no other business shall be transacted at such adjourned meeting. Such adjournment and the reasons therefor shall be recorded in the minutes of the proceedings. The stockholders present at a duly called or convened meeting at which a quorum is present may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum.
(b) Except as otherwise provided by law, the Certificate of Incorporation or these Bylaws, all action taken by the holders of a majority of the votes cast on a matter affirmatively or negatively shall be valid and binding upon the Corporation. For purposes of these Bylaws, a share present at a meeting, but for which there is an abstention or as to which a stockholder gives no authority or direction as to a particular proposal or director nominee, shall be counted as present for the purpose of establishing a quorum but shall not be counted as a vote cast, except to the extent permitted by applicable law or the principal securities exchange on which the Corporation's securities are listed.

Section 2.6 Waiver of Notice.
When all the stockholders of the Corporation are present, in person or by proxy, at any meeting, or when the stockholders not present, in person or by proxy, thereat give their written consent, either before or after such meeting, to the holding thereof at the time and place the meeting is held, and such written consent is made a part of the records of such meeting, the proceedings had at such meeting are valid, irrespective of the manner in which the meeting is called or the place where it is held.

\section*{Section 2.7 Voting Rights.}
(a) Except as otherwise provided by law, only persons in whose names shares entitled to vote stand on the stock records of the Corporation on the record date for determining the stockholders entitled to vote at said meeting shall be entitled to vote at such meeting. Shares standing in the names of two or more persons shall be voted or represented in accordance with the determination of the majority of such persons, or, if only one of such persons is present in person or represented by proxy, such person shall have the right to vote such shares and such shares shall be deemed to be represented for the purpose of determining a quorum.
(b) Every person entitled to vote or to execute consents shall have the right to do so either in person or by an agent or agents authorized by a written proxy executed by such person or such person's duly authorized agent, which proxy shall be filed with the Secretary of the Corporation at or before the meeting at which it is to be used. Said proxy so appointed need not be a stockholder. No proxy shall be voted on after the expiration of eleven (11) months from the date of its execution, unless the person executing it specifies therein the length of time for which such proxy is to continue in force, which in no case shall exceed seven (7) years from the date of its execution. Unless and until voted, every proxy shall be revocable at the pleasure of the person who executed it or of such person's legal representatives or assigns, except in those cases where an irrevocable proxy permitted by statute has been given.
(c) Without limiting the manner in which a stockholder may authorize another person or persons to act for such stockholder as proxy pursuant to Section 2.7 (b), the following shall constitute a valid means by which a stockholder may grant such authority:
(1) A stockholder may execute a writing authorizing another person or persons to act for such stockholder as proxy. Execution may be accomplished by the stockholder or such stockholder's authorized officer, director, employee or agent signing such writing or causing his or her signature to be affixed to such writing by any reasonable means including, but not limited to, by facsimile signature or by other means of electronic transmission.
(2) A stockholder may authorize another person or persons to act for such stockholder as proxy by transmitting or authorizing the transmission of an electronic transmission to the person who will be the holder of the proxy or to a proxy solicitation firm, proxy support service organization or like agent duly authorized by the person who will be the holder of the proxy to receive such transmission, provided that any such transmission must either set forth or be submitted with information from which it can be determined that the transmission was authorized by the stockholder. Such authorization can be established by the signature of the stockholder on the proxy, either in writing or by a signature stamp, facsimile signature, other means of electronic transmission, or by a number or symbol from which the identity of the stockholder can be determined, or by any other procedure deemed appropriate by the inspectors or other persons making the determination as to due authorization.

If it is determined that such transmissions are valid, the inspectors or, if there are no inspectors, such other persons making that determination shall specify the information upon which they relied.
(d) Any copy, facsimile telecommunication or other reliable reproduction of the writing or transmission created pursuant to Section 2.7(c) may be substituted or used in lieu of the original writing or transmission for any and all purposes for which the original writing or transmission could be used, provided that such copy, facsimile telecommunication or other reproduction shall be a complete reproduction of the entire original writing or transmission.

Section 2.8 Voting Procedures and Inspectors of Elections.
(a) The Corporation shall, in advance of any meeting of stockholders, appoint one or more inspectors to act at the meeting and make a written report thereof. The Corporation may designate one or more persons as alternate inspectors to replace any inspector who fails to act. If no inspector or alternate is able to act at a meeting of stockholders, the person presiding at the meeting shall appoint one or more inspectors to act at the meeting. Each inspector, before entering upon the discharge of his or her duties, shall take and sign an oath faithfully to execute the duties of inspector with strict impartiality and according to the best of his or her ability.
(b) The inspectors shall (i) ascertain the number of shares outstanding and the voting power of each, (ii) determine the shares represented at a meeting and the validity of proxies and ballots, (iii) count all votes and ballots, (iv) determine and retain for a reasonable period a record of the disposition of any challenges made to any determination by the inspectors, and \((\mathrm{v})\) certify their determination of the number of shares represented at the meeting and their count of all votes and ballots. The inspectors may appoint or retain other persons or entities to assist the inspectors in the performance of the duties of the inspectors.
(c) The date and time of the opening and the closing of the polls for each matter upon which the stockholders will vote at a meeting shall be announced at the meeting. No ballot, proxies or votes, nor any revocations thereof or changes thereto, shall be accepted by the inspectors after the closing of the polls unless the Court of Chancery shall determine otherwise upon application by a stockholder.
(d) In determining the validity and counting of proxies and ballots, the inspectors shall be limited to an examination of the proxies, any envelopes submitted with those proxies, any information provided in accordance with Sections 211(e) or 212(c) of the Delaware General Corporation Law, or any information provided pursuant to Sections 211(a)(2)(B)(i) or (iii) thereof, ballots and the regular books and records of the Corporation, except that the inspectors may consider other reliable information for the limited purpose of reconciling proxies and ballots submitted by or on behalf of banks, brokers, their nominees or similar persons which represent more votes than the holder of a proxy is authorized by the record owner to cast or more votes than the stockholder holds of record. If the inspectors consider other reliable information for the limited purpose permitted herein, the inspectors at the time they make their certification pursuant to Section \(2.8(\mathrm{~b})(\mathrm{v})\) shall specify the precise information considered by them including the person or persons from whom they obtained the information, when the information was obtained, the means by which the information was obtained and the basis for the inspectors' belief that such information is accurate and reliable.

Section 2.9 List of Stockholders.
The officer who has charge of the stock ledger of the Corporation shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, (or, if the record date for determining the stockholders entitled to vote is less than ten (10) days before the meeting date, the list shall reflect the stockholders entitled to vote on the tenth ( \(10^{\text {th }}\) ) day before the meeting date), arranged in alphabetical order, showing the address of and the number of shares registered in the name of each stockholder. The Corporation need not include electronic mail addresses or other electronic contact information on such list. Such list shall be open to the examination of any stockholder for any purpose germane to the meeting for a period of at least ten (10) days prior to the meeting: (i) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (ii) during ordinary business hours at the principal place of business of the Corporation. In the event that the Corporation determines to make the list available on an electronic network, the Corporation may take reasonable steps to ensure that such information is available only to stockholders of the Corporation. If the meeting is to be held at a place, then the list shall be produced and kept at the time and place of the meeting during the whole time thereof, and may be inspected by any stockholder who is present. If the meeting is to be held solely by means of remote communication, then the list shall also be open to the examination of any stockholder during the whole time of the meeting on a reasonably accessible electronic network, and the information required to access such list shall be provided with the notice of the meeting.

Section 2.10 Proper Business for Stockholder Meetings
(a) At a meeting of the stockholders, only such business shall be conducted as shall have been properly brought before the meeting. To be properly brought before a meeting, business must be (1) specified in the notice of meeting
(or any supplement thereto) given by or at the direction of the Board of Directors, (2) otherwise properly brought before the meeting by or at the direction of the Board of Directors or the Chairman of the Board of Directors, or (3) otherwise properly brought before the meeting by a stockholder of the Corporation who is a stockholder of record at the time of giving the notice provided for herein, who shall be entitled to vote at such meeting and who complies with the notice procedures set forth herein.
(b) In addition to any other applicable requirements for business to be properly brought before a meeting by a stockholder, whether or not the stockholder is seeking to have a proposal included in the Corporation's proxy statement or information statement under Rule 14a-8 under the Exchange Act, the stockholder must have given timely notice thereof in writing to the Secretary of the Corporation. To be timely as to an annual meeting of stockholders (or in the case of a stockholder seeking to have a proposal included in the Corporation's proxy statement or information statement), a stockholder's notice must be delivered to the Secretary at the principal executive office of the Corporation not less than one hundred and twenty (120) calendar days prior to the first anniversary of the date on which the Corporation first mailed, or made available, as applicable, its proxy materials (or, in the absence of proxy materials, its notice of meetings) for the previous year's annual meeting. However, if the Corporation did not hold an annual meeting the previous year, or if the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year's annual meeting, then to be timely, notice by the stockholder must be delivered to the Secretary at the Corporation's principal executive offices not later than the close of business on the tenth (10th) day following the earlier of the day on which notice of the date of the meeting was mailed to stockholders or public disclosure of such date was made. To be timely as to a special meeting of stockholders, a stockholder notice must be received not later than the call of the meeting as provided for in this Article II. In no event shall any adjournment or postponement of a meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice as described above. Other than with respect to stockholder proposals relating to director nomination(s), which requirements are set forth in Section 2.10 below and Section 3.3, a stockholder's notice to the Secretary (whether for an annual meeting or a special meeting) shall set forth as to each matter the stockholder proposes to bring before the meeting: (1) a brief description of the business desired to be brought before the meeting and the reasons for conducting such business at the meeting; (2) the name and address, as they appear on the Corporation's books, and the name and address of the beneficial owner, if any, on whose behalf the proposal is made; (3) the class and number of shares of the Corporation which are owned beneficially and of record by such stockholder of record and by the beneficial owner, if any, on whose behalf the proposal is made; (4) any material interest of such stockholder of record and the beneficial owner, if any, on whose behalf the proposal is made, in such proposal, (5) as to the stockholder giving the notice and any Stockholder Associated Person (as defined below) or any member of such stockholder's immediate family sharing the same household, whether and the extent to which any hedging or other transaction or series of transactions has been entered into by or on behalf of, or any other agreement, arrangement, or understanding (including, but not limited to, any short position or any borrowing or lending of shares of stock) has been made, the effect or intent of which is to mitigate loss or increase profit to or manage the risk or benefit of stock price changes for, or to increase or decrease the voting power of, such stockholder, such Stockholder Associated Person, or family member with respect to any share of stock of the Corporation (each, a "Relevant Hedge Transaction"), and (6) as to the stockholder giving the notice and any Stockholder Associated Person or any member of such stockholder's immediate family sharing the same household, to the extent not set forth pursuant to the immediately preceding clause, (i) whether and the extent to which such stockholder, Stockholder Associated Person, or family member has direct or indirect beneficial ownership of any option, warrant, convertible security, stock appreciation right, or similar right with an exercise or conversion privilege or a settlement payment or mechanism at a price related to any class or series of shares of the Corporation, whether or not such instrument or right shall be subject to settlement in the underlying class or series of capital stock of the Corporation or otherwise, or any other direct or indirect opportunity to profit or share in any profit derived from any increase or decrease in the value of shares of the Corporation (a "Derivative Instrument"), (ii) any rights to dividends on the shares of the Corporation owned beneficially by such stockholder, Stockholder Associated Person, or family member that are separated or separable from the underlying shares of the Corporation, (iii) any proportionate interest in shares of the Corporation or Derivative Instruments held, directly or indirectly, by a general or limited partnership in which such stockholder, Stockholder Associated Person, or family member is a general partner or, directly or indirectly, beneficially owns an interest in a general partner, and (iv) any performance-related fees (other than an asset-based fee) that such stockholder, Stockholder Associated Person, or family member is entitled to, based on any increase or decrease in the value of shares of the Corporation or Derivative Instruments, if any, as of the date of such notice (which information shall be supplemented by such stockholder and beneficial owner, if any, not later than ten (10) days after the record date for the meeting to disclose such ownership as of the record date). With respect to stockholder proposals relating to director nominations pursuant to Section 3.3, in addition to the information above, the stockholder's notice shall set forth as to each person whom the stockholder proposes to nominate for election or re-election as a director, (i) the name, age, business address, and residence address of the person, (ii) the principal occupation or employment of the person,
(iii) the class and number of shares of the Corporation which are beneficially owned by the person, (iv) a statement whether such person, if elected, intends to tender a resignation effective upon such person's failure to receive the required vote for re-election at the next meeting at which such person would face re-election and upon acceptance of such resignation by the Board of Directors, in accordance with the Corporation's Corporate Governance Guidelines, and ( v ) any other information relating to the person that is required to be disclosed in solicitations for proxies for election of directors, or is otherwise required, in each case pursuant to Regulation 14A under the Exchange Act (including such person's written consent to being named in the proxy statement as a nominee and to serving as a director if elected).

For purposes of this Section 2.10, "Stockholder Associated Person" of any stockholder shall mean (i) any person controlling or controlled by, directly or indirectly, or acting in concert with, such stockholder, (ii) any beneficial owner of shares of stock of the Corporation owned of record or beneficially by such stockholder and (iii) any person controlling, controlled by or under common control with such Stockholder Associated Person.

Notwithstanding anything in the Bylaws to the contrary, no business shall be conducted at a meeting except in accordance with the procedures set forth in Section 2.1 and this Section 2.10, provided, however, that nothing in this Section 2.10 shall be deemed to preclude discussion by any stockholder of any business properly brought before a meeting in accordance with said procedure. Further, a shareholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth herein.

The Chairman of the Board of Directors or the individual designated as chairman of the meeting shall, if the facts warrant, determine and declare to the meeting that business was not properly brought before the meeting in accordance with the provisions of Section 2.1 and this Section 2.10, and if he or she should so determine, he or she shall so declare to the meeting, and any such business not properly brought before the meeting shall not be transacted.

Nothing in this Section 2.10 shall affect the right of a stockholder to request inclusion of a proposal in the Corporation's proxy statement or information statement pursuant to, and in accordance with, Rule 14a-8 under the Exchange Act.

Section 2.11 Action Without Meeting.
(a) Unless otherwise provided in the Certificate of Incorporation, any action required by statute to be taken at any annual or special meeting of stockholders of the Corporation, or any action which may be taken at any annual or special meeting of such stockholders, may be taken without a meeting, without prior notice and without a vote, if a consent or consents in writing setting forth the action so taken are signed by the holders of outstanding stock having not less than the minimum number of votes that would be necessary to authorize or take such action at a meeting at which all shares entitled to vote thereon were present and voted. To be effective, a written consent must be delivered to the Corporation by delivery to its registered office in Delaware, its principal place of business, or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. Every written consent shall bear the date of signature of each stockholder who signs the consent, and no written consent shall be effective to take the corporate action referred to therein unless, within sixty (60) days of the earliest dated consent delivered in the manner required by this Section 2.11 to the Corporation, written consents signed by a sufficient number of holders to take action are delivered to the Corporation in accordance with this Section 2.11. Prompt notice of the taking of the corporate action without a meeting by less than unanimous written consent shall be given to those stockholders who have not consented in writing.
(b) An electronic transmission consent to an action to be taken and transmitted by a stockholder or proxyholder, or by a person or persons authorized to act for a stockholder or proxyholder, shall be deemed to be written, signed and dated for the purposes of this Section 2.11, provided that any such electronic transmission sets forth or is delivered with information from which the Corporation can determine (1) that the electronic transmission was transmitted by the stockholder or proxyholder or by a person or persons authorized to act for the stockholder or proxyholder, and (2) the date on which such stockholder or proxyholder or authorized person or persons transmitted such electronic transmission. The date on which such electronic transmission is transmitted shall be deemed to be the date on which such consent was signed. No consent given by electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the Corporation by delivery to its registered office in the State of Delaware, its principal place of business or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a Corporation's registered office shall be made by hand or by certified or registered mail, return receipt requested. Notwithstanding the foregoing limitations on delivery, consents given by electronic transmission may be otherwise delivered to the principal place of business of the Corporation or to an officer or agent of the Corporation
having custody of the book in which proceedings of meetings of stockholders are recorded if to the extent and in the manner provided by resolution of the Board of Directors of the Corporation.
(c) Any copy, facsimile or other reliable reproduction of a consent in writing may be substituted or used in lieu of the original writing for any and all purposes for which the original writing could be used, provided that such copy, facsimile or other reproduction shall be a complete reproduction of the entire original writing.

\section*{ARTICLE III BOARD OF DIRECTORS}

Section 3.1 Number-Quorum.
(a) The business of the Corporation shall be managed by a Board of Directors, whose number shall be not fewer than nine (9) nor greater than thirteen (13), as the Board of Directors by resolution or the stockholders by amendment of these Bylaws may establish; provided, however, that a reduction in the authorized number of directors shall not remove any director prior to the expiration of such director's term of office.
(b) A quorum of the Board of Directors shall consist of a majority of the exact number of directors fixed from time to time in accordance with Section 3.2, but not less than one; provided, however, at any meeting, whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting. At a meeting at which a quorum is present, unless a different vote be required by law, the Certificate of Incorporation, or these Bylaws, every decision or act of a majority of the directors present made or done when duly assembled shall be valid as the act of the Board of Directors, provided that a minority of the directors, in the absence of a quorum, may adjourn from day to day but may transact no business.
(c) With the exception of the first Board of Directors, which shall be elected by the incorporators, and except as provided in Section 3.6, the directors shall be elected by a plurality vote of the votes cast and entitled to vote on the election of directors at any meeting for the election of directors at which a quorum is present.

Section 3.2 Exact Number of Directors.
The exact number of Directors of the Corporation shall be fixed from time to time, within the limits specified in this Article III, by resolution of the Board of Directors or otherwise pursuant to the provisions of Section 3.1.

