Company: Southern California Gas Company (U 904 G)
Proceeding: 2023 Cost of Capital
Application: A.22-04-_____
Exhibit: SCG-03

SOUTHERN CALIFORNIA GAS COMPANY (U 904 G)

PREPARED DIRECT TESTIMONY OF DEANA M. NG

(COMPANY RISK)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

April 2022

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SOUTHERN CALIFORNIA GAS COMPANY
DRAFT PREPARED DIRECT TESTIMONY OF DEANA M. NG
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I. INTRODUCTION

This testimony presents a qualitative assessment of business, financial, and regulatory risks that Southern California Gas Company (SoCalGas) faces as a gas-only California utility. The risks presented in this testimony support the capital structure proposal contained in Exhibit SCG-02 (Arazi) and the Return on Equity (ROE) proposal contained in Exhibit SCG-04 (Coyne).

Risks that impact SoCalGas's financial profile are closely reviewed and monitored by the investment community (*e.g.*, credit rating agencies and investors). Capital markets determine the price of investor capital based on the amount of risk to potential investors in relation to other investment opportunities. Given the choice between two investment options with equal opportunities for potential returns and different levels of associated risk, the investor will choose the lower risk opportunity. Because investors have a significant array of options to choose from, SoCalGas must offer a rate of return and ROE that is commensurate with its risk to investors to attract investor capital.

The California Public Utilities Commission's (Commission) prior Cost of Capital decisions recognize the principles for setting a fair rate of return, as established by the United States Supreme Court in the *Bluefield* and *Hope* cases.[1] The *Bluefield* decision sets forth the standard for measuring just and reasonable rates:

> A public utility is entitled to such rates as will permit it to earn a return upon the value of the property which it employs for the convenience of the public equal to

[1] *See* Decision (D.) 19-12-056 at 15. *See also* D.12-12-034, *mimeo,* at 17-18 and D.07-12-049, *mimeo*, at 9.

that generally being made at the same time and in the same general part of the country on investments in other business undertakings which are attended by corresponding risks and uncertainties . . . The return should be reasonably sufficient to assure confidence in the financial soundness of the utility, and should be adequate, under efficient and economical management, to maintain and support its credit, and enable it to raise the money necessary for the proper discharge of its public duties.[2]

Twenty-one years later, in the *Hope* decision, the Supreme Court reinforced the financial soundness and capital attraction principles of the *Bluefield* decision:

> From the investor or company point of view it is important that there be enough revenue not only for operating expenses but also for the capital costs of the business. These include service on the debt and dividends on the stock . . . By that standard the return to the equity owner should be commensurate with the returns on investments in other enterprises having corresponding risks. That return, moreover, should be sufficient to assure confidence in the financial integrity of the enterprise, so as to maintain its credit and attract capital.[3]

These two cases established the premise that a utility's authorized Cost of Capital should sufficiently account for the utility's risks and instill investor confidence. While California utilities face higher business, financial and regulatory risk in many areas compared to other non-

[2] *Bluefield Water Works Co. v. Public Serv. Comm'n*, 262 U.S. 679, 692 (1923).
[3] *Federal Power Comm'n v. Hope Natural Gas Co.*, 320 U.S. 591, 603 (1944).

California utilities,[4] SoCalGas faces additional risk as a gas-only utility in a state that is looking to rapidly decarbonize. The risks discussed in this testimony support the requested ROE that will allow SoCalGas to continue to attract funds as it carries out its obligation to provide safe, reliable, and resilient energy service to Southern California, while also supporting California's clean energy goals and maintaining affordable rates for customers.

II. BUSINESS RISK

A. Overview

The term "business risk" pertains to the risks the Company is exposed to in its daily operations, resulting from uncertainties in the economy and regulated business environment. To compensate for higher levels of business risk, investors require the opportunity to earn a higher rate of return. SoCalGas faces significant business risk in the present, near, and distant future — even more so in this Cost of Capital cycle compared to past cycles. California has adopted ambitious decarbonization goals, which rely heavily on electrification and raise questions around the role of natural gas in the energy transition.[5] Energy Resilience addresses the risk to natural gas infrastructure and the natural gas system from both climate change related events themselves and the need to transition natural gas infrastructure to a carbon neutral state, while continuing to provide safe and reliable service and energy resiliency to Southern California. Risks are often not limited to one category of "business," "regulatory," or "financial" risks. Rather, a given business risk, for example, may also overlap into financial and regulatory risk.[6] For SoCalGas,

[4] Moody's Investment Service's January 4, 2022, credit opinion for SoCalGas states, "We view California as having higher political risk than most jurisdictions in the US. California's utilities tend to receive a higher level of scrutiny from both the media and public and issues can quickly become contentious and litigious. We observe a higher level of disallowances, impairments, fines and penalties compared to other jurisdictions in the US." It also listed, "Elevated legal and political risk amid high public scrutiny" as a credit challenge for SoCalGas.

[5] *See, e.g.*, Rulemaking (R.) 20-01-007 (Long Term Gas System Rulemaking).

