Company: Southern California Gas Company (U 904 G)
Proceeding: 2023 Cost ofCapital
Application: A.22-04-____
Exhibit: SCG-02

SOUTHERN CALIFORNIA GAS COMPANY (U 904 G)

PREPARED DIRECT TESTIMONY OF SHIRLEY ARAZI

(AUTHORIZED CAPITAL STRUCTURE AND EMBEDDED COST OF DEBT AND PREFERRED EQUITY)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

April 2022

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I. INTRODUCTION

My testimony presents a proposal for forecasted embedded costs of long-term debt[1] and preferred stock and an updated capital structure for Southern California Gas Company (SoCalGas) for test year (TY) 2023. As shown in Table 1A below, SoCalGas recommends setting the embedded cost of debt and preferred stock at 3.89% and 6.00%, respectively. The forecasted cost of debt is 34 basis points lower than the currently authorized amount, which takes into account $1,650 million of low interest long term debt that SoCalGas has issued since the last cost of capital proceeding was decided.[2]

TABLE 1A – CURRENT AND PROPOSED AUTHORIZED EMBEDDED COSTS

Embedded Cost Component	Current Authorized[3]	Proposed 2023	Change (basis points[4])
Long-Term Debt	4.23%	3.89%	-34 bps
Preferred Equity	6.00%	6.00%	0 bps

The proposed capital structure refers to the capital ratios of three components: (1) long-term debt, (2) preferred equity (*i.e.*, preferred stock), and (3) common equity. As shown in Table 1B below, SoCalGas recommends an authorized capital structure of 45.60% long-term debt,

[1] The terms "debt" and "long-term debt" are used interchangeably, unless specifically noted otherwise. Long-term debt is defined as debt that is due more than one year in the future. This includes the current portion of long-term debt and excludes short-term debt (debt due within one year).
[2] Decision (D.)19-12-056.
[3] D.19-12-056 at 2.
[4] A one, ten, or 100 basis point change equals a 0.01%, 0.1%, or 1.0% change, respectively. "Basis points" is abbreviated as bps in the tables.

0.40% preferred stock, and 54.00% common equity. This proposed capital structure is necessary for SoCalGas to maintain its strong credit profile for efficient access to debt and equity markets as well as to fund its robust, ongoing capital investment program.

TABLE 1B – CURRENT AND PROPOSED AUTHORIZED CAPITAL STRUCTURE

Capital Structure Component	Current Authorized[5]	Proposed 2023
Long-Term Debt	45.60%	45.60%
Preferred Equity	2.40%	0.40%
Common Equity	52.00%	54.00%
Total	100.00%	100.00%

The long-term debt ratio of a utility's authorized ratemaking capital structure represents a measurement of a company's financial leverage, indicative of the amount of capital funded by debt. A high long-term debt ratio increases the risk around debt repayment to lenders and, all other things being equal, will result in higher costs of capital over the long-term. Conversely, too low long-term debt ratio also is not preferred as it does not represent sufficient use of a tax-deductible source of financing that is priced lower than the cost of equity. Preferred equity is a source of capital that is issued in shares and pays dividends, like common equity, but preferred equity dividends are paid at an agreed upon amount at regular intervals. Preferred equity generally has a lower cost than common equity, but higher cost than long-term debt.[6]

The common equity component represents the amount of capital funded by stockholders. The common equity ratio reflects how a company is financing its cash needs and shows the percentage of assets on which the stockholders have a claim. A high common equity ratio

[5] D.19-12-056 at 2.

[6] Credit rating agencies generally treat preferred stock as a hybrid of debt and equity, assigning a percentage of equity content in accordance with the security's features.

lowers financial risk by reducing the reliance on long-term debt.

The capital ratios, in conjunction with associated forecasted embedded costs, determine the weighted-average cost of capital or authorized Rate of Return (ROR). In the following sections, I discuss the derivation of the embedded costs for each of long-term debt and preferred equity, as well as the capital structure components for long-term debt, preferred equity, and common equity.

II. LONG-TERM DEBT

A. Embedded Cost of Long-Term Debt

The term "embedded costs" refers to the costs associated with the issuance and servicing of debt, expressed as a percentage of the net proceeds received from the debt issuances. The embedded cost of long-term debt, thereby includes all the costs (including historical costs of past long-term debt issuances currently outstanding) associated with the issuance and servicing of long-term debt, expressed as a percentage of the net proceeds received from long-term debt issuances. As shown in Table 2, SoCalGas proposes an embedded cost of Long-Term Debt of 3.89%, which is a 34-basis point reduction from the currently authorized embedded cost of debt.

TABLE 2 – CURRENT AND PROPOSED AUTHORIZED EMBEDDED COSTS

Embedded Cost Component	Current Authorized[7]	Proposed 2023
Long-Term Debt	4.23%	3.89%

Consistent with previous cost of capital proceedings, SoCalGas recommends setting the authorized cost of debt equal to the forecasted embedded cost of debt at the end of test year 2023. In Appendix A, I have included a detailed derivation of the embedded cost of debt forecast. SoCalGas plans to raise approximately $2.2 billion in 2022-2023 of new long-term

[7] D.19-12-056 at 2.

debt to support its 5-year capital expenditure plan of approximately $9.8 billion for 2022-2026. A summary of SoCalGas' planned long-term debt issuances is shown in Table 3.