Section 3.3 Director Nominating Procedure.
(a) In addition to any other applicable requirements, only persons who are nominated in accordance with the following procedures shall be eligible for election as directors. Nominations of persons for election to the Board of Directors of the Corporation may be made at a meeting of stockholders (i) pursuant to the Corporation's notice of meeting (or any supplement thereto) given by or at the direction of the Board of Directors, (ii) by or at the direction of the Board of Directors, or by any nominating committee or person appointed by the Board of Directors or (iii) by any stockholder of the Corporation who is a stockholder of record at the time of giving of notice provided for in this Section 3.3, who is entitled to vote for the election of directors at the meeting and who complies with the notice procedures set forth in this Section 3.3. The foregoing clause (iii) shall be the exclusive means for a stockholder to make nominations at a meeting of stockholders. A stockholder who complies with the notice procedures set forth in this Section 3.3 is permitted to present the nomination at the meeting of stockholders but is not entitled to have a nominee included in the Corporation's proxy statement in the absence of an applicable rule of the U.S. Securities and Exchange Commission requiring the Corporation to include a director nomination made by a stockholder in the Corporation's proxy statement or information statement.

Nominations by stockholders shall be made pursuant to timely notice in writing to the Secretary of the Corporation. To be timely as to an annual meeting, notice by the stockholder must be delivered to the Secretary at the Corporation's principal executive offices not later than one hundred and twenty (120) calendar days prior to the first anniversary of the date on which the Corporation first mailed, or made available, as applicable, its proxy materials (or, in the absence of proxy materials, its notice of meetings) for the previous year's annual meeting. However, if the Corporation did not hold an annual meeting the previous year, or if the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year's annual meeting, then to be timely, notice by the stockholder must be delivered to the Secretary at the Corporation's principal executive offices not later than the close of business on the tenth ( \(10^{\text {th }}\) ) day following the earlier of the day on which notice of the date of the meeting was mailed to stockholders or public disclosure of such date was made. To be timely as to a special meeting of stockholders at which directors are to be elected, a stockholder notice must
be received not later than the close of business on the tenth ( \(10^{\text {th }}\) ) day following the earlier of the day on which notice of the date of the meeting was mailed to stockholders or public disclosure of such date was made. In no event shall any adjournment or postponement of a meeting or the announcement thereof commence a new time period for the giving of a stockholder's notice as described above. The stockholder's notice relating to director nomination(s) shall set forth (a) as to each person whom the stockholder proposes to nominate for election or re-election as a director, the information required by Section 2.10(b); (b) as to the stockholder giving the notice, (i) the name and address, as they appear on the Corporation's books, of such stockholder and (ii) the class and number of shares of the Corporation which are beneficially owned by such stockholder and also which are owned of record by such stockholder; and (c) as to the beneficial owner, if any, on whose behalf the nomination is made, (i) the name and address of such person and (ii) the class and number of shares of the Corporation which are beneficially owned by such person. At the request of the Board, any person nominated by the Board for election as a director shall furnish to the Secretary that information required to be set forth in the stockholder's notice of nomination which pertains to the nominee. The Corporation may require any proposed nominee to furnish such other information as may reasonably be required by the Corporation to determine the eligibility and/or qualifications of such proposed nominee to serve as a director of the Corporation. The stockholder giving such notice shall indemnify the Corporation in respect of any loss arising as a result of any false or misleading information or statement submitted by the nominating stockholder in connection with the nomination, as provided by Section 112(5) of the Delaware General Corporation Law. No person shall be eligible for election as a director of the Corporation unless nominated in accordance with the procedures set forth herein. These provisions shall not apply to nomination of any persons entitled to be separately elected by holders of preferred stock.
(b) Except for the filling of vacancies, as provided for in the Certificate of Incorporation and Section 3.6, no person shall be qualified to serve as a director of the Corporation unless nominated in accordance with the procedures set forth in this Bylaw. The Chairman of the Board of Directors or the individual designated as chairman of the meeting shall, if the facts warrant, determine, and declare to the meeting that a nomination was not made in accordance with the procedures prescribed by these Bylaws, and if the chairman should so determine, that the defective nomination shall be disregarded. Notwithstanding the foregoing provisions of this Bylaw, a stockholder shall also comply with all applicable requirements of the Exchange Act and the rules and regulations thereunder with respect to the matters set forth in this Bylaw.

\section*{Section 3.4 Qualification of Directors}

The majority of directors of the Board of Directors shall not be officers or employees of the Corporation or any of its subsidiaries and shall not have held such positions at any time during the three years prior to election or selection to the Board of Directors. Whether an individual, who is an officer or employee of the Corporation or any of its subsidiaries, satisfies this qualification requirement will be determined at the time of his or her election or selection.

\section*{Section 3.5 Election and Term of Office.}

The directors shall be elected at each annual meeting of stockholders, but if, for any cause, any such annual meeting is not held, or the directors are not elected thereat, the directors may be elected as soon as convenient at any special meeting of stockholders held for that purpose in the manner provided in these Bylaws. All directors shall hold office until the next annual meeting of stockholders and until their respective successors are elected and qualified. In no case will a decrease in the number of directors shorten the term of any incumbent director.

Section 3.6 Vacancies; Resignations and Removals.
(a) As provided in the Certificate of Incorporation, except as otherwise required by law and subject to the rights of the holders of any series of stock with respect to such series of stock, unless the Board of Directors otherwise determines, vacancies on the Board of Directors from newly created directorships resulting from any increase in the authorized number of directors or any vacancies on the Board of Directors resulting from the death, resignation, retirement, disqualification, removal from office or other cause shall be filled only by a majority vote of the directors then in office, though less than a quorum, or by a sole remaining director, and not by the stockholders. Each director so elected shall hold office until the unexpired portion of the term of the director whose place shall be vacant and until such director's successor shall have been duly elected and qualified following the election at the next annual meeting of the stockholders or at any special meeting of stockholders duly called for that purpose prior to such annual meeting.
(b) Any director may resign at any time by delivering a written resignation to the Secretary or by electronic transmission, such resignation to specify whether it will be effective at a particular time, upon receipt by the Secretary or at the pleasure of the Board of Directors. If no such specification is made it shall be deemed effective at the pleasure of the Board of Directors. When one or more of the directors shall resign from the Board of Directors,
effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have the power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective. Each director so appointed shall hold office during the unexpired portion of the term of office of the resigning director or directors whose place shall be vacated and until their successors shall have been duly elected and qualified.

\section*{Section 3.7 Annual and Regular Meetings.}
(a) The annual meeting of the Board of Directors shall be held immediately after the annual stockholders' meeting and at the place where such meeting is held or at the place announced by the chairman at such meeting. No notice of an annual meeting of the Board of Directors shall be necessary, and such meeting shall be held for the purpose of electing officers and transacting such other business as may lawfully come before it.
(b) Regular meetings of the Board of Directors may be held at such time and at such place as the Board of Directors may from time to time fix by resolution.

\section*{Section 3.8 Special Meetings.}

A special meeting of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chief Executive Officer or other officer acting for the Chief Executive Officer, or by the Chairman of the Board of Directors or, if there is no Chairman of the Board of Directors, by three directors. Any and all business may be transacted at a special meeting. Each call for a special meeting shall be in writing, signed by the person or persons making the same, addressed and delivered to the Secretary, and shall state the time and place of such meeting.

Section 3.9 Notice of Regular and Special Meetings of the Directors.
No notice shall be required to be given of any regular meeting of the Board of Directors, but each director shall take notice thereof. Notice of each special meeting of the Board of Directors shall be given to each of the directors by: (i) mailing to each of them a copy of such notice at least five days; or (ii) delivering personally or by telephone, including voice messaging system or other system or technology designed to record and communicate messages, telegraph, facsimile, electronic mail, or other electronic means such notice at least 48 hours, prior to the time affixed for such meeting to the address of such director as shown on the books of the Corporation. If such director's address does not appear on the books of the Corporation, then such notice shall be addressed to such director at the principal office of the Corporation.

\section*{Section 3.10 Waiver of Notice.}

When all the directors of the Corporation are present at any meeting of the Board of Directors, however called or noticed, and sign a written consent thereto on the record of such meeting, or if the majority of the directors are present, and if those not present sign in writing a waiver of notice of such meeting, whether prior to or after the holding of such meeting, which waiver shall be filed with the Secretary of the Corporation, the transactions of such meeting are as valid as if had at a meeting regularly called and noticed.

Section 3.11 Action by Unanimous Consent of Directors.
Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or of such committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or electronic transmission or transmissions shall be filed with the corporate records or made a part of the minutes of the meeting of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 3.12 Telephonic Participation in Meetings.
Any member of the Board of Directors, or of any committee thereof, may participate in a meeting through use of conference telephone or similar communications equipment, so long as all members participating in such meeting can hear one another. Participation in a meeting pursuant to this Section 3.12 shall constitute presence in person at such meeting.

Section 3.13 Committees.
The Board of Directors may designate one or more committees, each committee to consist of one or more of the directors of the Corporation. The Board of Directors may designate one or more directors as alternate members of
any committee, who may replace any absent or disqualified member at any meeting of the committee. In the absence or disqualification of a member of the committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he, she or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in place of any such absent or disqualified member. Any such committee, to the extent permitted by law and to the extent provided in the resolution of the Board of Directors, shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the Corporation, and may authorize the seal of the Corporation to be affixed to all papers which may require it.

\section*{ARTICLE IV POWERS OF DIRECTORS}

Section 4.1 The powers of the Corporation shall be exercised, its business conducted and its property controlled by or under the direction of the Board of Directors. The directors shall have power to, among other things:
(a) Call special meetings of the stockholders when they deem it necessary, and they shall call a meeting at any time upon the written request of stockholders holding one-third of all the voting shares;
(b) Appoint and remove at pleasure all officers and agents of the Corporation, prescribe their duties, fix their compensation, and require from them as necessary security for faithful service;
(c) Create and appoint committees, offices, officers, and agents of the Corporation, and to prescribe and from time to time change their duties and compensation, but no committee shall be created and no member appointed thereto except upon approval of a majority of the whole Board of Directors; and
(d) Conduct, manage, and control the affairs and business of the Corporation and to make rules and regulations not inconsistent with the laws of the State of Delaware, or the Bylaws of the Corporation, for the guidance of the officers and management of the affairs of the Corporation.

\section*{ARTICLE V DUTIES OF DIRECTORS}

Section 5.1 It shall be the duty of the directors to:
(a) Cause to be kept a complete record of all their minutes and acts, and of the proceedings of the stockholders, and present a full statement at the regular annual meeting of the stockholders, showing in detail the assets and liabilities of the Corporation, and generally the condition of its affairs. A similar statement shall be presented at any other meeting of the stockholders when theretofore required by persons holding at least one-half of the voting shares of the Corporation;
(b) Declare dividends as appropriate and at their discretion;
(c) Oversee the actions of all officers and agents of the Corporation, see that their duties are properly performed; and
(d) Cause to be issued to the stockholders, in proportion to their several interests, certificates of stock.

\section*{ARTICLE VI OFFICERS}

Section 6.1 The officers of the Corporation shall include a Chairman of the Board of Directors, a Chief Executive Officer, who may be designated Chairman of the Board of Directors, a President, a Secretary, a Treasurer, a Controller, and may include one or more Executive Vice Presidents, Senior Vice Presidents, Vice Presidents, Assistant Vice Presidents, Assistant Secretaries, Assistant Treasurers, and such other officers and agents with such powers and duties as the Board of Directors or the Chief Executive Officer shall deem necessary.

All such officers shall be elected by, and hold office at the pleasure of, the Board of Directors, provided that the Chief Executive Officer shall have authority to dismiss any other officer. Any director shall be eligible to be the Chairman of the Board of Directors and any two or more of such offices may be held by the same person, except that the Chief Executive Officer or President may not also hold the office of Secretary. Any officer may exercise any of the powers of any other officer in the manner specified in these Bylaws, as specified from time to time by the Board of Directors, and/or as specified from time to time by the Chief Executive Officer or senior officer acting in his or her absence or incapacity, and any such acting officer shall perform such duties as may be assigned to him or her.

\section*{ARTICLE VII \\ FEES AND COMPENSATION}

Section 7.1 Directors and members of committees, if any, shall be reimbursed for their expenses, and shall be compensated for their services as directors or committee members, as applicable, in such amounts as the Board of Directors may fix or determine by resolution. Nothing herein contained shall be construed to preclude any director or committee member from serving the Corporation in any other capacity as an officer, agent, employee, or otherwise, and receiving compensation therefor.

\section*{ARTICLE VIII INDEMNIFICATION}

Section 8.1 Right to Indemnification.
Each person who was or is a party or is threatened to be made a party to or is involved (as a party, witness, or otherwise), in any threatened, pending, or completed action, suit, or proceeding, formal or informal, whether brought in the name of the Corporation or otherwise and whether of a civil, criminal, administrative, or investigative (hereinafter a "Proceeding"), by reason of the fact that he or she, or a person of whom he or she is the legal representative, is or was a director, officer, employee, or agent of the Corporation or is or was serving at the request of the Corporation as a director, officer, employee, or agent of another Corporation or of a partnership, joint venture, trust, or other enterprise, including service with respect to employee benefit plans, whether the basis of the Proceeding is alleged action or inaction in an official capacity as a director, officer, employee, or agent or in any other capacity while serving as a director, officer, employee, or agent (all such individuals being collectively referred to as an "Agent"), shall, subject to the terms of any agreement between the Corporation and such person, be indemnified and held harmless by the Corporation to the fullest extent authorized by the Delaware General Corporation Law, as the same exists or may hereafter be amended or interpreted (but, in the case of any such amendment or interpretation, only to the extent that such amendment or interpretation permits the Corporation to provide broader indemnification rights than were permitted prior thereto), against all charges, costs, expenses, liabilities, and losses (including attorneys' fees, judgments, fines, ERISA excise taxes or penalties, and amounts paid or to be paid in settlement, and any interest, assessments, or other charges imposed thereon, and any federal, state, local, or foreign taxes imposed on any Agent as a result of the actual or deemed receipt of any payments under this Article VIII) reasonably incurred or suffered by such person in connection with investigating, defending, being a witness in, or participating in (including on appeal), or preparing for any of the foregoing in, any Proceeding (hereinafter "Expenses") and the such indemnification shall continue as to a person who has ceased to be an Agent and shall inure to the benefit of the heirs, executors, and administrators of such a person; provided, however, that the Corporation shall indemnify any Agent seeking indemnification in connection with a Proceeding (or part thereof) initiated by such person only if the Proceeding (or part thereof) was authorized by the Board of Directors.

\section*{Section 8.2 Authority to Advance Expenses.}

Expenses incurred by an officer or director (acting in his or her capacity as such) in defending a Proceeding shall be paid by the Corporation in advance of the final disposition of such Proceeding, provided, however, that if required by the Delaware General Corporation Law, as amended, such Expenses shall be advanced only upon delivery to the Corporation of an undertaking by or on behalf of such director or officer to repay such amount if it shall ultimately be determined that he or she is not entitled to be indemnified by the Corporation as authorized in this Article VIII or otherwise. Expenses incurred by other Agents of the Corporation (or by the directors or officers not acting in their capacity as such, including service with respect to employee benefit plans) may be advanced upon such terms and conditions as the Board of Directors deems appropriate. Any obligation to reimburse the Corporation for Expense advances shall be unsecured and no interest shall be charged thereon.

Section 8.3 Right of Claimant to Bring Suit.
If a claim under Section 8.1 or 8.2 is not paid in full by the Corporation within thirty (30) days after a written claim has been received by the Corporation, the claimant may at any time thereafter bring suit against the Corporation to recover the unpaid amount of the claim and, if successful in whole or in part, the claimant shall be entitled to be paid also the expense (including attorneys' fees) of prosecuting such claim. It shall be a defense to any such action (other than an action brought to enforce a claim for expenses incurred in defending a Proceeding in advance of its final disposition where the required undertaking has been tendered to the Corporation) that the claimant has not met the standards of conduct that make it permissible under the Delaware General Corporation Law for the Corporation to indemnify the claimant for the amount claimed. The burden of proving such a defense shall be on the Corporation. Neither the failure of the Corporation (including its Board of Directors, independent legal counsel, or its stockholders)
to have made a determination prior to the commencement of such action that indemnification of the claimant is proper under the circumstances because he or she has met the applicable standard of conduct set forth in the Delaware General Corporation Law, nor an actual determination by the Corporation (including its Board of Directors, independent legal counsel, or its stockholders) that the claimant had not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct.

\section*{Section 8.4 Successful Defense.}

Notwithstanding any other provision of this Article, to the extent that a director or officer has been successful on the merits or otherwise (including the dismissal of an action without prejudice or the settlement of a proceeding or action without admission of liability) in defense of any proceeding referred to in Section 8.1 or in defense of any claim, issue or matter therein, he or she shall be indemnified against expenses (including attorneys' fees) actually and reasonably incurred in connection therewith.

Section 8.5 Non-Exclusivity of Rights.
The rights conferred on any person by this Article VIII shall not be exclusive of any other rights that such person may have or hereafter acquire under any statute, provision of the Certificate of Incorporation, agreement, vote of stockholders or disinterested directors, or otherwise, both as to action in an official capacity and as to action in another capacity while holding such office. To the extent that any provision of the Certificate of Incorporation, agreement, or vote of the stockholders or disinterested directors is inconsistent with these Bylaws, the provision, agreement, or vote shall take precedence.

Section 8.6 Insurance.
The Corporation may purchase and maintain insurance, at its expense, to protect itself and any Agent or another Corporation, partnership, joint venture, trust or other enterprise against any Expense, whether or not the Corporation would have the power to indemnify such person or entity against such Expense under applicable law or the provisions of this Article VIII.