[6] *See* D.12-12-034 at 30.

the primary business risks are risks related to California's transition to a clean energy system, increasing technology risk, operational risk, construction risk, and political and legal risk.

B. Risk Posed by California's Clean Energy Transition

California continues to be one of the most progressive states in the country in terms of its energy policy and ambitious clean energy goals.

Senate Bill (SB) 100 set the State's Renewable Portfolio Standard (RPS) at 60% by 2030, with the remaining 40% to be met with zero carbon sources by 2045.[7] After signing SB 100 into law, the California Governor at the time also signed an executive order to establish a state goal to achieve carbon neutrality no later than 2045 and negative emissions thereafter.[8]

The investment community recognizes the impact of California's energy policy on State utilities. As Moody's stated in a June 2, 2020 SoCalGas credit opinion, "We think California uses its utilities to implement state policies more than other jurisdictions across the US."[9] As the largest natural gas distribution utility in the country, serving approximately 22 million consumers, SoCalGas is instrumental to helping California achieve its clean energy goals. In alignment with these goals, in March 2021, SoCalGas announced ASPIRE 2045,[10] a bold climate commitment that pledges to lead in the transition to a decarbonized energy system by achieving net-zero greenhouse gas (GHG) emissions in both operations and delivery of energy by 2045.

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7 SB 100 California Renewables Portfolio Standard Program: emissions of greenhouse gases. (De León, 2018) *available at:* https://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201720180SB100.

8 Executive Order B-55-18, *available at:* https://www.ca.gov/archive/gov39/wp-content/uploads/2018/09/9.10.18-Executive-Order.pdf.

9 *See* Moody's Investor Service, *Credit Opinion*, *Southern California Gas Company*. (June 2, 2020), p.1.

10 *See* SoCalGas, *ASPIRE 2045 - Sustainability and Climate Commitment to Net Zero*, *available at:* https://www.socalgas.com/sites/default/files/2021-03/SoCalGas_Climate_Commitment.pdf.

Following the launch of ASPIRE 2045, in October 2021, SoCalGas released a clean fuels decarbonization study and whitepaper—*The Role of Clean Fuels and Gas Infrastructure in Achieving California's Net Zero Climate Goal* (Clean Fuels Whitepaper)— a comprehensive economy-wide GHG analysis that includes a cross-sectoral integration of fuels and electricity as well as a first of its kind infrastructure sizing model examining the different potential configurations of a clean fuels and carbon management network.[11] The study examines different scenarios, with varying levels of electrification, clean fuels and carbon management. The results highlight the importance of clean fuels and related clean fuels infrastructure to achieve the goal of full carbon neutrality in the most affordable and resilient manner, while minimizing feasibility risk.

As used herein, "Transition Risk" refers to the risk associated with the need to transition to a carbon neutral state, while continuing to provide safe and reliable service and energy resiliency to Southern California. A diverse portfolio of decarbonization tools is necessary to mitigate Transition Risk affordably and effectively. Embedded in Transition Risk are technological maturity, feasibility of achieving emission reduction targets, changing market dynamics, and affordability risks, each of which are discussed in greater detail below. While the goal to achieve carbon neutrality is more than twenty years away, SoCalGas and California are taking action and considering policy determinations now that will impact SoCalGas's risk profile in this Cost of Capital cycle.

[11] *See* SoCalGas, *The Role of Clean Fuels and Gas Infrastructure in Achieving California's Net Zero Climate Goal* (October 2021), *available at*: https://www.socalgas.com/sites/default/files/2021-10/Roles_Clean_Fuels_Full_Report.pdf.

1. Technological Maturity Risk

SoCalGas's Clean Fuels Whitepaper analyzes different scenarios to reach carbon neutrality by 2045 and includes the use of a diverse set of decarbonization tools and emerging technologies such as hydrogen, carbon sequestration, fuel cells, clean fuels, renewables, battery storage and others. While all the technologies modeled in the Clean Fuels Whitepaper are either in development or have been deployed, scenarios and pathways that rely more heavily on technology that is less developed carry greater uncertainty around long term viability and/or costs.

The Clean Fuels Whitepaper also examines the role of the existing fuels network. The results of this analysis highlight the value of repurposing SoCalGas's vast infrastructure network to deliver clean fuels, such as biogas and green hydrogen, to affordably provide critical reliability and resiliency to interdependent energy systems. While some clean fuels, such as renewable natural gas (RNG) and biogas are considered "drop-in" fuels that can be incorporated without significant additional investment to the existing gas infrastructure, blending greater levels of hydrogen will likely require additional investment. Successes in other areas of the world show great promise in the ability to leverage existing infrastructure to blend higher levels of hydrogen into the fuel mix, at up to 20%.[12] Further testing is needed, however, to determine the amount of hydrogen that can be safely blended, as well as the investment needed to accommodate higher blend rates.