TABLE 3 – FORECASTED[8] LONG-TERM DEBT ISSUANCES

Expected Issue Date	Principal	Term (years)	30-year Treasury	Spread (bps)	Forecasted Coupon Rate
2022[9]	$700,000,000	5	N/A	N/A	2.95%
2022	$400,000,000	30	2.70%	110	3.80%
2023	$1,100,000,000	30	3.08%	110	4.18%
2022-2023 Total	**$2,200,000,000**				

The embedded cost of debt calculation uses the April 2022 IHS Markit Global Insight forecast of the 30-year Treasury bond yield for 2022 and 2023, plus an estimation of a SoCalGas-specific credit spread. A concession spread is added to reflect current market conditions. That credit spread equates to 110 basis points.

The Commission has stated that, "[t]he latest available interest rate forecast should be used to determine embedded long-term debt and preferred stock costs in ROE proceedings."[10] In accordance with that guidance, SoCalGas plans to submit an embedded cost update during the course of this proceeding that reflects the latest available forecast as well as any changes to SoCalGas' Long-Term Debt forecast that may take place between the preparation of this testimony and the submittal of the update.

B. Long-Term Debt Ratio

SoCalGas proposes an authorized Long-Term Debt ratio of 45.60%, which aligns with the

[8] The timing and amounts of the forecast provided herein are subject to change based on market conditions and management's discretion.

[9] Reflects actual issuance amount, term, and rate for Long-Term Unsecured Note issued in March 2022.

[10] *See* D.07-12-049, *mimeo*, at 56 (Conclusion of Law 33).

five-year currently authorized Long-Term Debt ratio. The proposed 45.60% ratio aligns with the average recorded long-term debt ratio of 45.49%, as shown in Table 4.

TABLE 4 – RECORDED LONG-TERM DEBT RATIO

Recorded[11]	2017	2018	2019	2020	2021	2017-2021 Average	Proposed 2023
Long-Term Debt	43.47%	44.80%	44.50%	48.05%	46.65%	45.49%	**45.60%**

The proposed authorized Long-Term Debt ratio supports SoCalGas' expected level of capital expenditures and is intended to maintain SoCalGas' strong "A" credit rating, as further explained in the sections below.

1. Capital Expenditures

SoCalGas' capital expenditure forecast is expected to exceed cash flow from operations over the next five years. Over that same period, SoCalGas anticipates that its capital spending will average approximately $2 billion per year. SoCalGas' investment program reflects significant investments in large-scale capital projects to support safety, reliability, such as compressor station modernization projects, integrity management programs, and other pipeline safety work. Though these investments are crucial for providing safe and reliable service to customers, credit rating agencies such as Fitch cautions that "Although Fitch views rate base-accretive investments positively, they will pressure credit metrics temporarily."[12] This sentiment was echoed by Standard and Poor's (S&P), "The company's elevated utility capital spending plan prioritizes infrastructure upgrades to enhance its safety and reliability…Although its credit-supportive environment ensures the utility will recover its costs, the increase in its expenditure

[11] Represents capital structures recorded at year-end.

[12] Source: Fitch Ratings, Rating Action Commentary, "Fitch Affirms Sempra and Subsidiaries; Rating Outlook Stable," (April 8, 2021).

will likely stress its metrics over the short term."[13] In addition, Moody's also commented on the Company's significant capital expenditures in their most recent report, "… a strong financial position is an important characteristic for managing environmental and social risks amid the utility's elevated capital expenditure program."[14]

As part of SoCalGas' 2019 TY General Rate Case (GRC)[15], the Commission approved capital investments to support SoCalGas' operations to safely and reliably serve its customers. As a result, SoCalGas plans to raise approximately $1.1 billion in 2022 and $1.1 billion in 2023 of new long-term debt, as shown in Table 3. S&P highlighted the importance of SoCalGas' financing need in its latest credit opinion, "…because of its robust capital spending, we expect SoCalGas to generate negative discretionary cash flow, which will necessitate consistent access to the capital markets."[16] SoCalGas expects its proposed long-term debt ratio to allow it to maintain consistent access to the capital markets and to obtain new debt at low prices on behalf of ratepayers.