\section*{Section 8.7 Expenses as a Witness.}

To the extent that any Agent of the Corporation is by reason of such position, or a position with another entity at the request of the Corporation, a witness in any action, suit, or proceeding, he or she shall be indemnified against all costs and expenses actually and reasonably incurred by him or her on his or her behalf in connection therewith.

\section*{Section 8.8 Indemnity Agreements.}

The Corporation may enter into agreements with any Agent of the Corporation providing for indemnification to the fullest extent permissible under the Delaware General Corporation Law and the Corporation's Certificate of Incorporation.

Section 8.9 Enforcement of Rights.
Without the necessity of entering into an express contract, all rights provided under this Article VIII shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the Corporation and such Agent. Any rights granted by this Article VIII to an Agent shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction.

\section*{Section 8.10 Effect of Amendment.}

Any amendment, repeal, or modification of this Article VIII that adversely affects any rights provided in this Article VIII to an Agent shall only be effective upon the prior written consent of such Agent.

Section 8.11 Subrogation.
In the event of payment under this Article VIII, the Corporation shall be subrogated to the extent of such payment to all of the rights of recovery of the Agent, who shall execute all papers required and shall do everything that may be necessary to secure such rights, including the execution of such documents necessary to enable the Corporation effectively to bring suit to enforce such rights.

Section 8.12 No Duplication of Payments.
The Corporation shall not be liable under this Article to make any payment in connection with any claim made against the Agent to the extent the Agent has otherwise actually received payment (under any insurance policy, agreement, vote, or otherwise) of the amounts otherwise indemnifiable hereunder.

\section*{Section 8.13 Saving Clause.}

If this Article VIII or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the Corporation shall nevertheless indemnify each Agent to the fullest extent not prohibited by any applicable portion of this Article VIII that shall not have been invalidated, or by any other applicable law.

\section*{ARTICLE IX CHAIRMAN OF THE BOARD}

Section 9.1 If there shall be a Chairman of the Board of Directors, such Chairman shall, when present, preside at all meetings of the stockholders and the Board of Directors, and perform such other duties as the Bylaws or the Board of Directors shall designate from time to time.

\section*{ARTICLE X \\ CHIEF EXECUTIVE OFFICER; OTHER EXECUTIVE OFFICERS}

Section 10.1 The Board of Directors shall, at their first regular meeting, elect such officers as are required by Article VI and such additional officers authorized by Article VI as the Board of Directors, in its discretion, may choose to elect. If at any time the Chief Executive Officer shall be unable to act, the President (if there shall be one who is not also the Chief Executive Officer) shall act in the Chief Executive Officer's place and perform the Chief Executive Officer's duties; if the President or next most senior officer is unable to perform such duties, then the Vice Presidents, in such sequence as the Board of Directors may specify, shall act. If all the foregoing shall be unable to act, the senior officer among them shall appoint some other person in whom shall be vested, for the time being, all the duties and functions of Chief Executive Officer, to act until the Board of Directors can be convened and elect appropriate officers. The Chief Executive Officer (or person acting as such) shall:
(a) Preside (if there shall be no Chairman of the Board of Directors or in such Chairman's absence) over all meetings of the stockholders and directors;
(b) Sign on behalf of the Corporation contracts and other instruments in writing within the scope of his or her authority or if, when, and as directed to do so by the Board of Directors, but nothing herein shall limit the power of the Board of Directors to authorize such contracts and other instruments in writing to be signed by any other officer or person or limit the power of the Chief Executive Officer to delegate his or her authority in any such matter to another officer or other officers of the Corporation. The Chief Executive Officer or any other officer specified by the Board of Directors may sign certificates of stock as provided in Article XIII;
(c) Delegate duties and responsibilities to any other officers and/or employees of the Corporation in any manner not prohibited by these Bylaws or by the Board of Directors, and change such duties and responsibilities so delegated from time to time at will;
(d) Call the directors together when he or she deems it necessary, and have, subject to the advice of the directors, direction of the affairs of the Corporation; and
(e) Generally discharge such other duties as may be required of the Chief Executive Officer by the Bylaws of the Corporation.

\section*{ARTICLE XI SECRETARY}

Section 11.1 The Board of Directors shall elect a Secretary.
(a) It shall be the duty of the Secretary to attend all meetings of the stockholders and of the Board of Directors and any committee thereof, and to keep a record of proceedings of the Board of Directors and of the stockholders, and to keep the corporate seal of the Corporation. The Secretary shall be responsible for maintaining proper records showing the number of shares of stock of all classes and series issued and transferred by any stockholder, and the dates of such issuance and transfer;
(b) Whenever it is provided in these Bylaws that notice shall be given either of regular or special meetings of the stockholders, regular or special meetings of the directors, or otherwise, such notice shall be given by the Secretary or by the Chief Executive Officer or by any person designated by either of them, or by any authorized person who shall have signed the call for such meeting. Any notice which the Secretary may give or serve, or act required to be done by the Secretary, may with like effect be given or served or done by or under the direction of an Assistant Secretary;
(c) The Secretary shall discharge such other duties as pertain to his or her office or which may be prescribed by the Board of Directors from time to time.
(d) The President may direct any Assistant Secretary to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

\section*{ARTICLE XII TREASURER}

Section 12.1
(a) The Treasurer shall keep or cause to be kept the books of account of the Corporation in a thorough and proper manner, and shall render statements of the financial affairs of the Corporation in such form and as often as required by the Board of Directors or the President.
(b) The Treasurer shall, subject to the order of the Board of Directors, receive and keep all funds and securities of the Corporation and pay any funds of the Corporation out only on checks or otherwise, as directed by the Board of Directors; provided, however, that the Board of Directors may provide for a depository of the funds of the Corporation, and may by resolution prescribe the manner in which said funds shall be drawn from said depository.
(c) The Treasurer shall perform all other duties commonly incident to his or her office and shall perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.
(d) The President may direct any Assistant Treasurer to assume and perform the duties of the Treasurer in the absence or disability of the Treasurer, and each Assistant Treasurer shall perform such other duties and have such other powers as the Board of Directors or the President shall designate from time to time.

\section*{ARTICLE XIII SHARES OF STOCK}

Section 13.1 Form and Execution of Certificates.
The shares of the Corporation shall be represented by certificates, provided that the Board of Directors may provide by resolution or resolutions that some or all of any or all classes or series of its stock shall be uncertificated shares. Any such resolution shall not apply to shares represented by a certificate until such certificate is surrendered to the Corporation. Certificates for the shares of stock of the Corporation shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the Corporation shall be entitled to have a certificate signed by, or in the name of the Corporation by any two duly empowered officers designated from time to time by the Board of Directors, or, in the absence of such designation, by the Chairman of the Board of Directors (if there be such an officer appointed), or by the President or any Vice President and by the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by such holder in the Corporation. Any or all of the signatures on the certificate may be a facsimile. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he or she were such officer, transfer agent, or registrar at the date of issue. If the Corporation shall be authorized to issue more than one class of stock or more than one series of any class, the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights shall be set forth in full or summarized on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, provided that, except as otherwise provided in Section 202 of the Delaware General Corporation Law, in lieu of the foregoing requirements, there may be set forth on the face or back of the certificate which the Corporation shall issue to represent such class or series of stock, a statement that the Corporation will furnish without charge to each stockholder who so requests the powers, designations, preferences and relative, participating, optional or other special rights of each class of stock or series thereof and the qualifications, limitations or restrictions of such preferences and/or rights.

\section*{Section 13.2 Lost Certificates.}

The Board of Directors may direct a new certificate or certificates (or uncertificated shares in lieu of a new certificate) to be issued in place of any certificate or certificates theretofore issued by the Corporation alleged to have been lost or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost or destroyed. When authorizing such issue of a new certificate or certificates (or uncertificated shares in lieu of a new
certificate), the Board of Directors may, in its discretion and as a condition precedent to the issuance thereof, require the owner of such lost or destroyed certificate or certificates, or such owner's legal representative, to indemnify the Corporation in such manner as it shall require and/or to give the Corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the Corporation with respect to the certificate alleged to have been lost or destroyed.

\section*{Section 13.3 Transfers.}

Transfers of record of shares of stock of the Corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, who shall furnish proper evidence of authority to transfer, and in the case of stock represented by a certificate, upon the surrender of a certificate or certificates for a like number of shares, properly endorsed.

\section*{Section 13.4 Fixing Record Dates.}
(a) In order that the Corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall not be more than 60 nor less than 10 days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or, if notice is waived, at the close of business on the day next preceding the date on which the meeting is held. A determination of stockholders of record entitled notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.
(b) In order that the Corporation may determine the stockholders entitled to consent to corporate action in writing or by electronic transmission without a meeting, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which date shall not be more than 10 days after the date upon which the resolution fixing the record date is adopted by the Board of Directors. If no record date has been fixed by the Board of Directors, the record date for determining stockholders entitled to consent to corporate action in writing or by electronic transmission without a meeting, when no prior action by the Board of Directors is required by the Delaware General Corporation Law, shall be the first date on which a signed written consent or electronic transmission setting forth the action taken or proposed to be taken is delivered to the Corporation by delivery to its registered office in Delaware, its principal place of business, or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded; provided that any such electronic transmission shall satisfy the requirements of Section 2.11(b) and, unless the Board of Directors otherwise provides by resolution, no such consent by electronic transmission shall be deemed to have been delivered until such consent is reproduced in paper form and until such paper form shall be delivered to the Corporation by delivery to its registered office in Delaware, its principal place of business or an officer or agent of the Corporation having custody of the book in which proceedings of meetings of stockholders are recorded. Delivery made to a Corporation's registered office shall be by hand or by certified or registered mail, return receipt requested. If no record date has been fixed by the Board of Directors and prior action by the Board of Directors is required by law, the record date for determining stockholders entitled to consent to corporate action in writing or by electronic transmission without a meeting shall be at the close of business on the day on which the Board of Directors adopts the resolution taking such prior action.
(c) In order that the Corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than 60 days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

\section*{Section 13.5 Registered Stockholders.}

The Corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person, whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

\section*{ARTICLE XIV OTHER SECURITIES OF THE CORPORATION}

Section 14.1 The Board of Directors shall have power to incur indebtedness, and the terms and amount thereof shall \(\overline{b e}\) entered in the minutes. The Board of Directors shall have the power to secure said indebtedness, or any obligation or obligations of the Corporation, by pledge, mortgage, deed of trust, or other security given upon any property owned by it or in which it has any interest.

\section*{ARTICLE XV NOTICES}

Section 15.1 Whenever, under any provisions of these Bylaws, notice is required to be given to any stockholder, the same shall be given either (1) in writing, timely and duly deposited in the United States Mail, postage prepaid, and addressed to the stockholder's last known post office address as shown by the stock record of the Corporation or its transfer agent, or (2) by a means of electronic transmission that satisfies the requirements of Section 2.4(d), and has been consented to by the stockholder to whom the notice is given. Any notice required to be given to any director may be given by either of the methods hereinabove stated, except that such notice other than one which is delivered personally, shall be sent to such address or (in the case of electronic communication) such e-mail address, facsimile telephone number or other form of electronic address as such director shall have filed in writing or by electronic communication with the Secretary of the Corporation, or, in the absence of such filing, to the last known post office address of such director. If no address of a stockholder or director be known, such notice may be sent to the principal executive office of the Corporation. An affidavit of mailing, executed by a duly authorized and competent employee of the Corporation or its transfer agent appointed with respect to the class of stock affected, specifying the name and address or the names and addresses of the stockholder or stockholders, director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall be conclusive evidence of the statements therein contained. All notices given by mail, as above provided, shall be deemed to have been given as at the time of mailing and all notices given by means of electronic transmission shall be deemed to have been given as at the sending time recorded by the electronic transmission equipment operator transmitting the same. It shall not be necessary that the same method of giving notice be employed in respect of all directors or stockholders, as applicable, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others. The period or limitation of time within which any stockholder may exercise any option or right, or enjoy any privilege or benefit, or be required to act, or within which any director may exercise any power or right, or enjoy any privilege, pursuant to any notice sent to such stockholder in the manner above provided, shall not be affected or extended in any manner by the failure of such a stockholder or such director to receive such notice. Whenever any notice is required to be given under the provisions of the statutes or of the Certificate of Incorporation, or of these Bylaws, a waiver thereof in writing signed by the person or persons entitled to said notice, or a waiver by electronic transmission by the person entitled to notice, whether before or after the time stated therein, shall be deemed equivalent thereto. Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the Corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the Corporation is such as to require the filing of a certificate under any provision of the Delaware General Corporation Law, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

\section*{ARTICLE XVI REGISTRAR AND/OR TRANSFER AGENT}

Section 16.1 The Board of Directors may designate and appoint one or more registrars and/or transfer agents for the registration of the stock of the Corporation, and make such rules and regulations for the registrations of stock at the office of such registrars and/or transfer agents as may to the Board of Directors seem desirable. The Corporation may act as its own transfer agent, at the direction of the Board of Directors. The Board of Directors may, in its discretion, fix a transfer fee for transfer of stock certificates.

\section*{ARTICLE XVII}

\section*{MISCELLANEOUS}

Section 17.1 Meetings. Notice. When Conclusive.
An entry made in the minutes of the directors or stockholders, pursuant to resolution or recital, to the effect that the notice of such meeting required by these Bylaws to be given has been given, shall be conclusive upon the Corporation, its directors, stockholders, and all other persons that such notice has been duly given in proper form and substance to the proper persons and for the requisite length of time.

\section*{ARTICLE XVIII \\ SEAL}

Section 18.1 The corporate seal shall consist of a die bearing the name of the Corporation and the state and date of its Incorporation. The Board of Directors shall provide a suitable seal containing the name of the Corporation, the year of its creation, and other appropriate words, and may alter the same at pleasure. Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

\section*{ARTICLE XIX \\ AMENDMENTS TO BYLAWS}

Section 19.1 Power of Stockholders.
Except as otherwise provided in Section 8.9, these Bylaws may be repealed, altered or amended or new Bylaws adopted by written consent of stockholders in the manner authorized by Section 2.11, or at any meeting of the stockholders, either annual or special, by the affirmative vote of a majority of the stock entitled to vote at such meeting, unless a larger vote is required by these Bylaws or the Certificate of Incorporation.

\section*{Section 19.2 Power of Directors}

Except as otherwise provided in Section 8.9, the Board of Directors shall also have the authority to repeal, alter or amend these Bylaws or adopt new Bylaws by unanimous written consent or at any annual, regular, or special meeting by the affirmative vote of a majority of the whole number of directors, subject to the power of the stockholders to change or repeal such Bylaws.

\section*{CERTIFICATE OF SECRETARY}

The undersigned, Secretary of Southwest Gas Holdings, Inc., a Delaware corporation, hereby certifies that the foregoing is a full, true and correct copy of the Bylaws of said corporation, with all amendments to date of this Certificate.

WITNESS the signature of the undersigned this \(\qquad\) day of \(\qquad\) , 2019

\author{
Karen S. Haller \\ Executive Vice President / \\ Chief Legal and Administrative Officer and Corporate Secretary
}
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CHAPTER 24
Cost of Capital

\section*{SOUTHWEST GAS CORPORATION \\ NORTHERN CALIFORNIA COST OF CAPITAL CHAPTER 24}

\section*{Summary}

Chapter 24 contains the financial supporting schedules for the computation of Southwest Gas Corporation's ("Southwest Gas" or the "Company") weighted average cost of capital at December 31, 2018, for the estimated year 2019, for the estimated average year 2020, and for the estimated average test year 2021. The weighted average cost of capital for each of those periods for Southwest Gas Corporation's Northern California jurisdiction is as follows:

\author{
Actual December 31, 2018 7.45\% \\ Estimated December 31, \(2019 \quad 7.46 \%\) \\ Estimated Average Year 2020 7.51\% \\ Estimated Average Test Year 2021 7.76\%
}

\section*{Methodology}

Capital Structure - For the 2018 period, the capital structure displayed is the current actual capital structure of 50.50 percent long-term debt and 49.50 percent common equity. For the 2019 and 2020 periods, the forecasted capital structures displayed are 49.33 percent long-term debt, 50.67 percent common equity and 48.17 percent long-term debt, 51.83 percent common equity, respectively. For the test year 2021, Southwest Gas is proposing a capital structure of 47.0 percent long-term debt and 53.0 percent common equity.

Embedded Cost of Long-Term Debt - The embedded cost of long-term debt is calculated by computing the weighted cost of the individual debt instruments. The effective cost rates of debentures, notes, and medium-term notes are calculated through the use of the yield-to-maturity (YTM) or effective interest rate method. The Company's remaining notes, tax exempt and variable rate debt is computed by dividing total annual interest, fees and amortization expense by net average proceeds outstanding.

For the Northern California jurisdiction, test year 2021, the effective cost of the Big Bear, California, and the Clark County, Nevada IDRBs are excluded, as they are designated to finance gas distribution facilities in Big Bear, California and Clark County, Nevada, respectively.

For the estimated December 31, 2019, estimated average year of 2020, and the estimated average test year of 2021, the projected cost of new debt and variable rate debt was based on the IHS Markit July 2019 interest rate forecast.

The effective cost of long-term debt for the Company's Northern California jurisdiction is as follows:

Actual December 31, \(2018 \quad 4.85 \%\)
Estimated December 31, 2019 4.75\%
Average Estimated Year 2020 4.73\%
Average Estimated Test Year 2021 4.67\%

Estimated Cost of Common Equity - The Company is requesting a 10.50 percent return on common equity (ROE). Company witness, Robert B. Hevert, considered the results of several analytical approaches using a proxy group of six natural gas distribution companies in determining the Company's requested ROE. The approaches used to develop the ROE recommendation included, the Constant Growth form of the Discounted Cash Flow ("DCF") model, the traditional and "Empirical" forms of the Capital Asset Pricing Model ("CAPM"), and the Bond Yield Plus Risk Premium approach. In addition to the methodologies used, consideration was given to a range of factors, both quantitative and qualitative, in arriving at an ROE recommendation for Southwest Gas Corporation.