Additionally, SoCalGas will need to become increasingly data-driven and analytics-focused to continue to provide energy safely, reliably, and affordably and to manage changing market dynamics. Continued development of emerging technologies, clean fuels infrastructure,

[12] *Id.* at 9.

and advanced data analytics tools require utility investment and will all be necessary to achieve the State's climate goals. A clean energy transition of this scale has never been accomplished before. California, as the fifth largest economy in the world,[13] is on the leading edge. Innovation is a core tenet of SoCalGas, and while the energy transition provides an opportunity to transform the current fuels network to a decarbonized fuels network of the future, the transition and challenge of net zero also carry significant risk. SoCalGas will need to maintain favorable credit ratings, a strong balance sheet, and investor confidence to have access to capital markets at a reasonable cost to execute and deliver on the infrastructure needs that will be critical to the success of California's clean energy vision. SoCalGas requires a capital structure and ROE that that can attract low-cost capital in a highly competitive environment, spur innovation and allow for robust investment in infrastructure to enable a safe, reliable, resilient, and affordable clean energy transition.

2. Changing Market Dynamics

As a result of increasing amounts of renewable generation in Southern California, the gas and electric system have become more interdependent. The intermittency of renewable generation sources (*e.g.*, solar, wind) requires flexibility from the gas system to provide intra-day balancing and dispatchable long duration storage to help maintain reliability and resilience for both the gas and electric systems. As RPS standards increase, gas-fired generation may be displaced by renewable generation, resulting in an annual decline in gas usage on SoCalGas's system. As renewables are increasingly relied upon to meet electric demand, and the electric load grows due to increased building electrification, the gas system will be even more critical to meet higher ramping requirements and provide intra-day balancing for increasingly variable

[13] See Forbes, Best States for Business 2019.

electric loads. This flexibility that gas service provides is increasingly valuable as it maintains electric grid reliability. The utilities and Commission will need to consider appropriate rate structures to adequately account for the value of this service. Particularly for those customers who benefit from the backup services SoCalGas provides. These related rate reform and equitable cost allocation issues will need to be addressed at the appropriate time to ensure that SoCalGas can continue to recover reasonable costs to maintain and operate the gas system that will be increasingly critical to support California's clean energy transition. Lack of appropriate policy decisions on rate structures in the future could strain SoCalGas's ability to recover its costs, increasing financial risk.

3. Affordability

Although SoCalGas's rates have historically remained affordable, increasing regulatory requirements necessitate growing investments in the safety and reliability of existing gas infrastructure, climate change drives the need for investments to maintain system resiliency, and the State's decarbonization goals require additional investments to support the development, procurement, and delivery of cleaner fuels. These required investments will continue to put upward pressure on SoCalGas's rates.

In a recent credit opinion, Moody's clarifies that its rating outlook for SoCalGas is predicated on the State (and Commission's) support of policies and actions that will not result in stranded assets: "the stable outlook incorporates a view that the regulatory environment will remain supportive, and that the state's longer term environmental goals and policies will not result in significant risks of stranded assets."[14]

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

The Commission has expressed that it "is deeply concerned with understanding and measuring the affordability of essential utility services"[15] and that it has taken action to limit utility cost and rate increases "through scrutiny of gas utility revenue requirements in GRCs and corresponding scrutiny of gas rates in cost allocation proceedings and advice letters."[16]

Should affordability concerns drive the Commission to decline to authorize sufficient revenue requirement for SoCalGas to continue to meet increasing regulatory requirements focused on the safety, reliability and resiliency of existing infrastructure while simultaneously making investments necessary to decarbonize the gas system, this could pose significant business risk to SoCalGas.

C. Increasing Technology Risk

SoCalGas collects and stores sensitive data, including personal information about employees and customers, gas usage, and confidential infrastructure information. As reliance on technology for business purposes increases, vulnerability to cyber-attacks also increases. The shift toward an increased virtual workplace environment or hybrid workplace environment, initially driven by COVID-19, has also increased cyber risk. While all utilities face cyber risk, California utilities and certain gas pipeline operators face unique cyber security challenges. This is because California utilities are required to collect and disclose certain data to support decarbonization efforts while at the same time being subject to enhanced state privacy laws. As an example, the California utilities are now required to disclose a significant amount of data, including customer information, through a resolution in the CPUC's building decarbonization

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[15] California Public Utilities Commission, *2019 Affordability Report* (April 2021), *available at:* https://www.cpuc.ca.gov/-/media/cpuc-website/industries-and-topics/reports/2019-annual-affordability-report.pdf

[16] California Public Utilities Commission, *Utility Costs and Affordability of the Grid of the Future (*May 2021), *available at:* https://www.cpuc.ca.gov/-/media/cpuc-website/divisions/energy-division/documents/en-banc/senate-bill-695-report-2021_en-banc-white-paper.pdf

rulemaking proceeding.[17] This includes confidential information that is provided to the CPUC. Sempra Energy noted this dynamic in its 10-K while discussing business risk:

> …the California Utilities are increasingly required to disclose large amounts of data (including customer energy usage and personal information regarding customers) to support changes to California's electricity market related to grid modernization and customer choice, increasing the risks of inadvertent disclosure or other unauthorized access of sensitive information…Moreover, all of our businesses operating in California are subject to enhanced state privacy laws that have recently taken effect, which require companies that collect information on California residents to, among other things, make new disclosures to consumers about their data collection, use and sharing practices, allow consumers to opt out of certain data sharing with third parties and be liable under a new cause of action for breaches of certain highly sensitive categories of personal information.[18]

Confidential information shared with State regulatory agencies is vulnerable to potential disclosure in response to public records act requests.