2. Authorized Capital Structure Should Be Credit Supportive

SoCalGas manages its actual capitalization in a manner that supports and maintains its current "A" credit rating. An optimal capital structure supports a strong credit rating, resulting in lower borrowing costs for the utility and, ultimately, ratepayers. This optimal capital structure involves a blend of long-term debt and common equity financing. Long-Term Debt is normally less expensive than Common and Preferred Equity, due to its tax advantage and lower risk. However, as further explained below, there are limits to this benefit because a higher long-term

[13] Source: S&P Global Ratings, Ratings Direct, "Southern California Gas Co.," (May 14, 2021).
[14] Source: Moody's, Credit Opinion: "Southern California Gas Company," (January 4, 2022). Moody's "A2" rating is equivalent to "A."
[15] D.19-09-051.
[16] Source: S&P Global Ratings, Ratings Direct, "Southern California Gas Co.," (May 14, 2021).

debt ratio would degrade SoCalGas' credit profile, which may result in increased financial risk and ultimately a credit rating downgrade.[17]

In an environment of significant business risks, as described in Exhibit SCG-03 (Ng), it is crucial to manage financial risk. Financial risk can be effectively mitigated by managing debt levels, such that debt relative to total capitalization does not exceed thresholds established by the credit rating agencies.

Historically,[18] SoCalGas consistently operated at an *actual* capital structure that relies on less long-term debt than its *authorized* capital structure. However, following the decision in SoCalGas' 2020 Cost of Capital filing and increasing debt to fund a robust capital expenditure plan (discussed above), SoCalGas' actual long-term debt ratio rose above its current 45.6% authorized level and 2019 actual level of 44.50%. As SoCalGas' updated actual long-term debt ratio increased to above its currently authorized capital structure level, the credit rating agencies have taken notice and implemented negative action. In the second quarter of 2020, Moody's downgraded SoCalGas' credit rating to A2 from A1. Furthermore, following the downgrade, the debt ratio continued to increase, specifically, the 2020 ending capital structure included a debt ratio of 48.05% or 245 basis points above authorized and the 2021 ending capital structure included a debt ratio of 46.65% or 105 basis points above authorized. For reference, Moody's stated:

> SoCalGas' downgrade reflects our view that the company is exposed to a regulatory environment that exhibits above average volatility with respect to support and therefore requires a stronger financial profile for its rating…

[17] *See* D.89-11-068, *mimeo*, at 28.

[18] Generally applies for years 2013 through 2019, except for 2016 when SoCalGas' actual long-term debt ratio, was slightly higher (approximately 50 bps) than the authorized ratio. However, the common equity ratio also remained higher than authorized.

> Prospectively, we see a gradual deterioration in the ratio of cash flow to debt such that it remains in the range of 22% and 23%, on a sustainable basis which is more commensurate with the A2 rating.[19]

Moody's goes on to say in reference to SoCalGas' 2020 Cost of Capital Decision:[20]

> An increase in the utility's allowed equity layer would have been more credit supportive because it would have contributed to stronger credit metrics… SoCalGas' robust [actual] equity layer that consistently exceeded its authorized equity layer of 52% helped to mitigate the impact of the growing debt to fund the utility's elevated multi-year rate base expansion plan… After last year's CoC outcome, SoCalGas' actual equity ratio fell to approximately 52% as per its authorized capital structure, which along with the delayed 2019 GRC outcome tempered a material improvement in the utility's credit metrics that remained weak for the credit.[21]

SoCalGas seeks Commission approval of SoCalGas' proposed capital structure to partially offset the increasing debt ratio, support and maintain its current "A" credit rating by minimizing financial risk, strengthen key credit metrics, and optimize the use of debt relative to equity at levels that will ultimately minimize costs to ratepayers in the long-term.

a. Financial Risk

The more a company utilizes debt, the greater the financial risk to both stockholders and debt holders. A rising debt-equity ratio implies that a company has growing fixed obligations to holders of securities that have priority. As those obligations increase, more revenues must be

[19] Source: Moody's, "Rating Action: Moody's downgrades Southern California Gas Company to A2 from A1; stable outlook" (May 29, 2020).
[20] D.19-12-056 at 2.
[21] Source: Moody's, Credit Opinion: "Southern California Gas Company," (June 2, 2020).

committed to these payments, thus increasing risk to the company's initial debt holders. Similarly, the larger the revenues committed to fixed obligation payments, the greater the financial risk exposure to the common stockholders, as they are entitled only to revenues available after all fixed obligation payments are satisfied. While the lower cost of debt relative to equity may be viewed as a way to lower a utility's cost of capital by having the utility issue more Long-Term Debt rather than equity, this can increase the financial risk to the utility. As I discussed earlier, greater financial risk may lead to a credit rating downgrade, which increases actual long-term debt costs and ultimately costs to ratepayers. SoCalGas' proposed Long-Term Debt ratio is intended to keep financial risk low while still supporting an appropriate debt portfolio to help finance SoCalGas' capital expenditures at a reasonable cost to ratepayers.

b. Key Credit Metrics

The major credit rating agencies commonly employ a few key metrics as a means to quantify financial risk, such as interest coverage ratios and funds from operations as a percent of total debt. Together with their assessment of business risk, the major credit rating agencies use these credit metrics to help guide the credit ratings they assign.

The coverage ratio (CR) measures the cash from operations, or funds from operations (FFO) in a given period, available for servicing debt, measured as a ratio to total debt servicing obligations in that period. The ratio is indicative of a company's ability to pay its annual debt servicing obligations, where a higher ratio indicates a stronger ability to service its debt, and thus lower financial risk.