The Company's witness, Theodore K. Wood, presents the development of the overall weighted cost of capital, including the appropriate capital structure, and the embedded cost of long-term debt. The estimated cost of common equity is provided in the direct testimony of Company witness Robert B. Hevert.

\title{
CHAPTER 24A \\ Cost of Debt/ \\ Proposed Capital Structure
}

\section*{Company Witness: \\ Theodore K. Wood}

\section*{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA CURRENT AND PROJECTED COST OF CAPITAL}
\begin{tabular}{|c|c|c|c|c|c|}
\hline Line No. & Description & \begin{tabular}{l}
Capital \\
Structure[1]
\end{tabular} & Capital Cost & Weighted Cost of Capital & Line No. \\
\hline & (a) & (b) & (c) & (d) & \\
\hline 1 & December 31, 2018 & & & & 1 \\
\hline 2 & Long-Term Debt & 50.50\% & 4.85\% [2] & 2.45\% & 2 \\
\hline 3 & Common Equity & 49.50\% & 10.10\% [3] & 5.00\% & 4 \\
\hline 4 & Total & 100.00\% & & 7.45\% & 5 \\
\hline 5 & December 31, 2019 & & & & 6 \\
\hline 6 & Long-Term Debt & 49.33\% & 4.75\% [4] & 2.34\% & 7 \\
\hline 7 & Common Equity & 50.67\% & 10.10\% [3] & 5.12\% & 9 \\
\hline 8 & Total & 100.00\% & & 7.46\% & 10 \\
\hline 9 & 2020 Average Year & & & & 11 \\
\hline 10 & Long-Term Debt & 48.17\% & 4.73\% [5] & 2.28\% & 12 \\
\hline 11 & Common Equity & 51.83\% & 10.10\% [3] & 5.23\% & 14 \\
\hline 12 & Total & 100.00\% & & 7.51\% & 15 \\
\hline 13 & 2021 Average Test Year & & & & 16 \\
\hline 14 & Long-Term Debt & 47.00\% & 4.67\% [6] & 2.19\% & 17 \\
\hline 15 & Common Equity & 53.00\% & 10.50\% [7] & 5.57\% & 19 \\
\hline 16 & Total & 100.00\% & & 7.76\% & 20 \\
\hline
\end{tabular}
[1] Actual capital structure 2018, projected for 2019 and 2020, and proposed 2021 ratemaking capital structure.
[2] Tab A, Schedule 2, Sheet 1 of 3, Line No. 17, Column (c).
[3] Return on common equity established in Decision No. 12-12-024
[4] Tab A, Schedule 3, Sheet 1 of 3, Line No. 18, Column (c).
[5] Tab A, Schedule 4, Sheet 1 of 3, Line No. 20, Column (c).
[6] Tab A, Schedule 5, Sheet 1 of 3, Line No. 20, Column (c).
[7] Tab B, return on common equity recommended by Company witness Robert B. Hevert.

\section*{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA \\ EMBEDDED COST OF LONG-TERM DEBT AT DECEMBER 31, 2018}

Line No.


Net Ca
(b)
-
(c)
(d)
1
2
3
4
5
6
7
8
9
10
11
12
13
14
\begin{tabular}{l} 
Fixed Rate \\
Debentures \\
4.45\% Notes, Due 2020 \\
3.875\% Notes, Due 2022 \\
8.0\% Debenture, Due 2026 \\
3.70\% Notes, Due 2028 \\
6.1\% Notes, Due 2041 \\
4.875\% Notes, Due 2043 \\
3.80\% Notes, Due 2046 \\
Total Debentures \\
Medium Term Notes \\
7.78\% Series A, Due 2022 \\
7.92\% Series A, Due 2027 \\
6.76\% Series A, Due 2027 \\
Total Medium-Term Notes \\
Unamortized Loss on Reacquired Debt \\
Total Fixed Rate Debt \\
\\
Variable Rate \\
\hline Term Facility \\
Total Variable Rate Debt \\
Total Fixed and Variable Rate Debt
\end{tabular}
\begin{tabular}{rr}
\(\$\) & \(122,380,385\) \\
\(242,130,558\) \\
\(73,493,905\) \\
\(296,867,439\) \\
\(124,852,741\) \\
\(247,449,809\) \\
& \(295,873,290\) \\
\hline\(\$ \quad 1,403,048,127\) \\
\hline
\end{tabular}
\begin{tabular}{rlrl} 
& & & \\
\(5.65 \%\) & \(\$\) & \(6,920,413\) & 1 \\
\(4.99 \%\) & & \(12,089,373\) & 2 \\
\(8.59 \%\) & & \(6,310,407\) & 3 \\
\(3.83 \%\) & & \(11,377,896\) & 4 \\
\(6.11 \%\) & & \(7,628,240\) & 5 \\
\(4.95 \%\) & & \(12,241,150\) & 6 \\
\(3.88 \%\) & & \(11,484,044\) & 7 \\
\cline { 3 - 4 } \(4.85 \%\) & & \(68,051,522\) & 8 \\
\hline
\end{tabular}
\begin{tabular}{llllll}
\hline Southern California Tax Exempt \\
\hline 1993 Big Bear IDRB, Series A & \(\$ \quad 49,573,692\) & \(2.76 \%\) & \(\$ \quad 1,366,374\)
\end{tabular}

\section*{Clark County Tax Exempt}

\section*{Variable Rate}
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 2003 Clark County IDRB, Series A & \$ & 48,321,642 & 3.00\% & \$ & 1,450,240 & 19 \\
\hline 2008 Clark County IDRB, Series A & & 46,726,209 & 2.95\% & & 1,380,726 & 20 \\
\hline 2009 Clark County IDRB, Series A & & 49,451,552 & 2.63\% & & 1,298,339 & 21 \\
\hline Total Clark County Variable Rate Debt & \$ & 144,499,403 & 2.86\% & \$ & 4,129,304 & 22 \\
\hline \multicolumn{7}{|l|}{Clark County Tax Exempt} \\
\hline 1999 Clark County IDRB, Series A & \$ & \((372,810)\) & -5.02\% & \$ & 18,718 & 23 \\
\hline 1999 Clark County IDRB, Series C & & \((508,181)\) & -5.02\% & & 25,515 & 24 \\
\hline 1999 Clark County IDRB, Series D & & \((294,143)\) & -5.02\% & & 14,769 & 25 \\
\hline 2003 Clark County IDRB, Series C & & \((943,576)\) & -5.22\% & & 49,230 & 26 \\
\hline 2003 Clark County IDRB, Series D & & \((1,126,363)\) & -5.22\% & & 58,767 & 27 \\
\hline 2003 Clark County IDRB, Series E & & \((148,779)\) & -5.22\% & & 7,762 & 28 \\
\hline 2004 Clark County IDRB, Series A & & \((929,264)\) & -6.45\% & & 59,952 & 29 \\
\hline 2004 Clark County IDRB, Series B & & 3,352,304 & -6.70\% & & \((224,736)\) & 30 \\
\hline 2005 Clark County IDRB, Series A & & \((999,085)\) & -5.97\% & & 59,647 & 31 \\
\hline 2006 Clark County IDRB, Series A & & 4,322,221 & -5.66\% & & \((244,654)\) & 32 \\
\hline Total Clark County Tax Exempt & \$ & 2,352,324 & \(\underline{-7.44 \%}\) & \$ & \((175,029)\) & 33 \\
\hline Total Fixed and Variable Rate Debt & \$ & 196,425,420 & 2.71\% & \$ & 5,320,649 & 34 \\
\hline
\end{tabular}
[1] Tab A, Schedule 2, sheet 2 of 3, column (f).
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{3}{*}{Line No.} & \multirow[b]{3}{*}{Description} & \multicolumn{6}{|c|}{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA LONG-TERM DEBT AT DECEMBER 31, 2018} & & & \multicolumn{2}{|l|}{\multirow[b]{3}{*}{Net Proceeds at Dec. 31, 2018}} & \multirow[b]{3}{*}{Line No.} \\
\hline & & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Gross Principal at Dec. 31, 2018}} & \multicolumn{6}{|c|}{Unamortized Balance} & & & \\
\hline & & & & \multicolumn{2}{|r|}{Debt Expense} & \multicolumn{2}{|l|}{Reacquired Debt Expense} & \multicolumn{2}{|r|}{Discount} & & & \\
\hline & (a) & & (b) & & (c) & & (d) & & (e) & & (f) & \\
\hline \multicolumn{13}{|c|}{Fixed Rate} \\
\hline \multicolumn{13}{|c|}{Debentures} \\
\hline 1 & 4.45\% Notes, Due 2020 & \$ & 125,000,000 & \$ & 2,371,253 & \$ & - & \$ & 248,363 & \$ & 122,380,385 & 1 \\
\hline 2 & 3.875\% Notes, Due 2022 & & 250,000,000 & & 7,217,108 & & - & & 652,333 & & 242,130,558 & 2 \\
\hline 3 & 8.0\% Debenture, Due 2026 & & 75,000,000 & & 38,333 & & 1,239,104 & & 228,658 & & 73,493,905 & 3 \\
\hline 4 & 3.70\% Notes, Due 2028 & & 300,000,000 & & 784,477 & & - & & 2,348,084 & & 296,867,439 & 4 \\
\hline 5 & 6.1\% Notes, Due 2041 & & 125,000,000 & & 147,259 & & - & & - & & 124,852,741 & 5 \\
\hline 6 & 4.875\% Notes, Due 2043 & & 250,000,000 & & 376,887 & & - & & 2,173,304 & & 247,449,809 & 6 \\
\hline 7 & 3.80\% Notes, Due 2046 & & 300,000,000 & & 742,902 & & - & & 3,383,808 & & 295,873,290 & 7 \\
\hline 8 & Total Debentures & \$ & 1,425,000,000 & \$ & 11,678,219 & \$ & 1,239,104 & \$ & 9,034,550 & \$ & 1,403,048,127 & 8 \\
\hline \multicolumn{13}{|c|}{Medium Term Notes} \\
\hline 9 & 7.78\% Series A, Due 2022 & \$ & 25,000,000 & \$ & 8,293 & \$ & - & \$ & 46,554 & \$ & 24,945,153 & 9 \\
\hline 10 & 7.92\% Series A, Due 2027 & & 25,000,000 & & 24,449 & & - & & 100,174 & & 24,875,377 & 10 \\
\hline 11 & 6.76\% Series A, Due 2027 & & 7,500,000 & & - & & - & & - & & 7,500,000 & 11 \\
\hline 12 & Total Medium-Term Notes & \$ & 57,500,000 & \$ & 32,742 & \$ & - & \$ & 146,729 & \$ & 57,320,530 & 12 \\
\hline 13 & Unamortized Loss on Reacquired Debt[1] & \$ & - & \$ & 4,253,579 & \$ & - & \$ & - & \$ & \((4,253,579)\) & 13 \\
\hline \multirow[t]{2}{*}{14} & Total Fixed Rate Debt & \$ & 1,482,500,000 & \$ & 15,964,540 & \$ & 1,239,104 & \$ & 9,181,279 & \$ & 1,456,115,078 & 14 \\
\hline & \multicolumn{12}{|l|}{Variable Rate} \\
\hline 15 & Term Facility [2] & \$ & 150,000,000 & \$ & 132,727 & \$ & 301,326 & \$ & 121,333 & \$ & 149,444,614 & 15 \\
\hline 16 & Total Variable Rate Debt & \$ & 150,000,000 & \$ & 132,727 & \$ & 301,326 & \$ & 121,333 & \$ & 149,444,614 & 16 \\
\hline 17 & Total Fixed and Variable Rate Debt & \multicolumn{2}{|l|}{\$ 1,632,500,000} & \$ & 16,097,267 & \$ & 1,540,430 & \$ & 9,302,612 & \$ & 1,605,559,692 & 17 \\
\hline \multirow{3}{*}{18} & Southern California Tax Exempt & & & & & & & & & & & \\
\hline & 1993 Big Bear IDRB, Series A & \$ & 50,000,000 & \$ & 376,309 & \$ & - & \$ & 49,999 & \$ & 49,573,692 & 18 \\
\hline & \multicolumn{12}{|l|}{Clark County Tax Exempt} \\
\hline \multicolumn{13}{|c|}{Variable Rate} \\
\hline 19 & 2003 Clark County IDRB, Series A & \$ & 50,000,000 & \$ & 344,963 & \$ & 1,263,091 & \$ & 70,304 & \$ & 48,321,642 & 19 \\
\hline 20 & 2008 Clark County IDRB, Series A & & 50,000,000 & & 455,022 & & 2,702,303 & & 116,465 & & 46,726,209 & 20 \\
\hline 21 & 2009 Clark County IDRB, Series A & & 50,000,000 & & 426,434 & & - & & 122,014 & & 49,451,552 & 21 \\
\hline 22 & Total Variable Rate Debt & \$ & 150,000,000 & \$ & 1,226,420 & \$ & 3,965,394 & \$ & 308,784 & \$ & 144,499,403 & 22 \\
\hline \multicolumn{13}{|c|}{Amortization of Loss (Gain) on Retirement of Debt} \\
\hline 23 & 1999 Clark County IDRB, Series A & \$ & - & \$ & - & \$ & 372,810 & \$ & - & \$ & \((372,810)\) & 23 \\
\hline 24 & 1999 Clark County IDRB, Series C & & - & & - & & 508,181 & & - & & \((508,181)\) & 24 \\
\hline 25 & 1999 Clark County IDRB, Series D & & - & & - & & 294,143 & & - & & \((294,143)\) & 25 \\
\hline 26 & 2003 Clark County IDRB, Series C & & - & & - & & 943,576 & & - & & \((943,576)\) & 26 \\
\hline 27 & 2003 Clark County IDRB, Series D & & - & & - & & 1,126,363 & & - & & \((1,126,363)\) & 27 \\
\hline 28 & 2003 Clark County IDRB, Series E & & - & & - & & 148,779 & & - & & \((148,779)\) & 28 \\
\hline 29 & 2004 Clark County IDRB, Series A & & - & & - & & 929,264 & & - & & \((929,264)\) & 29 \\
\hline 30 & 2004 Clark County IDRB, Series B & & - & & - & & \((3,352,304)\) & & - & & 3,352,304 & 30 \\
\hline 31 & 2005 Clark County IDRB, Series A & & - & & - & & 999,085 & & - & & \((999,085)\) & 31 \\
\hline 32 & 2006 Clark County IDRB, Series A & & - & & - & & \((4,322,221)\) & & - & & 4,322,221 & 32 \\
\hline 33 & Total Tax Exempt Clark County & \$ & - & \$ & - & \$ & \((2,352,324)\) & \$ & - & \$ & 2,352,324 & 33 \\
\hline \multirow[t]{2}{*}{34} & Total Fixed and Variable Rate Debt & \$ & 200,000,000 & \$ & 1,602,728 & \$ & 1,613,070 & \$ & 358,783 & \$ & 196,425,420 & 34 \\
\hline & \multicolumn{12}{|l|}{\begin{tabular}{l}
[1] In March 2010, the Company redeemed the \(\$ 100\) million, \(7.70 \%\) Subordinated Debentures (Preferred Securities), due 9/15/2043, at par. \\
The unamortized debt expenses were recorded as a reacquistion loss and are being amortized over the remaining life of the retired securities. \\
[2] Term Facility discount is from the commercial paper.
\end{tabular}} \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION
ORIGINAL NET PROCEEDS OF ISSUES OUTSTANDING[1]
AT DECEMBER 31, 2018
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. }
\end{aligned}
\]} & \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Origination } \\
\text { Date } \\
\hline
\end{gathered}
\]} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Maturity } \\
\text { Date } \\
\hline
\end{gathered}
\]} & \multirow[t]{2}{*}{Coupon Rate} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Offered}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Gross \\
Proceeds
\end{tabular}}} & \multicolumn{3}{|l|}{Underwriter's Commission and Discounts} & \multicolumn{3}{|l|}{Debt and Issuance Expense} & \multicolumn{3}{|l|}{Net Proceeds} & \multirow[t]{2}{*}{Cost of Money} & \multirow[t]{2}{*}{Line No.} \\
\hline & & & & & & & & & & Amount & Percent of Gross Proceeds & & Amount & \begin{tabular}{c} 
Percent \\
of Gross \\
Proceeds \\
\hline
\end{tabular} & & Amount & \[
\begin{gathered}
\text { Per } \\
\$ 100 \\
\text { Unit }
\end{gathered}
\] & & \\
\hline & (a) & (b) & (c) & (d) & & (e) & & (f) & & (g) & (h) & & (i) & (j) & & (k) & (I) & (m) & \\
\hline \multicolumn{20}{|l|}{Debentures} \\
\hline 1 & 4.45\% Notes, Due 2020 & 12/10/10 & 12/01/20 & 4.450\% & \$ & 125,000,000 & \$ & 125,000,000 & \$ & 1,040,000 & 0.83\% & & 12,237,413 & 9.79\% & \$ & 111,722,587 & 89.38 & 5.87\% & 1 \\
\hline 2 & 3.875\% Notes, Due 2022 & 03/23/12 & 04/01/22 & 3.875\% & & 250,000,000 & & 250,000,000 & & 1,710,000 & 0.68\% & & 22,139,458 & 8.86\% & & 226,150,542 & 90.46 & 5.10\% & 2 \\
\hline 3 & 8.0\% Debenture, Due 2026 & 08/01/96 & 08/01/26 & 8.000\% & & 75,000,000 & & 75,000,000 & & 894,750 & 1.19\% & & 4,998,668 & 6.66\% & & 69,106,582 & 92.14 & 9.13\% & 3 \\
\hline 4 & 3.70\% Notes, Due 2028 & 03/15/18 & 04/01/28 & 3.700\% & & 300,000,000 & & 300,000,000 & & 2,505,000 & 0.84\% & & 836,902 & 0.28\% & & 296,658,098 & 98.89 & 3.83\% & 4 \\
\hline 5 & 6.1\% Notes, Due 2041 & 02/15/11 & 02/15/41 & 6.100\% & & 125,000,000 & & 125,000,000 & & 0 & 0.00\% & & 167,358 & 0.13\% & & 124,832,642 & 99.87 & 6.11\% & 5 \\
\hline 6 & 4.875\% Notes, Due 2043 & 10/04/13 & 10/01/43 & 4.875\% & & 250,000,000 & & 250,000,000 & & 2,382,500 & 0.95\% & & 413,165 & 0.17\% & & 247,204,335 & 98.88 & 4.95\% & 6 \\
\hline 7 & 3.80\% Notes, Due 2046 & 09/29/16 & 10/01/46 & 3.800\% & & 300,000,000 & & 300,000,000 & & 3,531,000 & 1.18\% & & 775,217 & 0.26\% & & 295,693,783 & 98.56 & 3.88\% & 7 \\
\hline \multirow[t]{2}{*}{8} & Total Debentures & & & & & 1,425,000,000 & & 1,425,000,000 & & 12,063,250 & 0.85\% & & 41,568,181 & 2.92\% & & 1,371,368,569 & 96.24 & & 8 \\
\hline & \multicolumn{19}{|l|}{Medium Term Notes} \\
\hline 9 & 7.78\% MTN, Due 2022 & 02/03/97 & 02/03/22 & 7.780\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 33,400 & 0.13\% & & 24,779,100 & 99.12 & 7.86\% & 9 \\
\hline 10 & 7.92\% MTN, Due 2027 & 06/04/97 & 06/04/27 & 7.920\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 45,761 & 0.18\% & & 24,766,739 & 99.07 & 8.00\% & 10 \\
\hline 11 & 6.76\% MTN, Due 2027 & 09/23/97 & 09/24/27 & 6.760\% & & 7,500,000 & & 7,500,000 & & 46,875 & 0.63\% & & 17,228 & 0.23\% & & 7,435,897 & 99.15 & 6.88\% & 11 \\
\hline \multirow[t]{2}{*}{12} & Total Medium Term Notes & & & & \$ & 57,500,000 & \$ & 57,500,000 & \$ & 421,875 & 0.73\% & \$ & 96,389 & 0.17\% & \$ & 56,981,736 & 99.10 & & 12 \\
\hline & \multicolumn{19}{|l|}{Tax Exempt Clark County} \\
\hline 13 & 2003 Series A, Due 2038 & 03/25/03 & 03/01/38 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 128,076 & 0.26\% & \$ & 2,820,818 & 5.64\% & \$ & 47,051,106 & 94.10 & Var & 13 \\
\hline 14 & 2008 Series A, Due 2038 & 09/24/08 & 03/01/38 & Var & & 50,000,000 & & 50,000,000 & & 178,749 & 0.36\% & & 4,771,935 & 9.54\% & & 45,049,316 & 90.10 & Var & 14 \\
\hline 15 & 2009 Series A, Due 2039 & 12/09/09 & 12/01/39 & Var & & 50,000,000 & & 50,000,000 & & 175,000 & 0.35\% & & 766,649 & 1.53\% & & 49,058,351 & 98.12 & Var & 15 \\
\hline \multirow[t]{2}{*}{16} & Total Tax Exempt Clark County & & & & \$ & 150,000,000 & \$ & 150,000,000 & \$ & 481,825 & 0.32\% & \$ & 8,359,402 & 5.57\% & \$ & 141,158,773 & 94.11 & & 16 \\
\hline & \multicolumn{19}{|l|}{Tax Exempt Big Bear} \\
\hline 17 & 1993 Series A, Due 2028 & 12/01/93 & 12/01/28 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 175,000 & 0.35\% & \$ & 656,763 & 1.31\% & \$ & 49,168,237 & 98.34 & Var & 17 \\
\hline 18 & Term Facility [2] & 03/15/12 & 03/28/22 & Var & \$ & 150,000,000 & \$ & 150,000,000 & \$ & - & 0.00\% & \$ & 552,300 & 0.37\% & \$ & 149,447,700 & 99.63 & Var & 18 \\
\hline \multirow[t]{2}{*}{19} & Total Debt Capital & & & & \$ & 1,832,500,000 & \$ & 1,832,500,000 & \$ & 13,141,950 & 0.72\% & \$ & 51,233,036 & 2.80\% & \$ & 1,768,125,014 & 96.49 & & 19 \\
\hline & \begin{tabular}{l}
Based on Company records. \\
A commercial paper program was
\end{tabular} & ted in Octobe & 002 and is & by \(\$ 50 \mathrm{~m}\) & millio & of the term fac & & & & & & & & & & & & & \\
\hline
\end{tabular}