In addition, certain pipeline operators that that are deemed "critical" by the Department of Homeland Security's Transportation Security Administration ("TSA") are subject to new regulatory requirements issued by the TSA to strengthen cybersecurity of critical energy infrastructure.[19] SoCalGas is subject to these new regulatory requirements, which require SoCalGas to share highly sensitive cybersecurity information with the TSA, which increases the risk of disclosure.

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17 R.19-01-011.
18 Sempra Energy 2021 Form10-K, February 25, 2022, pg. 38.
19 TSA Security Directive Pipeline-2021-01; TSA Security Directive Pipeline-2021-02.

As previously discussed, digitization will only increase in the future as SoCalGas will have to deploy advanced technologies and analytics as a necessary part of its strategy to meet California's clean energy goals.[20] Consequences of data being leaked because of a cyber-attack include SoCalGas being found in violation of California consumer privacy laws and health and safety impacts if critical infrastructure information is apprehended. The additional use of technology and digitization has the potential to increase SoCalGas's exposure to bad actors, increasing business risk.

D. Operational Risk

SoCalGas faces risks as it pertains to weather, natural disasters, equipment failures, third-party dig-ins, or other events that may disrupt operations, damage facilities, or subject the utility to liability. As an example, climate change has increased the severity and frequency of weather-related events such as heat waves, winter storms, and mudslides. The Commission has recognized the impact of climate change-related system vulnerabilities and requires utilities to submit climate impact studies.[21] SoCalGas has been studying climate change issues such as potential impacts that changes in precipitation and drought, rising sea levels, and extreme temperatures have on its infrastructure.[22] Impacts include corrosion, exposure of underground pipeline, and other pipeline damage that could lead to service disruptions. Additionally, extreme temperature events, such as the Southern California heat wave in August 2020 or the Texas winter storm in early 2021, increase energy demand and create potential for supply shortages and energy market price spikes across the United States.

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20 *See* SoCalGas, *ASPIRE 2045 - Sustainability and Climate Commitment to Net Zero*.

21 Order Instituting Rulemaking to Consider Strategies and Guidance for Climate Change Adaptation (R.18-04-019).

22 SoCalGas Risk Assessment and Mitigation Phase Cross-Functional Factor Energy System Resilience. (May 17, 2021) at 4.

Currently, natural gas storage withdrawal capability is critical to meeting energy demand during peak demand events and is a key component of maintaining service reliability and a resilient system, especially during peak electric generation needs in the summer and consumer heating needs in the winter. Restrictions and uncertainty with respect to the ability to continue to utilize underground natural gas storage facilities in the future can pose operational risk.

E. Construction Risk

For purposes of this testimony, "Construction Risk" refers to the financial and operating risks associated with the magnitude and nature of a company's physical infrastructure investment activities, including the ability to finance and complete projects on schedule and consistent with authorized costs. Infrastructure investments and system upgrades are necessary for SoCalGas to continue to provide safe, reliable, and resilient service to its customers. The scope and magnitude of system evolution from the energy transition require additional substantial investment. In addition, SoCalGas must comply with increasing requirements to enhance the safety and reliability of its energy system, whether the costs of compliance are authorized by the Commission or not. For example, the federal Pipeline and Hazardous Materials Safety Administration (PHMSA) recently enacted a new Gas Transmission Safety Rule (GTSR),[23] which requires increased expenditures to maintain SoCalGas's transmission system. These GTSR expenditures are anticipated to be significant and were not contemplated by SoCalGas in its last General Rate Case. Nevertheless, the Commission denied, without prejudice, a request by SoCalGas to establish a memorandum account to track the incremental costs of complying with these new federal regulatory mandates for future reasonableness review and potential recovery in

[23] Safety of Gas Transmission Pipelines: Maximum Allowable Operating Pressure Reconfirmation, Expansion of Assessment Requirements, and Other Related Amendments, 84 Fed. Reg. 52180 (October 1, 2019).

rates. Lack of Commission support for a mechanism to recover the reasonable costs of compliance with new mandatory Federal regulations not contemplated in SoCalGas's most recent General Rate Case creates financial and operational risk (Construction Risk) for the Company.

Over the next five years (2022-2026), SoCalGas anticipates investing approximately $9.8 billion in capital, the highest capital plan in SoCalGas's history. This includes significant investments for safety, reliability, resiliency and to reduce emissions.[24] SoCalGas must compete for new capital funding to finance these elevated levels of capital investments. As discussed in Ms. Arazi's testimony (Exhibit SCG-02), the magnitude of these planned expenditures could put pressure on SoCalGas's capital structure and credit metrics. While many of SoCalGas's planned construction projects are related to compliance with increasing safety and reliability obligations, there are policymakers in California promoting a significant reduction or elimination of gas in favor of electrification thereby creating an uncertain policy environment and potentially increasing risk of execution on SoCalGas's planned construction projects.