FFO-to-Total Debt is another of the key metrics employed by major credit rating agencies. FFO-to-Total Debt measures FFO as a percent of total debt and indicates how much of its debt a company could retire with annual cash from operations, where a higher figure indicates a stronger ability to retire its debt, and thus lower financial risk. In its most recent credit opinion,

Moody's specified a lowerbound FFO-to-Total Debt of 20% for SoCalGas to avoid further downgrade from its current "A2" rating for senior unsecured debt.[22] As of September 30, 2021, Moody's reported a ratio[23] of 18.6% for the last 12 months, which is considerably below the 20% threshold. In the section titled "Factors that could lead to a downgrade," Moody's states that SoCalGas' ratings could be downgraded if:

- there is a significant deterioration in the regulatory supportiveness in California including a negative resolution in the CPUC's pending regulatory proceedings related to Aliso Canyon or the long-term risks around the natural gas policy, and/or
- SoCalGas' credit metrics remain under the 20% threshold for an extended period of time.

If SoCalGas is not able to recover its FFO-to-Total Debt ratio above the Moody's threshold, it may result in further downgrades by Moody's.

Under S&P's methodology, S&P stated that SoCalGas could be downgraded if FFO-to-Total Debt fallsbelow 18%.[24]

These stated credit metric targets represent a lower bound in order to sustain an "A" rating over time. SoCalGas believes it prudently manages debt levels so that its credit metrics remainreasonably above the lower bounds presented in these analyses, in order to accommodate short-term fluctuations and disruptions to credit markets and the business environment, and ultimately maintain its "A" rating for senior unsecured debt.

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[22] Source: Moody's, Credit Opinion: "Southern California Gas Company," (January 4, 2022). Moody's "A2" rating is equivalent to "A."

[23] Cash from operations (CFO) Pre-Working Cash-to-Debt ratio.

[24] Source: S&P Global Ratings, Research Update, "Sempra Energy And Southern California Gas Ratings Affirmed, Outlooks Remain Negative" (September 30, 2021).

c. Target Debt Ratio

Moody's explains its approach to assessing credit risk for regulated electric and gas utilities globally.[25] The report provides a detailed rating grid, which can be used as a reference tool to approximate credit profiles within the regulated electric and gas utilities sector. Table 5 below replicates Moody's Debt Ratio benchmarks presented in the report.

TABLE 5 – Moody's Debt Ratio Benchmarks

Bond Rating	Debt/Capital %[26]
Aaa	<25%
Aa	25% - 35%
A	35% - 45%
Baa	45% - 55%
Ba	55% - 65%
B	65% - 75%
Caa	≥75%

Together with other indicators, Moody's uses the table above as a guideline for assigning a utility's credit rating. The table suggests that for SoCalGas to sustain its strong single "A" bond rating, it should maintain a debt ratio in the range of 35% – 45% which is in line with SoCalGas' proposed Long-Term Debt ratio of 45.60%.

Credit metric guidance provided by the credit rating agencies is an invaluable guide to help determine the appropriate use of debt. Debt utilization beyond the levels indicated by the target credit metrics defined above would put downward pressure on SoCalGas' "A" credit rating, as stated by Moody's.

[25] Source: Moody's, "Rating Methodology for Regulated Electric and Gas Utilities," (June 23, 2017).
[26] Ratios shown are for companies that Moody's has identified to have a standard risk profile.

III. PREFERRED EQUITY

A. Embedded Cost of Preferred Equity

The embedded cost of preferred equity represents all costs (including historical) associated with the issuance and servicing of preferred equity, expressed as a percentage of the net proceeds received from preferred equity issuances. SoCalGas proposes an embedded cost of preferred equity of 6.00%. Appendix B shows the derivation of this figure. The proposed embedded cost of preferred equity is unchanged from the currently authorized figure.

TABLE 6 – CURRENT AND PROPOSED AUTHORIZED EMBEDDED COSTS

Embedded Cost Component	Current Authorized[27]	Proposed 2023	Change (basis points)
Preferred Equity	6.00%	6.00%	0 bps

SoCalGas does not anticipate the need to issue any new preferred equity in 2022 or 2023 (as further discussed below). However, if market conditions become more favorable, SoCalGas may consider preferred equity as an advantageous financing option. Furthermore, none of SoCalGas' perpetual preferred equity is expected to be retired in 2022 or 2023. In the absence of any projected issuances or retirements, the forecasted embedded cost of preferred equity is equal to the current actual embedded cost of preferred equity.

As discussed above with respect to the embedded cost of Long-Term Debt, SoCalGas will submit an update during the course of this proceeding, that will reflect any changes to SoCalGas' Preferred Equity forecast that may take place between the preparation of this testimony and the submittal of the update.

B. Preferred Equity Ratio

SoCalGas proposes an authorized preferred equity ratio of 0.40%, which is a 200-basis

[27] D.19-12-056 at 2.

points reduction to the currently authorized preferred equity ratio of 2.40%. The proposed 0.40% ratio aligns more closely with the average recorded preferred equity ratio of 0.25%, as shown in Table 7.