\section*{SOUTHWEST GAS CORPORATION \\ NORTHERN CALIFORNIA \\ Embedded cost of Long-term debt ESTIMATED DECEMBER 31, 2019}
\begin{tabular}{|c|c|c|c|c|c|c|c|}
\hline Line No. & Description & \multicolumn{2}{|r|}{Net Capital[1]} & Rate & \multicolumn{2}{|r|}{Cost} & \multirow[t]{2}{*}{Line No.} \\
\hline & (a) & & (b) & (c) & & (d) & \\
\hline \multicolumn{8}{|c|}{Fixed Rate} \\
\hline \multicolumn{8}{|c|}{Debentures} \\
\hline 1 & 4.45\% Notes, Due 2020 & \$ & 123,742,005 & 5.60\% & \$ & 6,931,656 & 1 \\
\hline 2 & 3.875\% Notes, Due 2022 & & 244,538,250 & 4.95\% & & 12,101,084 & 2 \\
\hline 3 & 8.0\% Debenture, Due 2026 & & 73,690,352 & 8.56\% & & 6,310,403 & 3 \\
\hline 4 & 3.70\% Notes, Due 2028 & & 297,155,552 & 3.83\% & & 11,388,938 & 4 \\
\hline 5 & 6.1\% Notes, Due 2041 & & 124,856,030 & 6.11\% & & 7,628,441 & 5 \\
\hline 6 & 4.875\% Notes, Due 2043 & & 247,504,123 & 4.95\% & & 12,243,837 & 6 \\
\hline 7 & 3.80\% Notes, Due 2046 & & 295,958,149 & 3.88\% & & 11,487,337 & 7 \\
\hline 8 & 4.15\% Notes, Due 2049 & & 296,336,531 & 4.23\% & & 12,522,975 & 8 \\
\hline 9 & Total Debentures & \$ & 1,703,780,992 & 4.73\% & \$ & 80,614,671 & 9 \\
\hline \multicolumn{8}{|c|}{Medium Term Notes} \\
\hline 10 & 7.78\% Series A, Due 2022 & & 24,961,478 & 7.86\% & & 1,962,294 & 10 \\
\hline 11 & 7.92\% Series A, Due 2027 & & 24,886,243 & 8.00\% & & 1,991,523 & 11 \\
\hline 12 & 6.76\% Series A, Due 2027 & & 7,500,000 & 6.76\% & & 507,000 & 12 \\
\hline 13 & Total Medium-Term Notes & \$ & 57,347,721 & 7.78\% & \$ & 4,460,817 & 13 \\
\hline 14 & Unamortized Loss on Reacquired Debt & \$ & \((4,081,717)\) & -4.21\% & \$ & 171,862 & 14 \\
\hline 15 & Total Fixed Rate Debt & \$ & 1,757,046,996 & 4.85\% & \$ & 85,247,349 & 15 \\
\hline \multicolumn{8}{|c|}{Variable Rate} \\
\hline 16 & Term Facility & \$ & 149,698,780 & 3.58\% & \$ & 5,354,762 & 16 \\
\hline 17 & Total Variable Rate Debt & \$ & 149,698,780 & 3.58\% & \$ & 5,354,762 & 17 \\
\hline 18 & Total Fixed and Variable Rate Debt & \$ & 1,906,745,776 & 4.75\% & \$ & 90,602,111 & 18 \\
\hline & Southern California Tax Exempt & & & & & & \\
\hline 19 & 1993 Big Bear IDRB, Series A & \$ & 49,654,658 & 2.51\% & \$ & 1,248,233 & 19 \\
\hline \multicolumn{8}{|c|}{Clark County Tax Exempt} \\
\hline \multicolumn{8}{|c|}{Variable Rate} \\
\hline 20 & 2003 Clark County IDRB, Series A & \$ & 48,453,720 & 2.68\% & \$ & 1,299,860 & 20 \\
\hline 21 & 2008 Clark County IDRB, Series A & & 46,917,141 & 2.83\% & & 1,326,942 & 21 \\
\hline 22 & 2009 Clark County IDRB, Series A & & 49,499,337 & 2.34\% & & 1,156,631 & 22 \\
\hline 23 & Total Clark County Variable Rate Debt & \$ & 144,870,197 & 2.61\% & \$ & 3,783,433 & 23 \\
\hline \multicolumn{8}{|c|}{Clark County Tax Exempt} \\
\hline 24 & 1999 Clark County IDRB, Series A & \$ & \((354,091)\) & -5.02\% & \$ & 17,779 & 24 \\
\hline 25 & 1999 Clark County IDRB, Series C & & \((482,666)\) & -5.02\% & & 24,234 & 25 \\
\hline 26 & 1999 Clark County IDRB, Series D & & \((279,375)\) & -5.02\% & & 14,027 & 26 \\
\hline 27 & 2003 Clark County IDRB, Series C & & \((894,346)\) & -5.22\% & & 46,662 & 27 \\
\hline 28 & 2003 Clark County IDRB, Series D & & \((1,067,596)\) & -5.22\% & & 55,701 & 28 \\
\hline 29 & 2003 Clark County IDRB, Series E & & \((141,016)\) & -5.22\% & & 7,357 & 29 \\
\hline 30 & 2004 Clark County IDRB, Series A & & \((869,311)\) & -6.45\% & & 56,085 & 30 \\
\hline 31 & 2004 Clark County IDRB, Series B & & 3,127,569 & -6.70\% & & \((209,669)\) & 31 \\
\hline 32 & 2005 Clark County IDRB, Series A & & \((939,439)\) & -5.97\% & & 56,086 & 32 \\
\hline 33 & 2006 Clark County IDRB, Series A & & 4,077,567 & -5.66\% & & \((230,806)\) & 33 \\
\hline 34 & Total Clark County Tax Exempt & \$ & 2,177,296 & \(\underline{ }\) & \$ & (162,545) & 34 \\
\hline 35 & Total Fixed and Variable Rate Debt & \$ & 196,702,151 & 2.48\% & \$ & 4,869,121 & 35 \\
\hline
\end{tabular}

[1] In March 2010, the Company redeemed the \(\$ 100\) million, \(7.70 \%\) Subordinated Debentures (Preferred Securities), due 9/15/2043, at par.
The unamortized debt expenses were recorded as a reacquistion loss (gain) and are being amortized over the remaining life of the retired securities.
SOUTHWEST GAS CORPORATION
ORIGINAL NET PROCEEDS OF ISSUES OUTSTANDING[1]
AT DECEMBER 31, 2019
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{Line No.} & \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Origination } \\
\text { Date } \\
\hline
\end{gathered}
\]} & \multirow[t]{2}{*}{Maturity Date} & \multirow[t]{2}{*}{Coupon Rate} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Offered}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Gross Proceeds}} & \multicolumn{3}{|l|}{Underwriter's Commission and Discounts} & \multicolumn{3}{|l|}{Debt and Issuance Expense} & \multicolumn{3}{|l|}{Net Proceeds} & \multirow[t]{2}{*}{Cost of Money} & \multirow[t]{2}{*}{Line No.} \\
\hline & & & & & & & & & & Amount & Percent of Gross Proceeds & & Amount & \begin{tabular}{c} 
Percent \\
of Gross \\
Proceeds \\
\hline
\end{tabular} & & Amount & \[
\begin{array}{r}
\text { Per } \\
\$ 100 \\
\text { Unit } \\
\hline
\end{array}
\] & & \\
\hline & (a) & (b) & (c) & (d) & & (e) & & (f) & & (g) & (h) & & (i) & (j) & & (k) & (I) & (m) & \\
\hline \multicolumn{20}{|l|}{Debentures} \\
\hline 1 & 4.45\% Notes, Due 2020 & 12/10/10 & 12/01/20 & 4.450\% & \$ & 125,000,000 & \$ & 125,000,000 & \$ & 1,040,000 & 0.83\% & & 12,237,413 & 9.79\% & \$ & 111,722,587 & 89.38 & 5.87\% & 1 \\
\hline 2 & 3.875\% Notes, Due 2022 & 03/23/12 & 04/01/22 & 3.875\% & & 250,000,000 & & 250,000,000 & & 1,710,000 & 0.68\% & & 22,139,458 & 8.86\% & & 226,150,542 & 90.46 & 5.10\% & 2 \\
\hline 3 & 8.0\% Debenture, Due 2026 & 08/01/96 & 08/01/26 & 8.000\% & & 75,000,000 & & 75,000,000 & & 894,750 & 1.19\% & & 4,998,668 & 6.66\% & & 69,106,582 & 92.14 & 9.13\% & 3 \\
\hline 4 & 3.70\% Notes, Due 2028 & 03/15/18 & 04/01/28 & 3.700\% & & 300,000,000 & & 300,000,000 & & 2,505,000 & 0.84\% & & 836,902 & 0.28\% & & 296,658,098 & 98.89 & 3.83\% & 4 \\
\hline 5 & 6.1\% Notes, Due 2041 & 02/15/11 & 02/15/41 & 6.100\% & & 125,000,000 & & 125,000,000 & & 0 & 0.00\% & & 167,358 & 0.13\% & & 124,832,642 & 99.87 & 6.11\% & 5 \\
\hline 6 & 4.875\% Notes, Due 2043 & 10/04/13 & 10/01/43 & 4.875\% & & 250,000,000 & & 250,000,000 & & 2,382,500 & 0.95\% & & 413,165 & 0.17\% & & 247,204,335 & 98.88 & 4.95\% & 6 \\
\hline 7 & 3.80\% Notes, Due 2046 & 09/29/16 & 10/01/46 & 3.800\% & & 300,000,000 & & 300,000,000 & & 3,531,000 & 1.18\% & & 775,217 & 0.26\% & & 295,693,783 & 98.56 & 3.88\% & 7 \\
\hline 8 & 4.15\% Notes, Due 2049 & 05/31/19 & 06/01/49 & 4.150\% & & 300,000,000 & & 300,000,000 & & 2,778,000 & 0.93\% & & 922,000 & 0.31\% & & 296,300,000 & 98.77 & 4.23\% & 8 \\
\hline \multirow[t]{2}{*}{9} & Total Debentures & & & & & 1,725,000,000 & & 1,725,000,000 & & 14,841,250 & 0.86\% & & 42,490,181 & 2.46\% & & 1,667,668,569 & 96.68 & & 9 \\
\hline & Medium Term Notes & & & & & & & & & & & & & & & & & & \\
\hline 10 & 7.78\% MTN, Due 2022 & 02/03/97 & 02/03/22 & 7.780\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 33,400 & 0.13\% & & 24,779,100 & 99.12 & 7.86\% & 10 \\
\hline 11 & 7.92\% MTN, Due 2027 & 06/04/97 & 06/04/27 & 7.920\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 45,761 & 0.18\% & & 24,766,739 & 99.07 & 8.00\% & 11 \\
\hline 12 & 6.76\% MTN, Due 2027 & 09/23/97 & 09/24/27 & 6.760\% & & 7,500,000 & & 7,500,000 & & 46,875 & 0.63\% & & 17,228 & 0.23\% & & 7,435,897 & 99.15 & 6.88\% & 12 \\
\hline \multirow[t]{2}{*}{13} & Total Medium Term Notes & & & & \$ & 57,500,000 & \$ & 57,500,000 & \$ & 421,875 & 0.73\% & \$ & 96,389 & 0.17\% & \$ & 56,981,736 & 99.10 & & 13 \\
\hline & Tax Exempt Clark County & & & & & & & & & & & & & & & & & & \\
\hline 14 & 2003 Series A, Due 2038 & 03/25/03 & 03/01/38 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 128,076 & 0.26\% & \$ & 2,820,818 & 5.64\% & \$ & 47,051,106 & 94.10 & Var & 14 \\
\hline 15 & 2008 Series A, Due 2038 & 09/24/08 & 03/01/38 & Var & & 50,000,000 & & 50,000,000 & & 178,749 & 0.36\% & & 4,770,822 & 9.54\% & & 45,050,429 & 90.10 & Var & 15 \\
\hline 16 & 2009 Series A, Due 2039 & 12/09/09 & 12/01/39 & Var & & 50,000,000 & & 50,000,000 & & 175,000 & 0.35\% & & 766,649 & 1.53\% & & 49,058,351 & 98.12 & Var & 16 \\
\hline \multirow[t]{2}{*}{17} & Total Tax Exempt Clark County & & & & \$ & 150,000,000 & \$ & 150,000,000 & \$ & 481,825 & 0.32\% & \$ & 8,358,289 & 5.57\% & \$ & 141,159,886 & 94.11 & & 17 \\
\hline & Tax Exempt Big Bear & & & & & & & & & & & & & & & & & & \\
\hline 18 & 1993 Series A, Due 2028 & 12/01/93 & 12/01/28 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 175,000 & 0.35\% & \$ & 656,763 & 1.31\% & \$ & 49,168,237 & 98.34 & Var & 18 \\
\hline 19 & Term Facility[2] & 03/15/12 & 03/25/22 & Var & \$ & 150,000,000 & \$ & 150,000,000 & \$ & - & 0.00\% & \$ & 552,300 & 0.37\% & \$ & 149,447,700 & 99.63 & Var & 19 \\
\hline \multirow[t]{2}{*}{20} & Total Debt Capital & & & & \$ & 2,132,500,000 & \$ & 2,132,500,000 & \$ & 15,919,950 & 0.75\% & \$ & 52,153,923 & 2.45\% & \$ & 2,064,426,127 & 96.81 & & 20 \\
\hline & Based on Company records. A commercial paper program was & ted in Octobe & 2002 and is & d by \(\$ 50\) & millio & of the term faci & & & & & & & & & & & & & \\
\hline
\end{tabular}