F. Political and Legal Risk

While all utilities face some level of political and legal risk, intense media scrutiny and poor public perception of fossil fuels in California heighten these risks for California utilities. For SoCalGas in particular, Moody's cites the "high level of scrutiny surrounding the Aliso Canyon leak" as an example of "above average legal and political risk faced by the utilities in the state, a factor that tempers the credit quality of SoCalGas."[25] Moody's credit rating also considers that "significant demands that are placed on the California utilities, including many

[24] See SoCalGas, *ASPIRE 2045, Sustainability and Climate Commitment to Net Zero*.

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

ambitious public policy initiatives on clean energy, efficiency, pipeline safety as well as methane leak reduction."[26]

The political climate in California particularly impacts SoCalGas as a gas only utility. While SoCalGas's Clean Fuels Whitepaper demonstrates that SoCalGas's pipeline and storage infrastructure can be used to help California achieve its clean energy goals, there are policymakers and stakeholders in California who appear to view electrification and renewable generation as the only strategy to achieve decarbonization. Analysts and credit rating agencies have noted the trend of increasing opposition towards natural gas in California and that is credit negative for SoCalGas.[27] As an example, in recent years, several counties in California have passed policies that ban gas connections in new construction.[28] Similarly, in a November 2021 scoping memo for Phase 3 of the Building Decarbonization Order Instituting Rulemaking (OIR), CPUC staff proposed elimination of existing allowances, refunds and/or discounts for gas line extensions on new construction effective July 1, 2023.[29] The proposal reflects the view that gas use in new buildings is an impediment towards meeting the State's objective to reduce GHG emissions and that ratepayer funds should not be used to provide allowances, refunds or discounts to builders who rely on gas as an energy source.

Potential new gas connection bans, transition to electrification, and the elimination of existing allowances do not reduce SoCalGas's obligation to serve and the need to continue to maintain and operate existing gas infrastructure, while enabling the transition of the gas system. Such related activities and costs and associated regulatory policies may impact the utility's

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[26] *Id*.
[27] *Id*.
[28] *See* Scientific American, *California is Closing the Door to Gas in New Homes* (January 4, 2021), *available at:* https://www.scientificamerican.com/article/california-is-closing-the-door-to-gas-in-new-homes/.
[29] R.19-01-011 Phase 3 scoping memo

ability to recover prudently incurred costs and maintain affordability for remaining gas customers, which must be considered in the broader context of the utility's obligation to serve. This potential impact on affordability could pose a business risk for SoCalGas.

1. Litigation Risk

SoCalGas continues to be exposed to significant litigation risk in this Cost of Capital cycle. California's application of the doctrine of Inverse Condemnation means that SoCalGas could be held strictly liable for damages caused by one of its facilities, regardless of fault.[30] While the application of this doctrine is more commonly associated with wildfire risk and electric utilities, it could also be applied to gas infrastructure. An equity analyst recently described investors' continued caution with regard to all California utilities due to uncertainty around wildfire legislation implementation:

> We believe that investors may continue to employ a cautious approach to California and may seek proof that wildfire fund recovery mechanics work as advertised before narrowing the CA group utility discount.[31]

California's application of this doctrine to the utilities, along with California being one of the most litigious states in the country, creates significant litigation risk for SoCalGas. Moody's credit opinion describes the tendency for issues to become contentious and litigious in California.

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[30] *See Barham v. Southern California Edison Co*., 74 Cal. App. 4th 744, 752 (1999) ("The fundamental policy underlying the concept of inverse condemnation is to spread among the benefiting community any burden disproportionately borne by a member of that community, to establish a public undertaking for the benefit of all.").

[31] J.P. Morgan Equity Analyst comments following Sempra's Q4 2021 Earnings Call, January 26, 2022.

They also state, "We observe a higher level of disallowances, impairments, fines and penalties compared to other jurisdictions in the US."[32]

Further, because SoCalGas operates in California where the cost of living is generally higher than other states, costs associated with litigation disputes and claims tend to be higher than in other parts of the United States.[33] Any costs or penalties incurred as a result of these claims expose SoCalGas to financial risk, to the extent they are not recoverable through insurance. Litigation risk is a concern because the outcome of litigation can negatively impact finances, cash flows and operating conditions. Additionally, litigation risk may impact SoCalGas's ability to procure adequate liability insurance coverage at a reasonable cost. Because of these concerns, insurers require higher premiums compared to other states and the number of providers is limited.[34] Due to the unique impact the California utilities face in this area, the Commission authorized SoCalGas and SDG&E to establish the Liability Insurance Premium Balancing Account (LIPBA) in the 2019 GRC decision: "We find that in the case of Applicants, some of the risks that require adequate insurance coverage are atypical to other businesses and these include risks that can lead to severe damage and risks that are hard to predict….Therefore, we find that authority to establish the LIPBA should be granted in this decision."[35] While balanced treatment of liability insurance helps with unforeseen cost pressures of procuring insurance, the risk to SoCalGas remains in securing and maintaining adequate insurance coverage.