TABLE 7 – RECORDED PREFERRED EQUITY RATIO

Recorded[28]	2017	2018	2019	2020	2021	2017-2021 Average	Proposed 2023
Preferred Equity	0.31%	0.28%	0.25%	0.22%	0.21%	0.25%	**0.40%**

As stated above, at this time, SoCalGas does not anticipate issuing or retiring preferred equity during this Cost of Capital cycle. Despite a downward trend in bond rates, the relative cost of preferred stock continues to be materially higher than long-term debt over the last decade. The high costs of preferred equity are due to factors such as a shrinking buyer-base that has severely limited demand for traditional institutional utility preferred stock, few investment grade utilities utilizing this form of financing, and lower issuance amounts for those that do. States throughout the country, including California, have seen utilities reducing their preferred equity financing over the past several years.

In recent years, SoCalGas has been successful in issuing Long-Term Debt at relatively low costs to fund its robust capital investment plan, thus reducing the need to rely on preferred equity. Accordingly, SoCalGas proposes to reduce its authorized preferred equity ratio to 0.40%, aligning more closely to the current and average historical ratio.

IV. COMMON EQUITY

A. Return on Equity

Derivation of the cost of common equity component otherwise known as the Return on

[28] Represents capital structures recorded at year-end.

Equity (ROE), is developed based on a quantitative[29] and qualitative[30] analysis considering various factors, such as current market conditions, proxy company research, and business, financial, and regulatory risks that SoCalGas is expected to carry in the upcoming Cost of Capital cycle. SoCalGas proposes a ROE of 10.75%, which is a 70 basis points increase from its currently authorized ROE of 10.05%. See Exhibit SCG-04 (Coyne) for a full presentation of SoCalGas' ROE proposal.

B. Common Equity Ratio

SoCalGas proposes a Common Equity ratio of 54.00%, which is a 200-basis point increase from the currently authorized Common Equity ratio of 52.00%. The proposed 54.00% ratio aligns with the average recorded Common Equity ratio of 54.25%, as shown in Table 8.

TABLE 8 – RECORDED COMMON EQUITY RATIO

Recorded[31]	2017	2018	2019	2020	2021	2017-2021 Average	Proposed 2023
Common Equity	56.22%	54.92%	55.25%	51.73%	53.14%	54.25%	**54.00%**

SoCalGas proposes to increase its Common Equity ratio in order to align the capital structure more closely with average recorded actuals, which will also support SoCalGas to maintain its A credit rating by minimizing financial risk (as discussed in the Long-Term Debt section above).

1. Authorized Capital Structure Should Align with Recorded

SoCalGas proposes an authorized capital structure that more closely aligns with its five-year average recorded capital structure. In prior decisions, the Commission adopted authorized capital structures that generally aligned with a utility's actual capital structures. In the California

[29] Exhibit SCG-04.
[30] Exhibit SCG-03.
[31] Represents capital structures recorded at year-end.

investor-owned utilities' (IOUs) 2013 TY Cost of Capital case (A.12-04-015, et al.), the Commission approved San Diego Gas & Electric Company's (SDG&E's) requested Common Equity ratio because it was consistent with its actual Common Equity ratio:

> In this case, SDG&E seeks a common equity ratio for its revenue requirement which is the same as its actual common equity ratio. We concur with SDG&E and find . . . [the requested] capital structure reasonable and we adopt it.[32]

In addition, in the 2017 proceeding for large California water utilities,[33] the water utilities' requested capital structures were slightly higher than their average historical capital structures. Ultimately, the Commission adopted the water utilities' proposals, stating that their request was not materially different than the recent historical actual capital structures proposed by California Public Advocates (formerly Office of Ratepayer Advocates (ORA)):

> ORA witness Dawadi arrived at his recommended capital structures by calculating the weighted average capital structures of the Applicants' regulated operations as shown in their annual reports. His recommended capital structures are not materially different from those proposed by the Applicants . . . Therefore, we adopt the applicants' proposed capital structures.[34]

Accordingly, SoCalGas believes that its proposal for a 54.00% Common Equity ratio better aligns its authorized capital structure with recent historically recorded actuals and is supported by Commission precedent.

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[32] D.12-12-034 at 11.
[33] *See* A.17-04-001 *et al.*
[34] D.18-03-035, *mimeo*, at 22.

2. Authorized Equity Ratios of Comparable Natural Gas Utilities

As a benchmark, SoCalGas evaluates its authorized capital structure relative to the authorized capital structure of other natural gas utilities. Over the past five years, U.S. natural gas utilities have been authorized an average common equity ratio of 54.31%.[35,36]

The level of authorized common equity ratios has increased on average compared to historical common equity ratios over the last decade. Specifically, over the past ten years, U.S. natural gas utilities were authorized an average common equity ratio of 50.75%.[37,38] This data demonstrates that the average authorized common equity ratio for gas distribution utilities has increased significantly over the past 10 years. The variance between the five-year and ten-year averages is 338 basis points. In more recent years, the three-year average authorized common equity ratio, including 20 rate cases in seven states, is even higher at 54.89% or a 45-bps increase compared to the 5-year average and a 383 bps increase compared to the ten year average, indicating multiple jurisdictions recognize the need to strengthen gas utility balance sheets.