\title{
SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA EMBEDDED COST OF LONG-TERM DEBT AVERAGE ESTIMATED YEAR 2020
}

Line No.
\(\frac{\text { Description }}{(a)}\)
\(\frac{\text { Avg } 2020 \text { Balance [1] }}{\text { (b) }} \frac{\text { Rate }}{\text { (c) }} \frac{\text { Cost }}{\text { (d) }} \xrightarrow{\text { Line No. }}\)

Fixed Rate
Debentures
4.45\% Notes, Due 2020
3.875\% Notes, Due 2022
8.0\% Debenture, Due 2026
3.70\% Notes, Due 2028
6.1\% Notes, Due 2041
4.875\% Notes, Due 2043
3.80\% Notes, Due 2046
4.15\% Notes, Due 2049
4.45\% Notes, Due 2050
4.60\% Notes, Due 2050
Total Debentures
Medium Term Notes
\(7.78 \%\) Series A, Due 2022
\(7.92 \%\) Series A, Due 2027
\(6.76 \%\) Series A, Due 2027
\begin{tabular}{|c|c|c|c|c|c|}
\hline \multirow[t]{10}{*}{\$} & 114,803,438 & 5.54\% & \$ & 6,356,954 & 1 \\
\hline & 245,748,101 & 4.93\% & & 12,107,203 & 2 \\
\hline & 73,788,575 & 8.55\% & & 6,310,399 & 3 \\
\hline & 297,305,186 & 3.83\% & & 11,399,268 & 4 \\
\hline & 124,857,777 & 6.11\% & & 7,628,493 & 5 \\
\hline & 247,532,640 & 4.95\% & & 12,244,534 & 6 \\
\hline & 296,002,242 & 3.88\% & & 11,488,185 & 7 \\
\hline & 296,368,839 & 4.23\% & & 12,524,340 & 8 \\
\hline & 149,127,458 & 4.52\% & & 6,743,063 & 9 \\
\hline & 24,714,954 & 4.67\% & & 1,154,372 & 10 \\
\hline \$ & 1,870,249,210 & 4.70\% & \$ & 87,956,811 & 11 \\
\hline
\end{tabular}
12
13
14
15
Total Medium-Term Notes
\begin{tabular}{r}
\(24,970,295\) \\
\(24,892,120\) \\
\(7,500,000\) \\
\hline\(\$ \quad 57,362,415\) \\
\hline
\end{tabular}
\begin{tabular}{rrrr}
\(7.86 \%\) & & \(1,962,665\) & 12 \\
\(8.00 \%\) & \(1,991,370\) & 13 \\
\(6.76 \%\) & & 507,000 \\
& & \(4,461,035\) \\
\hline
\end{tabular}

Amortization of Loss on Reacquired
Debt
Total Fixed Rate Debt
\begin{tabular}{cc}
\(\$\) & \((3,995,786)\) \\
\hline\(\$ \quad 1,923,615,838\)
\end{tabular}
\(-4.30 \%\)
\begin{tabular}{l}
\(\$ \quad 171,862\) \\
\hline
\end{tabular}
16
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Total Fixed Rate Debt & \$ & 1,923,615,838 & 4.81\% & \$ & 92,589,707 & 17 \\
\hline \multicolumn{7}{|l|}{Variable Rate} \\
\hline Term Facility & \$ & 142,015,197 & 3.61\% & \$ & 5,132,272 & 18 \\
\hline Total Variable Rate Debt & \$ & 142,015,197 & 3.61\% & \$ & 5,132,272 & 19 \\
\hline Total Fixed and Variable Rate Debt & \$ & 2,065,631,035 & 4.73\% & \$ & 97,721,979 & 20 \\
\hline \multicolumn{7}{|l|}{Southern California Tax Exempt} \\
\hline 1993 Big Bear IDRB, Series A & \$ & 49,695,141 & 2.64\% & \$ & 1,313,322 & 21 \\
\hline
\end{tabular}

Clark County Tax Exempt
Variable Rate
2003 Clark County IDRB, Series A
2008 Clark County IDRB, Series A
2009 Clark County IDRB, Series A
Total Clark County Variable Rate Debt

\begin{tabular}{clrl}
\(2.69 \%\) & \(\$\) & \(1,306,235\) & 22 \\
\(2.86 \%\) & & \(1,344,678\) & 23 \\
\(2.43 \%\) & & \(1,201,531\) & 24 \\
\cline { 3 - 4 } & & \(\$ 3,852,444\) \\
\hline
\end{tabular}

Amortization of Loss (Gain) on Reaquired Debt
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1999 Clark County, Series A & \$ & \((344,732)\) & -5.43\% & \$ & 18,718 & 26 \\
\hline 1999 Clark County, Series C & & \((1,038,213)\) & -2.46\% & & 25,515 & 27 \\
\hline 1999 Clark County, Series D & & \((271,990)\) & -5.43\% & & 14,769 & 28 \\
\hline 2003 Clark County, Series C & & \((869,731)\) & -5.66\% & & 49,230 & 29 \\
\hline 2003 Clark County, Series D & & \((1,038,213)\) & -5.66\% & & 58,767 & 30 \\
\hline 2003 Clark County, Series E & & \((137,135)\) & -5.66\% & & 7,762 & 31 \\
\hline 2004 Clark County, Series A & & \((839,335)\) & -7.14\% & & 59,952 & 32 \\
\hline 2004 Clark County, Series B & & 3,015,201 & -7.45\% & & \((224,736)\) & 33 \\
\hline 2005 Clark County, Series A & & \((909,615)\) & -6.56\% & & 59,647 & 34 \\
\hline 2006 Clark County, Series A & & 3,955,240 & -6.19\% & & \((244,654)\) & 35 \\
\hline Total Amortization of Loss (Gain) on & & & & & & \\
\hline Retirement of Debt & \$ & 1,521,477 & \(\underline{-11.50 \%}\) & \$ & \((175,029)\) & 36 \\
\hline Total Fixed and Variable Rate Debt & \$ & 196,272,213 & 2.54\% & \$ & 4,990,737 & 37 \\
\hline
\end{tabular}
[1] Net proceeds based off of the forecasted balances
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[b]{2}{*}{Line No.} & \multirow[b]{2}{*}{Description} & \multicolumn{6}{|r|}{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA LONG-TERM DEBT AT DECEMBER 31, 2019 AND 2020} & \multicolumn{2}{|r|}{\multirow[b]{2}{*}{\begin{tabular}{l}
Net New \\
Financings
\end{tabular}}} & \multicolumn{2}{|l|}{\multirow[b]{2}{*}{Net Proceeds at Dec. 31, 2020}} & \multicolumn{2}{|r|}{\multirow[b]{2}{*}{\begin{tabular}{l}
Average \\
Net Proceeds
\end{tabular}}} & \multirow{3}{*}{Line No.} \\
\hline & & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\begin{tabular}{l}
Net Proceeds at Dec. 31, 2019 [1] \\
(b)
\end{tabular}}} & \multicolumn{2}{|l|}{Retirements and Redemptions} & \multicolumn{2}{|r|}{Annual Amortization} & & & & & & & \\
\hline & (a) & & & & (c) & & (d) & & & & (f) & & (g) & \\
\hline \multicolumn{15}{|c|}{Fixed Rate} \\
\hline \multicolumn{15}{|c|}{Debentures} \\
\hline 1 & 4.45\% Notes, Due 2020[2] & \$ & 123,742,005 & \$ & 125,000,000 & \$ & 1,257,995 & \$ & - & \$ & - & \$ & 114,803,438 & 1 \\
\hline 2 & 3.875\% Notes, Due 2022 & & 244,538,250 & & - & & 2,419,703 & & - & & 246,957,952 & & 245,748,101 & 2 \\
\hline 3 & 8.0\% Debenture, Due 2026 & & 73,690,352 & & - & & 196,447 & & - & & 73,886,799 & & 73,788,575 & 3 \\
\hline 4 & 3.70\% Notes, Due 2028 & & 297,155,552 & & - & & 299,268 & & - & & 297,454,820 & & 297,305,186 & 4 \\
\hline 5 & 6.1\% Notes, Due 2041 & & 124,856,030 & & - & & 3,493 & & - & & 124,859,524 & & 124,857,777 & 5 \\
\hline 6 & 4.875\% Notes, Due 2043 & & 247,504,123 & & - & & 57,034 & & - & & 247,561,157 & & 247,532,640 & 6 \\
\hline 7 & 3.80\% Notes, Due 2046 & & 295,958,149 & & - & & 88,185 & & - & & 296,046,334 & & 296,002,242 & 7 \\
\hline 8 & 4.15\% Notes, Due 2049 & & 296,336,521 & & - & & 64,636 & & - & & 296,401,157 & & 296,368,839 & 8 \\
\hline 9 & 4.45\% Notes, Due 2050 & & - & & - & & 30,980 & & - & & 296,607,099 & & 149,127,458 & 9 \\
\hline 10 & 4.60\% Notes, Due 2050 & & - & & - & & 4,372 & & - & & 296,579,450 & & 24,714,954 & 10 \\
\hline \multirow[t]{2}{*}{11} & Total Debentures & \$ & 1,703,780,982 & \$ & 125,000,000 & \$ & 4,422,113 & \$ & - & \$ & 2,176,354,293 & \$ & 1,870,249,210 & 11 \\
\hline & \multicolumn{14}{|l|}{Medium Term Notes} \\
\hline 12 & 7.78\% Series A, Due 2022 & \$ & 24,961,478 & \$ & - & \$ & 17,634 & \$ & - & \$ & 24,979,112 & \$ & 24,970,295 & 12 \\
\hline 13 & 7.92\% Series A, Due 2027 & & 24,886,243 & & - & & 11,753 & & - & & 24,897,996 & & 24,892,120 & 13 \\
\hline 14 & 6.76\% Series A, Due 2027 & & 7,500,000 & & - & & - & & - & & 7,500,000 & & 7,500,000 & 14 \\
\hline 15 & Total Medium-Term Notes & \$ & 57,347,721 & \$ & - & \$ & 29,387 & \$ & - & \$ & 57,377,108 & \$ & 57,362,415 & 15 \\
\hline 16 & Unamortized (Loss) on Reacquired Debt & \$ & \((4,081,717)\) & \$ & - & \$ & 171,862 & \$ & - & \$ & \((3,909,855)\) & \$ & \((3,995,786)\) & 16 \\
\hline \multirow[t]{2}{*}{17} & Total Fixed Rate Debt & \$ & 1,757,046,986 & \$ & 125,000,000 & \$ & 4,623,362 & \$ & - & \$ & 2,229,821,545 & & 1,923,615,838 & 17 \\
\hline & \multicolumn{14}{|l|}{Variable Rate} \\
\hline 18 & Term Facility [3] & \$ & 149,698,780 & \$ & 4,724,957 & \$ & 142,209 & \$ & - & \$ & 144,831,614 & \$ & 142,015,197 & 18 \\
\hline 19 & Southern California Tax Exempt & & & & & & & & & & & & & 19 \\
\hline 20 & 1993 Big Bear IDRB, Series A & & 49,654,658 & & - & & 80,966 & & - & & 49,735,624 & & 49,695,141 & 20 \\
\hline 21 & Total Variable Rate Debt & \$ & 199,353,438 & \$ & 4,724,957 & \$ & 223,175 & \$ & - & \$ & 194,567,238 & \$ & 191,710,338 & 21 \\
\hline \multirow[t]{2}{*}{22} & Total Fixed and Variable Rate Debt & \$ & 1,956,400,424 & \$ & 129,724,957 & \$ & 4,846,537 & \$ & - & \$ & 2,424,388,784 & \$ & 2,115,326,177 & 22 \\
\hline & \multicolumn{14}{|l|}{Clark County Tax Exempt} \\
\hline & \multicolumn{14}{|l|}{Variable Rate} \\
\hline 23 & 2003 Clark County IDRB, Series A & \$ & 48,453,720 & \$ & - & \$ & 132,079 & \$ & - & \$ & 48,585,799 & \$ & 48,519,760 & 23 \\
\hline 24 & 2008 Clark County IDRB, Series A & & 46,917,141 & & - & & 190,932 & & - & & 47,108,072 & & 47,012,606 & 24 \\
\hline 25 & 2009 Clark County IDRB, Series A & & 49,499,337 & & - & & 47,785 & & - & & 49,547,121 & & 49,523,229 & 25 \\
\hline \multirow[t]{2}{*}{26} & Total Variable Rate Debt & \$ & 144,870,197 & \$ & - & \$ & 370,795 & \$ & - & \$ & 145,240,992 & \$ & 145,055,595 & 26 \\
\hline & \multicolumn{14}{|l|}{Gain (Loss) on Unamortized Balances on Retirement of Debt} \\
\hline 27 & 1999 Clark County, Series A & \$ & \((354,091)\) & \$ & - & \$ & 18,718 & \$ & - & \$ & \((335,373)\) & \$ & \((344,732)\) & 27 \\
\hline 28 & 1999 Clark County, Series C & & \((482,666)\) & & - & & 25,515 & & - & & \((457,150)\) & & \((469,908)\) & 28 \\
\hline 29 & 1999 Clark County, Series D & & \((279,375)\) & & - & & 14,769 & & - & & \((264,606)\) & & \((271,990)\) & 29 \\
\hline 30 & 2003 Clark County, Series C & & \((894,346)\) & & - & & 49,230 & & - & & \((845,116)\) & & \((869,731)\) & 30 \\
\hline 31 & 2003 Clark County, Series D & & \((1,067,596)\) & & - & & 58,767 & & - & & \((1,008,829)\) & & \((1,038,213)\) & 31 \\
\hline 32 & 2003 Clark County, Series E & & \((141,016)\) & & - & & 7,762 & & - & & \((133,254)\) & & \((137,135)\) & 32 \\
\hline 33 & 2004 Clark County, Series A & & \((869,311)\) & & - & & 59,952 & & - & & \((809,359)\) & & \((839,335)\) & 33 \\
\hline 34 & 2004 Clark County, Series B & & 3,127,569 & & - & & \((224,736)\) & & - & & 2,902,833 & & 3,015,201 & 34 \\
\hline 35 & 2005 Clark County, Series A & & \((939,439)\) & & - & & 59,647 & & - & & \((879,792)\) & & \((909,615)\) & 35 \\
\hline \multirow[t]{2}{*}{36} & 2006 Clark County, Series A & & 4,077,567 & & - & & \((244,654)\) & & - & & 3,832,913 & & 3,955,240 & 36 \\
\hline & \multicolumn{14}{|l|}{Total Unamortizated Gain (Loss) on - - - - - - - - - -} \\
\hline 37 & Retirement of Debt & \$ & 2,177,296 & \$ & - & \$ & \((175,029)\) & \$ & - & \$ & 2,002,267 & \$ & 2,089,782 & 37 \\
\hline \multirow[t]{2}{*}{38} & Total Fixed and Variable Rate Debt & \$ & 147,047,493 & \$ & - & \$ & 195,767 & \$ & - & \$ & 147,243,260 & \$ & 147,145,376 & 38 \\
\hline & \multicolumn{13}{|l|}{\begin{tabular}{l}
[1] Net Proceeds are based off of the forecasted balances. \\
[2] Senior notes matured on December 1, 2020. \\
[3] Annual Amortization includes a \(\$ 9,375\) annual fee. Average balance is the sum of the monthly average b
\end{tabular}} & \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION
ORIGINAL NET PROCEEDS OF ISSUES OUTSTANDING[1]
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. } \\
& \hline
\end{aligned}
\]} & \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{\[
\begin{gathered}
\begin{array}{c}
\text { Origination } \\
\text { Date }
\end{array} \\
\hline
\end{gathered}
\]} & \multirow[t]{2}{*}{Maturity Date} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Coupon } \\
\text { Rate }
\end{gathered}
\]} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Offered}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Gross Proceeds}} & \multicolumn{3}{|l|}{Underwriter's Commission and Discounts} & \multicolumn{3}{|l|}{Debt and Issuance Expense} & \multicolumn{3}{|l|}{Net Proceeds} & \multirow[t]{2}{*}{Cost of Money} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Line } \\
\text { No. } \\
\hline
\end{gathered}
\]} \\
\hline & & & & & & & & & & Amount & \begin{tabular}{c}
\begin{tabular}{c} 
Percent \\
of Gross \\
Proceeds
\end{tabular} \\
\hline
\end{tabular} & & Amount & Percent
of Gross
Proceeds & & Amount & \[
\begin{array}{r}
\text { Per } \\
\text { \$100 } \\
\text { Unit }
\end{array}
\] & & \\
\hline & (a) & (b) & (c) & (d) & & (e) & & (f) & & (g) & (h) & & (i) & (j) & & (k) & (I) & (m) & \\
\hline \multicolumn{20}{|l|}{Debentures} \\
\hline 1 & 3.875\% Notes, Due 2022 & 03/23/12 & 04/01/22 & 3.875\% & & 250,000,000 & & 250,000,000 & & 1,710,000 & 0.68\% & & 22,139,458 & 8.86\% & & 226,150,542 & 90.46 & 5.10\% & 1 \\
\hline 2 & 8.0\% Debenture, Due 2026 & 08/01/96 & 08/01/26 & 8.000\% & & 75,000,000 & & 75,000,000 & & 894,750 & 1.19\% & & 4,998,668 & 6.66\% & & 69,106,582 & 92.14 & 9.13\% & 2 \\
\hline 3 & 3.70\% Notes, Due 2028 & 03/15/18 & 04/01/28 & 3.700\% & & 300,000,000 & & 300,000,000 & & 2,505,000 & 0.84\% & & 836,902 & 0.28\% & & 296,658,098 & 98.89 & 3.83\% & 3 \\
\hline 4 & 6.1\% Notes, Due 2041 & 02/15/11 & 02/15/41 & 6.100\% & & 125,000,000 & & 125,000,000 & & 0 & 0.00\% & & 167,358 & 0.13\% & & 124,832,642 & 99.87 & 6.11\% & 4 \\
\hline 5 & 4.875\% Notes, Due 2043 & 10/04/13 & 10/01/43 & 4.875\% & & 250,000,000 & & 250,000,000 & & 2,382,500 & 0.95\% & & 413,165 & 0.17\% & & 247,204,335 & 98.88 & 4.95\% & 5 \\
\hline 6 & 3.80\% Notes, Due 2046 & 09/29/16 & 10/01/46 & 3.800\% & & 300,000,000 & & 300,000,000 & & 3,531,000 & 1.18\% & & 775,217 & 0.26\% & & 295,693,783 & 98.56 & 3.88\% & 6 \\
\hline 7 & 4.15\% Notes, Due 2049 & 05/31/19 & 06/01/49 & 4.150\% & & 300,000,000 & & 300,000,000 & & 2,778,000 & 0.93\% & & 922,000 & 0.31\% & & 296,300,000 & 98.77 & 4.23\% & 7 \\
\hline 8 & 4.45\% Notes, Due 2050 & 06/01/20 & 06/01/50 & 4.450\% & & 300,000,000 & & 300,000,000 & & 2,625,000 & 0.88\% & & 800,000 & 0.27\% & & 296,575,000 & 98.86 & 4.52\% & 8 \\
\hline 9 & 4.60\% Notes, Due 2050 & 12/01/20 & 12/01/50 & 4.600\% & & 300,000,000 & & 300,000,000 & & 2,625,000 & 0.88\% & & 800,000 & 0.27\% & & 296,575,000 & 98.86 & 4.67\% & 9 \\
\hline \multirow[t]{2}{*}{10} & Total Debentures & & & & & 2,200,000,000 & & 2,200,000,000 & & 19,051,250 & 0.87\% & & 31,852,768 & 1.45\% & & 2,149,095,982 & 97.69 & & 10 \\
\hline & \multicolumn{19}{|l|}{Medium Term Notes} \\
\hline 11 & 7.78\% MTN, Due 2022 & 02/03/97 & 02/03/22 & 7.780\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 33,400 & 0.13\% & & 24,779,100 & 99.12 & 7.86\% & 11 \\
\hline 12 & 7.92\% MTN, Due 2027 & 06/04/97 & 06/04/27 & 7.920\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 45,761 & 0.18\% & & 24,766,739 & 99.07 & 8.00\% & 12 \\
\hline 13 & 6.76\% MTN, Due 2027 & 09/23/97 & 09/24/27 & 6.760\% & & 7,500,000 & & 7,500,000 & & 46,875 & 0.63\% & & 17,228 & 0.23\% & & 7,435,897 & 99.15 & 6.88\% & 13 \\
\hline \multirow[t]{2}{*}{14} & Total Medium Term Notes & & & & \$ & 57,500,000 & \$ & 57,500,000 & \$ & 421,875 & 0.73\% & \$ & 96,389 & 0.17\% & \$ & 56,981,736 & 99.10 & & 14 \\
\hline & Tax Exempt Clark County & & & & & & & & & & & & & & & & & & \\
\hline 15 & 2003 Series A, Due 2038 & 03/25/03 & 03/01/38 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 128,076 & 0.26\% & \$ & 2,820,818 & 5.64\% & \$ & 47,051,106 & 94.10 & Var & 15 \\
\hline 16 & 2008 Series A, Due 2038 & 09/24/08 & 03/01/38 & Var & & 50,000,000 & & 50,000,000 & & 178,749 & 0.36\% & & 4,770,822 & 9.54\% & & 45,050,429 & 90.10 & Var & 16 \\
\hline 17 & 2009 Series A, Due 2039 & 12/09/09 & 12/01/39 & Var & & 50,000,000 & & 50,000,000 & & 175,000 & 0.35\% & & 766,649 & 1.53\% & & 49,058,351 & 98.12 & Var & 17 \\
\hline \multirow[t]{2}{*}{18} & Total Tax Exempt Clark County & & & & \$ & 150,000,000 & \$ & 150,000,000 & \$ & 481,825 & 0.32\% & \$ & 8,358,289 & 5.57\% & \$ & 141,159,886 & 94.11 & & 18 \\
\hline & Tax Exempt Big Bear & & & & & & & & & & & & & & & & & & \\
\hline 19 & 1993 Series A, Due 2028 & 12/01/93 & 12/01/28 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 175,000 & 0.35\% & \$ & 656,763 & 1.31\% & \$ & 49,168,237 & 98.34 & Var & 19 \\
\hline 20 & Term Facility [2] & 03/15/12 & 03/25/22 & Var & \$ & 150,000,000 & \$ & 150,000,000 & \$ & - & 0.00\% & \$ & 552,300 & 0.37\% & \$ & 149,447,700 & 99.63 & Var & 20 \\
\hline \multirow[t]{2}{*}{21} & Total Debt Capital & & & & \$ & 2,607,500,000 & \$ & 2,607,500,000 & & 20,129,950 & 0.77\% & \$ & 41,516,510 & 1.59\% & \$ & 2,545,853,540 & 97.64 & & 21 \\
\hline & Based on Company records. A commercial paper program was & ated in Octobe & 2002 and is & ked by \(\$ 50 \mathrm{~m}\) & millio & of the term fac & & & & & & & & & & & & & \\
\hline
\end{tabular}