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

[33] Insurance Information Institute, *Facts + Statistics: Wildfires, available at:* https://www.iii.org/fact-statistic/facts-statistics-wildfires.

[34] A.17-10-008 Ex. SCG-29/SDG&E-27/ Cayabyab at 16-17.

[35] D.19-09-051 at 534.

III. FINANCIAL RISK

A. Overview

Financial risk is a function of the amount of debt in a company's capital structure. The more debt financing, or leverage, a company carries, the higher the financial risk because of the fixed payment obligations associated with debt. As the ratio of debt to equity rises, the amount of revenues that need to be committed to debt payment obligations also increases. This creates risk to shareholder returns since investors are only entitled to revenues once fixed obligation payments are met.

The amount of debt in a company's capital structure, relative to equity, is a common metric used by credit rating agencies to evaluate financial risk. Ultimately credit rating agencies use this and other metrics, and their assessment of business risk, to assign a credit rating. SoCalGas's credit rating is one of the primary factors in determining the price of investor capital and is a signal to investors.

SoCalGas uses its capital structure to manage financial risk, historically utilizing increased levels of Common Equity relative to Long-Term Debt and Preferred Equity. Ms. Arazi's testimony addresses this in more detail while discussing SoCalGas's proposal for an appropriate capital structure for Test Year 2023 that is more aligned with its average recorded actual capital structure.

B. Magnitude of Capital Spending

The magnitude of capital spending increases financial risk by putting pressure on the utility's capital structure, stressing credit metrics, and impacting cash flows. As discussed in Section II.C above, SoCalGas anticipates the largest capital investment in its history over the next five years. To finance these capital investments, SoCalGas will need to raise significant capital from investors.

C. Economic Impacts of the Pandemic

In March 2020, the Commission issued a directive ordering immediate protection to residential and small commercial customers adversely affected by the COVID-19 pandemic.[36] One of these protections was a moratorium on disconnection from gas service due to non-payment.[37] The Commission extended the moratorium through September 30, 2021, one of the longest moratoriums in the U.S.[38] The average past due balances for SoCalGas customers in 2021 increased fivefold over pre-pandemic levels in 2019.[39] Subsequently, the Commission instituted a Rulemaking 21-02-014 *to Address Energy Utility Customer Bill Debt Accumulated During the COVID-19 Pandemic* (COVID-19 Bill Debt OIR) to ease the burden of debt to customers who could not pay their utility bills during the pandemic.[40] Bad debt incurred by SoCalGas customers could result in rate increases[41] and affordability concerns. As Moody's states, however, "there is a possibility that longer term recessionary pressures and high unemployment may increase regulatory resistance to rate increases."[42] If SoCalGas is unable to

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36 CPUC Directive issued March 17,2020. Subject: "Emergency Customer Protections to Support Customers Affected by the COVID-19 State of Emergency."

37 On April 16, 2020, the Commission adopted Resolution M-4842, Emergency Authorization and Order Directing Utilities to Implement Emergency Customer Protections to Support California Customers During the COVID-19 Pandemic, directing utilities to offer the protections adopted in D.19-07-015 to all residential and small business customers through April 16, 2021, with an option to extend.

38 D.21-06-036 at 50 (Ordering Paragraph 1).

39 Refers to monthly average past due balances for all customer classes. *See* Monthly Disconnection Report Filed by SoCalGas in Rulemaking 18-07-005, April 20, 2021.

40 Order Instituting Rulemaking (OIR) 21-02-014 to Address Energy Utility Customer Bill Debt Accumulated During the COVID-19 Pandemic, February 11, 2021.

41 Historically, SoCalGas' anticipated bad debt is incorporated into its base rates through the GRC. SoCalGas uses statistical tools and historical data to estimate the revenues from customers that they anticipate will not be paid or will record a high delinquency ratio. This "authorized amount of bad debt" is incorporated in the revenue requirements (so that, if the revenues from customers are defaulted, the utility is still made whole as it's collecting the "gap" from the other end-users).

42 Source: Moody's, Credit Opinion: "Southern California Gas Company," (June 2, 2020). Moody's "Update following downgrade to A2, stable"

or experiences significant delays to recover costs associated with bad debt through rates, its cash flows and financial condition may be adversely affected.