The above historical averages are a valuable benchmark for evaluating the appropriate authorized common equity ratio for SoCalGas. The requested common equity ratio of 54.0% is in-line with both the three-year and five-year national average and consistent with the trend for increasing authorized common equity ratios.

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35 S&P Global Rate Case History (Past Rate Cases), 2017-Current, Natural Gas Distribution utilities.

36 This average consists of 27 rate case decisions in seven states, of which approximately 40% were fully litigated. After removing the top and bottom 5% of authorized common equity ratios from the data set, the five-year average still remains well above 54% at 54.44%.

37 S&P Global Rate Case History (Past Rate Cases), 2012-Current, Natural Gas Distribution utilities.

38 This includes 295 rate case decisions in 46 states, of which over 40% were fully litigated. After removing the top and bottom 5% from the data set, the ten-year average authorized common equity ratio is 51.06%.

VII. CONCLUSION

SoCalGas' comprehensive authorized capital structure analysis and proposal will support a strong credit rating, as well as its ability to manage financial and business risk. The proposal is in alignment with historically recorded company actuals, Commission precedent, and comparable national gas utilities. A total snapshot of SoCalGas' proposal is depicted in Table 10.

TABLE 10 – PROPOSED EMBEDDED COSTS AND CAPITAL STRUCTURE

Component	Proposed Embedded Costs	Proposed Capital Structure
Long-Term Debt	3.89%	45.60%
Preferred Equity	6.00%	0.40%
Common Equity	10.75%	54.00%
Total		100.00%

SoCalGas' request closely aligns with its recent recorded capital structure and will support SoCalGas in maintaining a strong "A" credit rating. Viewed in its entirety, the proposed capital structure is reasonable and will support SoCalGas' efficient access to markets during the anticipated period of significant capital expenditures, thereby providing ratepayers with lower total capital costs over the long term.

This concludes my prepared direct testimony.

VIII. WITNESS QUALIFICATIONS

My name is Shirley Arazi. My business address is 555 West 5th Street, Los Angeles, CA 90013. I am currently employed by SoCalGas as the Director of Financial Planning. My responsibilities since July 2020, include the company's proforma financial statements, including cash and financing plans, financial planning for capital and operating expenses, and incremental projects. I have been employed by SoCalGas (starting at SDG&E) since June 2006 and have held numerous roles in Accounting & Finance, Investor Relations, Procurement, and Regulatory Affairs.

I received a Bachelor of Science in Business Administration majoring in Finance and a minor in Psychology from the University of Arizona in 2006. I also received a Master's in Business Administration from San Diego State University in 2010.

I have previously testified before this Commission.

APPENDIX A

EMBEDDED COST OF LONG-TERM DEBT

Southern California Gas Company

Embedded Cost of Debt

(figures in dollars unless otherwise stated)

Line #	Description	A Principal	B Total Discounts and Expenses	C Net Proceeds (C = A - B)	D Total Annual Cost	E Effective Rate (E = D / C)
1	Series R		174,385	(174,385)	204,560	-117.30%
2	Series T		334,724	(334,724)	318,878	-95.27%
3	Series Y		0	0	231,898	0.00%
4	Series BB		98,240	(98,240)	116,926	-119.02%
5	Series DD		230,714	(230,714)	219,678	-95.22%
6	Series EE		243,872	(243,872)	88,340	-36.22%
7	Swiss Francs Bond	4,338,770	0	4,338,770	81,352	1.88%
8	Medium Term Note	5,000,000	0	5,000,000	283,500	5.67%
9	Series KK	250,000,000	3,960,222	246,039,778	14,507,007	5.90%
10	Series MM	300,000,000	3,816,052	296,183,948	15,502,202	5.23%
11	SERIES NN	350,000,000	5,478,830	344,521,170	13,307,628	3.86%
12	SERIES OO	250,000,000	43,939,736	206,060,264	12,437,727	6.04%
13	SERIES PP	500,000,000	5,973,758	494,026,242	16,347,376	3.31%
14	SERIES RR	350,000,000	3,456,594	346,543,406	11,546,005	3.33%
15	SERIES TT	500,000,000	5,229,164	494,770,836	13,525,544	2.73%
16	SERIES UU	400,000,000	4,575,075	395,424,925	16,652,502	4.21%
17	SERIES VV	550,000,000	5,820,812	544,179,188	23,844,027	4.38%
18	SERIES WW	350,000,000	4,681,730	345,318,270	13,981,058	4.05%
19	SERIES XX	650,000,000	7,145,065	642,854,935	17,289,507	2.69%
20	SCG 2023 FRN	300,000,000	1,610,272	298,389,728	2,078,205	0.70%
21	Revolving Line of Credit				437,453	
22	**Total Outstanding (12/31/2021)**	**4,759,338,770**	**96,769,244**	**4,662,569,526**	**173,001,373**	**3.71%**
23						
24	**Changes During 2022[1]**					
25	5 year in Q1 2022, 2.95%	700,000,000	5,810,956	694,189,044	21,812,191	3.14%
26	30 year in Q2 2022, 3.80%	400,000,000	4,515,268	395,484,732	15,336,032	3.88%
27	**Total Changes During 2022**	**1,100,000,000**	**10,326,224**	**1,089,673,776**	**37,148,223**	
28	**Total Outstanding (12/31/2022)**	**5,859,338,770**	**107,095,468**	**5,752,243,302**	**210,149,596**	**3.65%**
29						