\title{
SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA EMBEDDED COST OF LONG-TERM DEBT AVERAGE ESTIMATED TEST YEAR 2021
}

\(\frac{\text { Avg } 2021 \text { Balance [1] }}{\text { (b) }}\) \(\qquad\) \(\frac{\text { Cost }}{(\mathrm{d})}\) Line No.

Fixed Rate
Debentures
3.875\% Notes, Due 2022
8.0\% Debenture, Due 2026
\(3.70 \%\) Notes, Due 2028
\(6.1 \%\) Notes, Due 2041
\(4.875 \%\) Notes, Due 2043
3.80\% Notes, Due 2046
\(4.15 \%\) Notes, Due 2049
\(4.45 \%\) Notes, Due 2050
\(4.60 \%\) Notes, Due 2050
4.90\% Notes, Due 2051
Total Debentures
\begin{tabular}{rr} 
\$ & \(248,174,120\) \\
& \(73,985,022\) \\
& \(297,610,248\) \\
& \(124,861,379\) \\
& \(247,591,103\) \\
& \(296,092,154\) \\
& \(296,434,854\) \\
& \(296,635,567\) \\
& \(296,606,570\) \\
& \(37,072,412\) \\
\hline\(\$ 2,215,063,429\) \\
\hline
\end{tabular}
\begin{tabular}{l}
1 \\
\(\square\) \\
\hline
\end{tabular}
\begin{tabular}{lll}
\(4.88 \%\) & \(\$\) \\
\(8.38 \%\) & \\
\(3.83 \%\) & \\
\(6.11 \%\) & \\
\(4.95 \%\) & \\
\(3.88 \%\) & \\
\(4.23 \%\) & \\
\(4.52 \%\) & \\
\(4.67 \%\) & \\
\(4.97 \%\) & \\
\hline \(4.64 \%\) &
\end{tabular}
\begin{tabular}{rrr}
\(\$\) & \(12,119,835\) & 1 \\
& \(6,196,447\) & 2 \\
& \(11,410,856\) & 3 \\
& \(7,628,710\) & 4 \\
& \(12,247,390\) & 5 \\
& \(11,491,641\) & 6 \\
& \(12,527,130\) & 7 \\
& \(13,406,937\) & 8 \\
& \(13,854,239\) & 9 \\
& \(1,843,826\) & 10 \\
\hline\(\$\) & \(102,727,010\) & 11 \\
\hline
\end{tabular}

Medium Term Notes
7.78\% Series A, Due 2022
7.92\% Series A, Due 2027
6.76\% Series A, Due 2027

Total Medium-Term Notes
\begin{tabular}{rr}
\(24,988,606\) \\
\(24,904,353\) \\
\(7,500,000\) \\
& \(57,392,958\) \\
\hline
\end{tabular}
\begin{tabular}{rrrr}
\(7.86 \%\) & & \(1,964,104\) & 12 \\
\(8.00 \%\) & & \(1,992,348\) & 13 \\
\(6.76 \%\) & & 507,000 & 14 \\
& & \(\$, 463,453\) \\
& & & 15 \\
\hline
\end{tabular}

Amortization of Loss on Reacquired
Debt
\(\$ \quad(3,823,924)\)
\(-4.49 \%\)
\(\$ \quad 171,862\)
16
Total Fixed Rate Debt
\(\frac{\text { Variable Rate }}{\text { Term Facility }}\)
Total Variable Rate Debt
Total Fixed and Variable Rate Debt
\begin{tabular}{l}
\(\$ \quad 2,268,632,463\) \\
\hline
\end{tabular}
\begin{tabular}{l}
\(4.73 \%\) \\
\hline \hline
\end{tabular}
\(\xlongequal{\$ \quad 107,362,325}\) 17
\(\frac{\text { Variable Rate }}{\text { Term Facility }}\)
\$ \(141,292,475\)
\(3.61 \%\)
\(\$ \quad 5,102,858\)
18
19
20
\(\frac{\text { Southern California Tax Exempt }}{1993 \text { Big Bear IDRB, Series A }}\)
\(\begin{aligned} & \text { \$ 141,292,475 } \\ & \text { \$ 2,409,924,938 }\end{aligned}=\)
\begin{tabular}{lll}
\hline \hline \(3.61 \%\) & & \(\$, 102,858\) \\
\hline \hline
\end{tabular}
20

Clark County Tax Exempt
Variable Rate
2003 Clark County IDRB, Series A
2008 Clark County IDRB, Series A
2009 Clark County IDRB, Series A
Total Clark County Variable Rate Debt

\begin{tabular}{ccrl}
\(2.82 \%\) & \(\$\) & \(1,371,205\) & 22 \\
\(2.99 \%\) & & \(1,409,560\) & 23 \\
\(2.56 \%\) & & \(1,266,501\) & 24 \\
\cline { 3 - 4 } & & & \(4,047,266\) \\
\hline
\end{tabular}