D. Energy Procurement Risk

In Moody's discussion of SoCalGas commodity procurement risk, they state that SoCalGas "minimizes its use of spot purchases to meet the natural gas demand of its customers."[43] They also recognize that "SoCalGas relies on interstate pipeline capacity, physical storage, and financial instruments that include a mix of NYMEX-based natural gas and weather contingent options as well as specific locational basis swaps, another credit positive."[44]

The CPUC has recently established a mandatory biomethane procurement program that will impact energy procurement. Senate Bill (SB) 1440 requires the Commission to consider setting biomethane procurement targets for the investor-owned gas utilities (IOUs) in California, to assist the State in meeting its goals to reduce short-lived climate pollutant emissions.[45] The CPUC issued a final decision in February 2022, pursuant to SB 1440, establishing biomethane procurement targets for California gas utilities on behalf of their core customers for 2025 and 2030. The decision allows the utilities to enter biomethane procurement contracts for a maximum term of 15 years. While long-term contracts may be essential for utilities to secure supply to meet their targets, if a counterparty fails to meet their contractual supply obligation, there is risk of not meeting the SB1440 targets. High cost long-term contracts will affect SoCalGas's energy procurement and may increase business risk as the market for biomethane

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

44 *Id.*

45 SB 1440 Energy: biomethane: biomethane procurement (Hueso, 2018) *available at: https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=201720180SB1440*.

evolves and as customer usage patterns change over time from factors such as energy efficiency and building electrification.

IV. REGULATORY RISK

A. Overview

Regulatory risk refers to how supportive investors perceive the regulatory environment. The more predictable regulatory outcomes are, the lower the risk to investors. Factors such as timeliness and past precedent being upheld with issued decisions, and final decisions remaining final create stability and lower the risk of uncertainty in regulatory outcomes. The investment community and credit rating agencies monitor regulatory outcomes to assess the regulatory environment, as it is a significant factor in the utilities' financial health. Regulatory "lag" or delays in receiving authorization to recover costs through rates can lead to financial concerns.

While the investment community recognizes the negative sentiment of some towards natural gas in California, the view that "the regulatory environment will remain supportive, and that the State's long-term environmental goals and policies will not result in significant risks of stranded assets"[46] allows for some creditors to have a stable outlook on SoCalGas. Lack of regulatory support for SoCalGas, or a negative outcome in a proceeding that materially impacts financial or operational performance, could cause concern from the investment community and potentially a credit rating downgrade. SoCalGas currently has many open proceedings including investigations and rulemakings. The outcome of these proceedings could have material financial and operational impacts to SoCalGas and this uncertainty poses risk.

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

B. Risks Associated with Regulatory Accounts

Regulatory accounts allow utilities to track costs and seek cost recovery at a later date, which is generally viewed positively as a risk mitigation tool by the investment community and rating agencies. SoCalGas recognizes that regulatory accounts are favorable and afford the Company the opportunity to recover the outstanding balances in such accounts when reasonable and appropriate. The number of regulatory accounts and associated undercollections that SoCalGas currently manages without certainty of cost recovery has grown, however, which increases risk for the utility. Cost tracked in regulatory accounts without full and timely authorization of cost recovery increases the risk of SoCalGas's cash flows, credit metrics, and capital structure being negatively impacted.

It can be viewed as a financial risk to investors for a utility to make significant investments and experience significant regulatory lag to recover the investment from ratepayers. Rating agencies have commented on the impact of regulatory lag on SoCalGas's credit rating:

> We generally view these trackers and riders as a credit positive because they improve cash flow transparency and predictability. However, in the case of California, the benefits are often undermined by long and drawn-out regulatory proceedings that result in significant regulatory lag.[47]

Further, for many regulatory accounts, particularly with memorandum accounts, cost recovery is not guaranteed, resulting in additional financial risk. SoCalGas may make substantial investments that are later denied cost recovery from ratepayers. The total regulatory account balances that SoCalGas has not put in rates are forecasted to grow significantly over the

[47] *Id*.

next several years and may take a considerable amount of time to recover in rates leading to increased financial risk.

C. Regulatory Uncertainty

SoCalGas has experienced an increasing number of open investigations and rulemakings with the CPUC that have the potential for material financial or operational impacts since the last Cost of Capital proceeding, including the Long-term Gas System Planning OIR, two investigations related to Aliso Canyon, and the Safety Culture OII.

The Long-Term Gas System Planning OIR was initiated by the Commission in January 2020 to develop a long-term strategy to implement the State's transition toward meeting California's decarbonization goals while ensuring safe and reliable gas service and just and reasonable rates in California.[48] As part of the long-term planning framework, the CPUC is considering methods of addressing the useful life and cost recovery of assets, with topics such as accelerated depreciation and stranded assets. Regulatory policies should recognize that a successful transition to decarbonization will require continued investment in the safety and reliability of the gas system, and thus gas utilities should be able to recover the costs of investments that were prudently made. As noted above in the Affordability section of my testimony, assurance of cost recovery is critical to the utilities' ability to continue to raise capital at reasonable cost. This proceeding is closely monitored by the investment community and factored into credit rating assessments by credit rating agencies, due to the proceeding's focus on transitioning away from natural gas-fueled technologies to meet California's decarbonization goals. Moody's comments on the uncertainty related to this proceeding in a recent credit opinion, "SoCalGas's credit profile reflects some uncertainty until the completion of this

[48] R.20-01-007.

proceeding given the wide range of possible outcomes."[49] As Fitch noted in its April 2021 Rating Action Commentary, "The companies' long-term rating stability depends on constructive regulatory solutions that balance system reliability, the financial health of the utilities and progressive aspirations."[50] The pending final outcome of the proceeding creates uncertainty, resulting in increased risk, and potentially downward pressure on SoCalGas's credit rating.