30	**Changes During 2023**					
31	SoCalGas 2023 FRN Retirement	(300,000,000)	(1,610,272)	(298,389,728)	(2,078,205)	0.70%
32	30 year in Q2 2023, 4.18%	1,100,000,000	11,976,802	1,088,023,198	46,380,965	4.26%
33	**Total Changes During 2023**	**800,000,000**	**10,366,530**	**789,633,470**	**44,302,760**	
34	**Total Outstanding (12/31/2023)**	**6,659,338,770**	**117,461,998**	**6,541,876,772**	**254,452,356**	**3.89%**
35						
36						
37		**Average 2023 Embedded Cost of Long-Term Debt**				**3.89%**

[1] Amount ultimately raised and timing is subject to change and will be a function of the Company's access to capital markets and cash flow position at the time funds are required.

Southern California Gas Company
Embedded Cost of Debt Detail
(figures in dollars unless otherwise stated)

		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
								DFD CHG A/C 13300xx						Annual	Amortization		
Line #	Description	Interest Rate	Date of Issue	Due Date	Life of Bond	Principal	Issued Discount	Issue Expense	Swap Lock Termination	(Net of Tax schedules) Loss on Reacq.	Total Discounts and Expenses	Annual Interest Expense	Interest Expense Swap Lock Termination	Annual Discount	Amortization Expense	Amortization Loss	Total Discounts and Expenses
1	Series R (1)		03/01/86	03/01/16						174,385	174,385					204,560	204,560
2	Series T (2)		12/01/86	12/01/16						334,724	334,724					318,878	318,878
3	Series Y (3) (4)		10/01/91	10/01/21							0					231,898	231,898
4	Series BB (3)		03/01/93	03/01/23						98,240	98,240					116,926	116,926
5	Series DD (3)		06/15/93	06/15/23						230,714	230,714					219,678	219,678
6	Series EE (3)		11/01/93	11/01/25						243,872	243,872					88,340	88,340
7	Swiss Francs Bond (5)	1.87%	05/14/16	05/14/26	10.0	4,338,770					0	81,352					81,352
8	Medium Term Note	5.67%	01/15/03	01/18/28	25.0	5,000,000					0	283,500					283,500
9	Series KK	5.75%	11/18/03	11/15/35	30.0	250,000,000	1,520,000	2,440,222			3,960,222	14,375,000		50,667	81,341		14,507,007
10	Series MM	5.12%	11/18/10	11/15/40	30.0	300,000,000	729,000	3,087,052			3,816,052	15,375,000		24,300	102,902		15,502,202
11	SERIES NN	3.75%	09/21/12	09/15/42	30.0	350,000,000	1,746,500	3,732,330			5,478,830	13,125,000		58,217	124,411		13,307,628
12	SERIES OO	4.45%	03/13/14	03/15/44	30.0	250,000,000	1,517,500	2,668,436	39,753,800		43,939,736	11,125,000	1,173,196	50,583	88,943		12,437,728
13	SERIES PP	3.15%	09/11/14	09/15/24	10.0	500,000,000	1,830,000	4,143,758			5,973,758	15,750,000		183,000	414,376		16,347,376
14	SERIES RR	3.20%	06/18/15	06/15/25	10.0	350,000,000	829,500	2,627,094			3,456,594	11,200,000		83,003	262,972		11,546,005
15	SERIES TT	2.60%	06/03/15	06/15/26	10.0	500,000,000	970,000	4,259,164			5,229,164	13,000,000		97,487	428,057		13,525,544
16	SERIES UU	4.12%	05/15/18	06/01/48	30.0	400,000,000	420,000	4,155,075			4,575,075	16,500,000		14,000	138,502		16,652,502
17	SERIES VV	4.30%	09/24/19	01/15/49	30.0	550,000,000	247,500	5,573,312			5,820,812	23,650,000		8,250	185,777		23,844,027
18	SERIES WW	3.95%	06/04/19	02/15/50	30.0	350,000,000	850,500	3,831,230			4,681,730	13,825,000		28,350	127,708		13,981,058
19	SERIES XX	2.55%	01/09/20	02/01/30	10.0	650,000,000	1,495,000	5,650,065			7,145,065	16,575,000		149,500	565,007		17,289,507
20	SCG 2023 FRN (6)	0.51 4%	09/14/20	09/14/23	3.0	300,000,000		1,610,272			1,610,272	1,540,950		-	537,272	2,078,205	
21	Revolving Line of Credit											437,453					437,453
22	Total Outstanding (12/31/2021)					4,759,338,770	12,155,500	43,778,009	39,753,800	1,081,935	96,769,244	166,843,254	1,173,196	747,387	3,057,256	1,180,280	173,001,373
23																	
24	**Forecast of**		**GI**	**Spread**			**Issuance**		**Underwriting**			**Annual**		**Annual**			**Total Annual**