Amortization of Loss (Gain) on Reaquired Debt
\begin{tabular}{|c|c|c|c|c|c|c|}
\hline 1999 Clark County, Series A & \multirow[t]{10}{*}{\$} & \((326,014)\) & -5.74\% & \$ & 18,718 & 26 \\
\hline 1999 Clark County, Series C & & \((444,393)\) & -5.74\% & & 25,515 & 27 \\
\hline 1999 Clark County, Series D & & \((257,222)\) & -5.74\% & & 14,769 & 28 \\
\hline 2003 Clark County, Series C & & \((820,501)\) & -6.00\% & & 49,230 & 29 \\
\hline 2003 Clark County, Series D & & \((979,446)\) & -6.00\% & & 58,767 & 30 \\
\hline 2003 Clark County, Series E & & \((129,373)\) & -6.00\% & & 7,762 & 31 \\
\hline 2004 Clark County, Series A & & \((779,382)\) & -7.69\% & & 59,952 & 32 \\
\hline 2004 Clark County, Series B & & 2,790,466 & -8.05\% & & \((224,736)\) & 33 \\
\hline 2005 Clark County, Series A & & \((849,968)\) & -7.02\% & & 59,647 & 34 \\
\hline 2006 Clark County, Series A & & 3,710,586 & -6.59\% & & \((244,654)\) & 35 \\
\hline \multirow[t]{2}{*}{Total Amortization of Loss (Gain) on Retirement of Debt} & & & & & & \\
\hline & \$ & 1,914,753 & -9.14\% & \$ & \((175,029)\) & 36 \\
\hline Total Fixed and Variable Rate Debt & \$ & 197,098,103 & 2.66\% & \$ & 5,250,411 & 37 \\
\hline
\end{tabular}
[1] Net proceeds based off of the forecasted balances
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multicolumn{15}{|c|}{SOUTHWEST GAS CORPORATION NORTHERN CALIFORNIA LONG-TERM DEBT AT DECEMBER 31, 2020 AND 2021} \\
\hline \multirow[t]{2}{*}{Line No.} & \multirow[t]{2}{*}{\(\frac{\text { Description }}{\text { (a) }}\)} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\begin{array}{c}
\text { Net Proceeds } \\
\text { at Dec. 31, } 2020[1]
\end{array} \\
\text { (b) }
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\frac{\begin{array}{c}
\text { Retirements } \\
\text { and Redemptions }
\end{array}}{\text { (c) }}
\]}} & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{\begin{tabular}{c}
\begin{tabular}{c} 
Annual \\
Amortization
\end{tabular} \\
\hline (d)
\end{tabular}}} & \multicolumn{2}{|r|}{\multirow[t]{2}{*}{Net New Financings (e)}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\begin{array}{c}
\text { Net Proceeds } \\
\text { at Dec. 31, 2021 }
\end{array} \\
\text { (f) }
\end{gathered}
\]}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{\[
\begin{gathered}
\begin{array}{c}
\text { Average } \\
\text { Net Proceeds }
\end{array} \\
\hline(\mathrm{g})
\end{gathered}
\]}} & \multirow[t]{2}{*}{Line No.} \\
\hline & & & & & & & & & & & & & & \\
\hline \multicolumn{15}{|c|}{\multirow[t]{2}{*}{Fixed Rate Debentures}} \\
\hline & & & & & & & & & & & & & & \\
\hline 1 & 3.875\% Notes, Due 2022 & \$ & 246,957,952 & \$ & - & \$ & 2,432,335 & \$ & - & \$ & 249,390,287 & \$ & 248,174,120 & 1 \\
\hline 2 & 8.0\% Debenture, Due 2026 & & 73,886,799 & & - & & 196,447 & & - & & 74,083,246 & & 73,985,022 & 2 \\
\hline 3 & 3.70\% Notes, Due 2028 & & 297,454,820 & & - & & 310,856 & & - & & 297,765,676 & & 297,610,248 & 3 \\
\hline 4 & 6.1\% Notes, Due 2041 & & 124,859,524 & & - & & 3,710 & & - & & 124,863,233 & & 124,861,379 & 4 \\
\hline 5 & 4.875\% Notes, Due 2043 & & 247,561,157 & & - & & 59,890 & & & & 247,621,048 & & 247,591,103 & 5 \\
\hline 6 & 3.80\% Notes, Due 2046 & & 296,046,334 & & - & & 91,641 & & - & & 296,137,975 & & 296,092,154 & 6 \\
\hline 7 & 4.15\% Notes, Due 2049 & & 296,401,157 & & - & & 67,395 & & - & & 296,468,552 & & 296,434,854 & 7 \\
\hline 8 & 4.45\% Notes, Due 2050 & & 296,607,099 & & - & & 56,937 & & - & & 296,664,036 & & 296,635,567 & 8 \\
\hline 9 & 4.60\% Notes, Due 2050 & & 296,579,450 & & - & & 54,239 & & - & & 296,633,689 & & 296,606,570 & 9 \\
\hline 10 & 4.90\% Notes, Due 2051 & & - & & - & & 6,326 & & - & & 296,579,217 & & 37,072,412 & 10 \\
\hline 11 & Total Debentures & & 2,176,354,293 & \$ & - & \$ & 3,279,775 & \$ & - & & 2,476,206,959 & & 2,215,063,429 & 11 \\
\hline \multicolumn{15}{|c|}{Medium Term Notes} \\
\hline 12 & 7.78\% Series A, Due 2022 & \$ & 24,979,112 & \$ & - & \$ & 18,988 & \$ & - & \$ & 24,998,100 & \$ & 24,988,606 & 12 \\
\hline 13 & 7.92\% Series A, Due 2027 & & 24,897,996 & & - & & 12,713 & & - & & 24,910,709 & & 24,904,353 & 13 \\
\hline 14 & 6.76\% Series A, Due 2027 & & 7,500,000 & & - & & - & & - & & 7,500,000 & & 7,500,000 & 14 \\
\hline 15 & Total Medium-Term Notes & \$ & 57,377,108 & \$ & - & \$ & 31,701 & \$ & - & \$ & 57,408,809 & \$ & 57,392,958 & 15 \\
\hline 16 & Unamortized (Loss) on Reacquired Debt & \$ & \((3,909,855)\) & \$ & - & \$ & 171,862 & \$ & - & \$ & \((3,737,993)\) & \$ & \((3,823,924)\) & 16 \\
\hline 17 & Total Fixed Rate Debt & \multicolumn{2}{|l|}{\$ 2,229,821,545} & \$ & - & \$ & 3,483,338 & \$ & - & \multicolumn{2}{|l|}{\$ 2,529,877,775} & \multicolumn{2}{|l|}{\$ 2,268,632,463} & 17 \\
\hline & Variable Rate & & & & & & & & & & & & & \\
\hline 18 & Term Facility [2] & & 144,831,614 & \multirow[t]{2}{*}{\$} & - & \$ & 132,834 & \$ & 5,265,668 & & \$ 149,964,448 & & \$ 141,292,475 & 18 \\
\hline 19 & \multirow[t]{2}{*}{Southern California Tax Exempt 1993 Big Bear IDRB, Series A} & \multirow{2}{*}{\$} & & & & & & & & & & & & 19 \\
\hline 20 & & & 49,735,624 & & - & & 67,747 & & - & & 49,803,371 & & 49,769,498 & 20 \\
\hline 21 & Total Variable Rate Debt & \$ & 194,567,238 & \$ & - & \$ & 200,580 & \$ & 5,265,668 & \$ & 199,767,819 & \$ & 191,061,973 & 21 \\
\hline \multirow[t]{2}{*}{22} & Total Fixed and Variable Rate Debt & \multicolumn{2}{|l|}{\$ 2,424,388,784} & \multicolumn{2}{|l|}{\$} & \multicolumn{2}{|r|}{3,683,919} & \multicolumn{2}{|r|}{5,265,668} & \multicolumn{2}{|l|}{\$ 2,729,645,594} & \multicolumn{2}{|l|}{\$ 2,459,694,436} & 22 \\
\hline & \multicolumn{14}{|l|}{Clark County Tax Exempt} \\
\hline & \multicolumn{14}{|l|}{Variable Rate} \\
\hline 23 & 2003 Clark County IDRB, Series A & \$ & 48,585,799 & \$ & - & \$ & 119,085 & \$ & - & \$ & 48,704,884 & \$ & 48,645,341 & 23 \\
\hline 24 & 2008 Clark County IDRB, Series A & & 47,108,072 & & - & & 185,058 & & - & & 47,293,130 & & 47,200,601 & 24 \\
\hline 25 & 2009 Clark County IDRB, Series A & & 49,547,121 & & - & & 41,578 & & - & & 49,588,699 & & 49,567,910 & 25 \\
\hline 26 & Total Variable Rate Debt & \$ & 145,240,992 & \$ & - & \$ & 345,720 & \$ & - & \$ & 145,586,712 & \$ & 145,413,852 & 26 \\
\hline & \multicolumn{14}{|l|}{Gain (Loss) on Unamortized Balances on Retirement of Debt} \\
\hline 27 & 1999 Clark County, Series A & \$ & (335,373) & \$ & - & \$ & 18,718 & \$ & - & \$ & \((316,654)\) & \$ & \((326,014)\) & 27 \\
\hline 28 & 1999 Clark County, Series C & & \((457,150)\) & & - & & 25,515 & & - & & \((431,635)\) & & \((444,393)\) & 28 \\
\hline 29 & 1999 Clark County, Series D & & \((264,606)\) & & - & & 14,769 & & - & & (249,837) & & \((257,222)\) & 29 \\
\hline 30 & 2003 Clark County, Series C & & \((845,116)\) & & - & & 49,230 & & - & & \((795,886)\) & & \((820,501)\) & 30 \\
\hline 31 & 2003 Clark County, Series D & & \((1,008,829)\) & & - & & 58,767 & & - & & \((950,063)\) & & \((979,446)\) & 31 \\
\hline 32 & 2003 Clark County, Series E & & \((133,254)\) & & - & & 7,762 & & - & & \((125,492)\) & & \((129,373)\) & 32 \\
\hline 33 & 2004 Clark County, Series A & & \((809,359)\) & & - & & 59,952 & & - & & \((749,406)\) & & \((779,382)\) & 33 \\
\hline 34 & 2004 Clark County, Series B & & 2,902,833 & & - & & \((224,736)\) & & - & & 2,678,098 & & 2,790,466 & 34 \\
\hline 35 & 2005 Clark County, Series A & & \((879,792)\) & & - & & 59,647 & & - & & \((820,145)\) & & \((849,968)\) & 35 \\
\hline 36 & 2006 Clark County, Series A Total Unamortizated Gain (Loss) on & & 3,832,913 & & - & & \((244,654)\) & & - & & 3,588,259 & & 3,710,586 & 36 \\
\hline 37 & Retirement of Debt & \$ & 2,002,267 & \$ & - & \$ & \((175,029)\) & \$ & - & \$ & 1,827,239 & \$ & 1,914,753 & 37 \\
\hline \multirow[t]{2}{*}{38} & Total Fixed and Variable Rate Debt & \$ & 147,243,260 & \$ & - & \$ & 170,691 & \$ & - & \$ & 147,413,951 & \$ & 147,328,605 & 38 \\
\hline & \multicolumn{14}{|l|}{[1] Net Proceeds are based off of the forecasted balances. [2] Annual Amortization includes \(\$ 9,375\) annual fee} \\
\hline
\end{tabular}
SOUTHWEST GAS CORPORATION
ORIGINAL NET PROCEEDS OF ISSUES OUTSTANDING[1]
AT DECEMBER 31, 2021
\begin{tabular}{|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|c|}
\hline \multirow[t]{2}{*}{\[
\begin{aligned}
& \text { Line } \\
& \text { No. } \\
& \hline
\end{aligned}
\]} & \multirow[t]{2}{*}{Description} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Origination } \\
\text { Date } \\
\hline
\end{gathered}
\]} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Maturity } \\
\text { Date } \\
\hline
\end{gathered}
\]} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Coupon } \\
\text { Rate } \\
\hline
\end{gathered}
\]} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Offered}} & \multicolumn{2}{|l|}{\multirow[t]{2}{*}{Gross Proceeds}} & \multicolumn{3}{|l|}{Underwriter's Commission and Discounts} & \multicolumn{3}{|l|}{Debt and Issuance Expense} & \multicolumn{3}{|l|}{Net Proceeds} & \multirow[t]{2}{*}{Cost of Money} & \multirow[t]{2}{*}{\[
\begin{gathered}
\text { Line } \\
\text { No. } \\
\hline
\end{gathered}
\]} \\
\hline & & & & & & & & & & Amount & \begin{tabular}{r} 
Percent \\
of Gross \\
Proceeds \\
\hline
\end{tabular} & & Amount & \begin{tabular}{c} 
Percent \\
of Gross \\
Proceeds \\
\hline
\end{tabular} & & Amount & \[
\begin{array}{r}
\text { Per } \\
\$ 100 \\
\text { Unit } \\
\hline
\end{array}
\] & & \\
\hline & (a) & (b) & (c) & (d) & & (e) & & (f) & & (g) & (h) & & (i) & (j) & & (k) & (I) & (m) & \\
\hline \multicolumn{20}{|l|}{Debentures} \\
\hline 1 & 3.875\% Notes, Due 2022 & 03/23/12 & 04/01/22 & 3.875\% & & 250,000,000 & & 250,000,000 & & 1,710,000 & 0.68\% & & 22,139,458 & 8.86\% & & 226,150,542 & 90.46 & 5.10\% & 1 \\
\hline 2 & 8.0\% Debenture, Due 2026 & 08/01/96 & 08/01/26 & 8.000\% & & 75,000,000 & & 75,000,000 & & 894,750 & 1.19\% & & 4,998,668 & 6.66\% & & 69,106,582 & 92.14 & 9.13\% & 2 \\
\hline 3 & 3.70\% Notes, Due 2028 & 03/15/18 & 04/01/28 & 3.700\% & & 300,000,000 & & 300,000,000 & & 2,505,000 & 0.84\% & & 836,902 & 0.28\% & & 296,658,098 & 98.89 & 3.83\% & 3 \\
\hline 4 & 6.1\% Notes, Due 2041 & 02/15/11 & 02/15/41 & 6.100\% & & 125,000,000 & & 125,000,000 & & 0 & 0.00\% & & 167,358 & 0.13\% & & 124,832,642 & 99.87 & 6.11\% & 4 \\
\hline 5 & 4.875\% Notes, Due 2043 & 10/04/13 & 10/01/43 & 4.875\% & & 250,000,000 & & 250,000,000 & & 2,382,500 & 0.95\% & & 413,165 & 0.17\% & & 247,204,335 & 98.88 & 4.95\% & 5 \\
\hline 6 & 3.80\% Notes, Due 2046 & 09/29/16 & 10/01/46 & 3.800\% & & 300,000,000 & & 300,000,000 & & 3,531,000 & 1.18\% & & 775,217 & 0.26\% & & 295,693,783 & 98.56 & 3.88\% & 6 \\
\hline 7 & 4.15\% Notes, Due 2049 & 05/31/19 & 06/01/49 & 4.150\% & & 300,000,000 & & 300,000,000 & & 2,778,000 & 0.93\% & & 922,000 & 0.31\% & & 296,300,000 & 98.77 & 4.23\% & 7 \\
\hline 8 & 4.45\% Notes, Due 2050 & 06/01/20 & 06/01/50 & 4.450\% & & 300,000,000 & & 300,000,000 & & 2,625,000 & 0.88\% & & 800,000 & 0.27\% & & 296,575,000 & 98.86 & 4.52\% & 8 \\
\hline 9 & 4.60\% Notes, Due 2050 & 12/01/20 & 12/01/50 & 4.600\% & & 300,000,000 & & 300,000,000 & & 2,625,000 & 0.88\% & & 800,000 & 0.27\% & & 296,575,000 & 98.86 & 4.67\% & 9 \\
\hline 10 & 4.90\% Notes, Due 2051 & 11/15/21 & 12/01/51 & 4.900\% & & 300,000,000 & & 300,000,000 & & 2,625,000 & 0.88\% & & 800,000 & 0.27\% & & 296,575,000 & 98.86 & 4.97\% & 10 \\
\hline \multirow[t]{2}{*}{11} & Total Debentures & & & & & 2,500,000,000 & & 2,500,000,000 & & 21,676,250 & 0.87\% & & 32,652,768 & 1.31\% & & 2,445,670,982 & 97.83 & & 11 \\
\hline & Medium Term Notes & & & & & & & & & & & & & & & & & & \\
\hline 12 & 7.78\% MTN, Due 2022 & 02/03/97 & 02/03/22 & 7.780\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 33,400 & 0.13\% & & 24,779,100 & 99.12 & 7.86\% & 12 \\
\hline 13 & 7.92\% MTN, Due 2027 & 06/04/97 & 06/04/27 & 7.920\% & & 25,000,000 & & 25,000,000 & & 187,500 & 0.75\% & & 45,761 & 0.18\% & & 24,766,739 & 99.07 & 8.00\% & 13 \\
\hline 14 & 6.76\% MTN, Due 2027 & 09/23/97 & 09/24/27 & 6.760\% & & 7,500,000 & & 7,500,000 & & 46,875 & 0.63\% & & 17,228 & 0.23\% & & 7,435,897 & 99.15 & 6.88\% & 14 \\
\hline \multirow[t]{2}{*}{15} & Total Medium Term Notes & & & & \$ & 57,500,000 & \$ & 57,500,000 & \$ & 421,875 & 0.73\% & \$ & 96,389 & 0.17\% & \$ & 56,981,736 & 99.10 & & 15 \\
\hline & Tax Exempt Clark County & & & & & & & & & & & & & & & & & & \\
\hline 16 & 2003 Series A, Due 2038 & 03/25/03 & 03/01/38 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 128,076 & 0.26\% & \$ & 2,820,818 & 5.64\% & \$ & 47,051,106 & 94.10 & Var & 16 \\
\hline 17 & 2008 Series A, Due 2038 & 09/24/08 & 03/01/38 & Var & & 50,000,000 & & 50,000,000 & & 178,749 & 0.36\% & & 4,770,822 & 9.54\% & & 45,050,429 & 90.10 & Var & 17 \\
\hline 18 & 2009 Series A, Due 2039 & 12/09/09 & 12/01/39 & Var & & 50,000,000 & & 50,000,000 & & 175,000 & 0.35\% & & 766,649 & 1.53\% & & 49,058,351 & 98.12 & Var & 18 \\
\hline \multirow[t]{2}{*}{19} & Total Tax Exempt Clark County & & & & \$ & 150,000,000 & \$ & 150,000,000 & \$ & 481,825 & 0.32\% & \$ & 8,358,289 & 5.57\% & \$ & 141,159,886 & 94.11 & & 19 \\
\hline & Tax Exempt Big Bear & & & & & & & & & & & & & & & & & & \\
\hline 20 & 1993 Series A, Due 2028 & 12/01/93 & 12/01/28 & Var & \$ & 50,000,000 & \$ & 50,000,000 & \$ & 175,000 & 0.35\% & \$ & 656,763 & 1.31\% & \$ & 49,168,237 & 98.34 & Var & 20 \\
\hline 21 & Term Facility [2] & 03/15/12 & 03/25/22 & Var & \$ & 150,000,000 & \$ & 150,000,000 & \$ & - & 0.00\% & \$ & 552,300 & 0.37\% & \$ & 149,447,700 & 99.63 & Var & 21 \\
\hline \multirow[t]{2}{*}{22} & Total Debt Capital & & & & \$ & 2,907,500,000 & \$ & 2,907,500,000 & \$ & 22,754,950 & 0.78\% & \$ & 42,316,510 & 1.46\% & \$ & 2,842,428,540 & 97.76 & & 22 \\
\hline & \begin{tabular}{l}
Based on Company records. \\
A commercial paper program was
\end{tabular} & ted in Octobe & 2002 and is & ed by \(\$ 50\) & millio & of the term fac & & & & & & & & & & & & & \\
\hline
\end{tabular}

\title{
CHAPTER 24B Cost of Equity
}

\section*{Company Witness: Robert B. Hevert}

\section*{SOUTHWEST GAS CORPORATION SUMMARY OF COST OF COMMON EQUITY MODEL RESULTS}

The Company is requesting a 10.50 percent return on common equity (ROE). Company witness, Robert B. Hevert, considered the results of four widely accepted analytical approaches using a proxy group of six natural gas distribution companies in determining the Company's requested ROE. The approaches used to develop the ROE recommendation included: (1) the Constant Growth form of the Discounted Cash Flow ("DCF") model; (2) the traditional and "Empirical" forms of the Capital Asset Pricing Model ("CAPM" \& "ECAPM"): (3) the Bond Yield Plus Risk Premium approach; and (4) the Expected Earnings method. In addition to the methodologies used, consideration was given to a range of factors, both quantitative and qualitative, in arriving at an ROE recommendation for Southwest Gas Corporation.

Summary of DCF Model Results
\begin{tabular}{||l|c|c||}
\hline & Median & Median High \\
\hline 30-Day Average & \(9.06 \%\) & \(11.32 \%\) \\
\hline 90-Day Average & \(9.10 \%\) & \(11.36 \%\) \\
\hline 180-Day Average & \(9.17 \%\) & \(11.44 \%\) \\
\hline
\end{tabular}

\section*{Summary of CAPM Results}
\begin{tabular}{||l|c|c||}
\hline \hline \multicolumn{3}{|c|}{} \\
Average Bloomberg Beta Coefficient \\
\hline Current 30-Year Treasury (2.63\%) & \begin{tabular}{c} 
Bloomberg \\
Derived \\
Premium
\end{tabular} & \begin{tabular}{c} 
Value Line \\
Derived \\
Market Risk \\
Premium
\end{tabular} \\
\hline Near Term Projected 30-Year Treasury (2.70\%) & \(9.58 \%\) & \(9.53 \%\) \\
\hline Average Value Line Beta Coefficient \\
\hline Current 30-Year Treasury (2.63\%) & \(10.90 \%\) & \(10.83 \%\) \\
\hline Near Term Projected 30-Year Treasury \((2.70 \%)\) & \(10.97 \%\) & \(10.90 \%\) \\
\hline \hline
\end{tabular}

\title{
SOUTHWEST GAS CORPORATION SUMMARY OF COST OF COMMON EQUITY MODEL RESULTS
}

\section*{Summary of ECAPM Results}
\begin{tabular}{||l|c|c||}
\hline \hline \multicolumn{3}{|c|}{} \\
Average Bloomberg Beta Coefficient & \begin{tabular}{c} 
Bloomberg \\
Derived \\
Market Risk \\
Premium
\end{tabular} & \begin{tabular}{c} 
Value Line \\
Derived \\
Market Risk \\
Premium
\end{tabular} \\
\hline Current 30-Year Treasury (2.63\%) & \(10.91 \%\) & \(10.84 \%\) \\
\hline Near Term Projected 30-Year Treasury (2.70\%) & \(10.98 \%\) & \(10.91 \%\) \\
\hline \multicolumn{3}{|c|}{ Average Value Line Beta Coefficient } \\
\hline Current 30-Year Treasury (2.63\%) & \(11.89 \%\) & \(11.82 \%\) \\
\hline Near Term Projected 30-Year Treasury \((2.70 \%)\) & \(11.96 \%\) & \(11.89 \%\) \\
\hline \hline
\end{tabular}

\section*{Summary of Bond Yield Plus Risk Premium Results}
\begin{tabular}{|l|c||}
\hline \multicolumn{1}{|c|}{ Treasury Yield } & \begin{tabular}{c} 
Return on \\
Equity
\end{tabular} \\
\hline Current 30-Year Treasury (2.63\%) & \(9.87 \%\) \\
\hline Near Term Projected 30-Year Treasury (2.70\%) & \(9.87 \%\) \\
\hline Long Term Projected 30-Year Treasury (3.70\%) & \(10.01 \%\) \\
\hline \hline
\end{tabular}

\section*{Summary of Expected Earnings Results}
\begin{tabular}{||l|c||}
\hline & Return on Equity \\
\hline Mean & \(10.83 \%\) \\
\hline Median & \(10.85 \%\) \\
\hline
\end{tabular}~~~~


[^0]:    [1] Annual Average CPI - All Urban Customers

[^1]:    [1] The South Lake Tahoe ratemaking jurisdiction is a part of the Northern Nevada division.
    [2] The NND Allocation to NCA is calculated on WP Ch 16, Sh 1
    [3] Monthly Operating Report for December 2018. No additional employees are projected to be added for the test year.

[^2]:    [1] See WP Ch 17 Table of Contents columns (c) \& (d) for references.
    [2] Chapter 17 Workpapers

[^3]:    [1] See WP Ch 17 Table of Contents columns (c) \& (d) for references.
    [2] Chapter 17 Workpapers

[^4]:    Benefits Cost Increase Per Year
    Average Benefits Cost Increase 2012-2018 Benefits Cost Increase Per Year Excluding P Benefits Cost Increase Per Year Excluding Pension and Medic:
    Average Non-Pension Benefits Cost Increase 2012-2018