An investigation evaluating the feasibility of reducing or eliminating the use of Aliso Canyon, has been ongoing since 2017. In addition to concerns about gas and electric reliability, SoCalGas also faces significant financial exposure if the field is permanently closed. Any impairment to the facility or incremental capital or operational costs, that could not be recovered in rates could have a material impact on its operations, finances, and cash flows.[51]

In June 2019, the Commission opened a separate investigation to assess if any of the findings of the root cause analysis of the 2015 Aliso Canyon gas leak represent any violation of laws or regulations and if so, what sanctions and/or penalties would be applicable.[52] The outcome of these investigations could result in fines and other costs that may not be recoverable.

In June 2019, the CPUC opened an investigation to determine if the organizational cultures at SoCalGas and Sempra adequately prioritize safety by directing resources to promote accountability, and achieve safety performance goals, standards, and improvements. A safety culture assessment was conducted throughout 2021 and the report detailing the results of the assessment was released by the CPUC in early 2022. The methodology used to assess the safety culture at SoCalGas differs from a more traditional benchmarking or maturity assessment. To

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

50 Fitch, Rating Action Commentary: "Fitch Affirms Sempra and Subsidiaries; Rating Outlook Stable," (April 8, 2021).

51 Sempra Energy 2021 Form10-K, February 25, 2022, at 82.

52 I.19-06-016

assess SoCalGas's safety culture, the Commission's consultants collected "cultural facts" that "consist of the perceptions, beliefs and values" of SoCalGas employees and contractors. To identify improvement opportunities in the assessment, perceptions, whether accurate or not, are treated as facts by the consultants because perceptions drive behavior. Because this approach is new to our industry, new to the CPUC and unfamiliar to SoCalGas and its stakeholders, this investigation presents a continued risk to the Company. In particular some stakeholders appear to equate the qualitative "cultural facts," with matters of fact and have presented adversarial positions as a result.

Relatedly, in 2021, the Commission issued an OIR to "develop and adopt a safety culture assessment framework and identify the structure, elements, and process necessary to drive each regulated investor-owned electric and natural gas utility and gas storage operator to establish and continuously improve their organization-wide safety culture."[53] The Rulemaking is intended to "determine a process for ongoing review and refinement of their safety culture assessments in future years."[54] At this stage, it is unclear whether the assessment approach relied upon in the Investigation will be adopted in the Rulemaking or whether enhancements and processes implemented in the Investigation will align with the framework developed in the Rulemaking. Accordingly, the Rulemaking introduces additional uncertainty and risk related to the Commission's investigation and oversight of utility safety cultures.

Sempra Energy informs the investment community of the impact that proceedings such as the ones listed above can have on the company in its 2021 Form 10-K Report.

Many of these standards and programs are becoming more stringent and could impose severe penalties, including enforcement programs under which the CPUC

[53] R. 21-10-001
[54] *Id.*

staff can issue citations that in some cases can impose substantial fines. The CPUC conducts reviews and audits of the matters under its authority and could launch investigations or open proceedings at any time on any such matter it deems appropriate, the results of which could lead to citations, disallowances, fines and penalties, as well as corrective or mitigation actions required to address any noncompliance that may not be sufficiently funded in customer rates or at all. Any such occurrence could have a material adverse effect on Sempra's, SDG&E's and SoCalGas' results of operations, financial condition, cash flows and/or prospects.[55]

V. CONCLUSION

SoCalGas respectfully asks the Commission to consider my testimony and adopt the Company's proposed authorized Cost of Capital for Test Year 2023, which represents a Cost of Capital commensurate with SoCalGas's business, financial, and regulatory risks. SoCalGas's higher risk profile differs from its utility peer group which warrants SoCalGas's ROE to be at the higher end of the modeling result range presented in Mr. Coyne's testimony (Exhibit SCG-04) and for SoCalGas's capital structure to be consistent with the level proposed in Ms. Arazi's testimony (Exhibit SCG-02). This concludes my prepared direct testimony.

[55] Sempra Energy 2021 Form10-K, February 25, 2022, at 48.

VI. WITNESS QUALIFICATIONS

My name is Deana M. Ng. I am the Vice President of Risk Management and Chief Risk Officer at Southern California Gas Company. My business address is 555 West Fifth Street, Los Angeles, California, 90013-1011.

I have held my current position since November 2020. I first joined SoCalGas in 2011 in the role of Senior Regulatory Counsel and was promoted to Director of Major Program & Project Controls in 2014. Prior to joining SoCalGas, I was a Senior Regulatory Attorney at Southern California Edison Company, where I was employed as a Regulatory Attorney from 2005 to 2011. From 2001 to 2005, I was a Litigation Associate at Morrison & Foerster LLP, and from 2000-2001, I served as a federal judicial law clerk to the Honorable Roger L. Hunt in the District of Nevada.

I received a Juris Doctorate degree from New York University School of Law in 2000, and a Bachelor of Arts degree in American Studies and Political Science from California State University, Fullerton in 1997.

I have previously testified before the Commission.