	New Issuances(7)	Coupon	Forecast (8)	(bps)	Term	Principal	Fees	Underwriting	fees (bps)	Total Fees	Interest	Fees	Expenses
25		2.95				700,000,	1,610,	4,200,00			20,650,	1,162,	21,812,19
26	New Issuance in 2022 (9)	0%	N/A	N/A	5	000	956	0	60.0	5,810,956	000	191	1
		3.79				400,000,	1,015,	3,500,00			15,185,	150,5	15,336,03
27	New Issuance in 2022 (10)	6%	2.696%	110	30	000	268	0	87.5	4,515,268	523	09	2
		4.18				1,100,00	2,351,	9,625,00		11,976,80	45,981,	399,2	46,380,96
28	New Issuance in 2023 (10)	0%	3.080%	110	30	0,000	802	0	87.5	2	738	27	5
29													
30													

31 (1) Series R - Refunded by Series BB and DD and amortized over the life of Series BB and DD.

32 (2) Series T - Refunded by Series DD and amortized over life of Series DD.

33 (3) These bond series are being amortized over the remaining life of the original bond issuance at the time of reacquisition.

34 (4) Series Y - Loss on reacquisition matured 10/01/2021 therefore the "Annual Amortization" reflects 9 months.

35 (5) Swiss Franc bonds were issued in 1986 and are perpetual (ie. no maturity date, ever). Every 10 years the interest rate re-sets. These bonds may be called by the company or be put to the company by the investors.

36 (6) Effective 3 Month LIBOR rate for December 2021 + 35 bps spread. From 9/14/2021 to 12/13/2021, 3m LIBOR at 0.11575%. From 12/14/2021 to 3/13/2022, 3m LIBOR at 0.19825%

37 (7) Amount ultimately raised and timing is subject to change and will be a function of the Company's access to capital markets and cash flow position at the time funds are required.

38 (8) Reflects average 30 year Treasury Rate from April 2022 Global Insights forecast.

39 (9) Reflects actual issuance amount, term, and rate for Long-Term Unsecured Note issued in March 2022.

40 (10) Basis point spread is forecasted based on the current G-spread as of April 2022 plus a concession spread in an effort to reflect current market conditions.

Southern California Gas Company
Issuance Cost Forecast Summary
(figures in dollars unless otherwise stated)

	2022	2022	2023
Principal issued	**700,000,000**	**400,000,000**	**1,100,000,000**
Up-Front Costs:			
Underwriter (1)(2)	4,200,000	3,500,000	9,625,000
Issuance Fees:			
Legal	125,000	125,000	125,000
Rating agency	939,400	536,800	1,476,200
Trustee	46,150	29,050	68,950
Auditor	60,000	60,000	60,000
CPUC	347,580	201,387	494,608
SEC & Other	92,826	37,080	101,970
Total Issuance Fees	1,610,956	1,015,268	2,351,802
Total Up-Front Costs	**5,810,956**	**4,515,268**	**11,976,802**

(1) 2022 $700 million issuance based on 60 bps of principal issuance
(2) 2022 $400 million and 2023 $1.1 billion issuances based on 87.5 bps of principal issuance

APPENDIX B

EMBEDDED COST OF PREFERRED EQUITY

EMBEDDED COST OF PREFERRED EQUITY

(figures in dollars unless otherwise stated)

Funding Type	Class/ Series	Prices ($)	Dividend Rate (%)	Amount Outstanding ($000)	Shares Outstanding
Preferred Equity	A	$27.50	6.00%	$19,575	783,032
Preferred Equity	-	$30.00	6.00%	$1,975	79,011
Weighted Average Cost			6.00%	$21,550	

APPENDIX C

HISTORICALLY RECORDED CAPITAL STRUCTURES COMPARED TO AUTHORIZED

Historically Recorded Capital Structures Compared to Authorized

Recorded Capital Structures[39]							Currently Authorized Capital Structure
	2017	2018	2019	2020	2021	2017-2021 Average	
Long-Term Debt	43.47%	44.80%	44.50%	48.05%	46.65%	45.49%	45.60%
Preferred Stock	0.31%	0.28%	0.25%	0.22%	0.21%	0.25%	2.40%
Common Equity	56.22%	54.92%	55.25%	51.73%	53.14%	54.25%	52.00%
Total	100%	100%	100%	100%	100%	100%	100%

[39] Represents capital structures recorded at year-end. These percentages are rounded to the hundredth decimal point. In the event they do not add up to 100.00%, it is due to rounding.