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PREPARED DIRECT TESTIMONY OF

ARI BEER - COMPANY RISK

ON BEHALF OF

SAN DIEGO GAS & ELECTRIC COMPANY

BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA



APRIL 20, 2022

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PREPARED DIRECT TESTIMONY OF ARI BEER ON BEHALF OF SAN DIEGO GAS & ELECTRIC COMPANY

I. INTRODUCTION

My testimony provides a qualitative overview of the business, regulatory, and financial risks that San Diego Gas & Electric Company ("SDG&E" or "Company") faces that differ from utilities nationwide and should be considered in setting SDG&E's Cost of Capital for Test Year 2023. I highlight SDG&E's risks, in conjunction with the risks discussed in the testimony of James M. Coyne (Exhibit SDG&E-04), to inform Mr. Coyne's analysis of SDG&E's return on equity ("ROE"), SDG&E's ROE request (Valerie A. Bille (Exhibit SDG&E-01)), and the analysis of capital structure and financial risks set forth in the testimony of Maritza Mekitarian (Exhibit SDG&E-02).

As Mr. Coyne discusses, risk is a crucial component in assessing SDG&E's rate of return and ROE because capital markets determine the price of investor capital (*i.e.*, the required return on stocks and bonds) based on SDG&E's riskiness relative to other investments. Investors require a lower return for lower risk (*e.g.*, "risk free" US government treasury bonds) and will require higher returns for riskier assets. Investors have many investment choices in competitive financial markets, including stocks, bonds, money market funds, treasury securities, and real estate, and will flock to a lower-risk investment over another if the return is the same.

SDG&E must thus offer investors the prospect of earning a return on their investment that fairly prices the unique and additional risks relative to other investments, industries, and its utility peers; particularly as it seeks to attract the necessary additional capital needed to invest in public infrastructure improvements to provide safe, reliable, clean, and cost-effective energy.

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California utilities are not fully comparable to non-California utility peers.¹ California utilities carry higher risks and therefore a significant risk premium (*i.e.*, investors require a higher rate of return), because SDG&E and other California utilities face higher business, regulatory and financial risks relative to non-California utilities. As Table 1 shows, investor analysts discount SDG&E and other California utilities' equity valuation relative to the average regulated utility; meaning that SDG&E and other California electric utilities carry a risk premium for their above-average risks.

For example, in recent investor analyses of Sempra Energy (SDG&E's publicly traded parent company), numerous analysts emphasized the discount that they apply to Sempra Energy's stock price because of the risks associated with SDG&E and other California utilities; principally because of (but not limited to) California's unique wildfire liability risks.

Table 1: Investor Analysts Valuation Discount

Date	Bank / Equity Analyst	Valuation Discount	Commentary
January 19, 2022	Bank of America Securities	-2.0x (equivalent to 11%)	We continue to apply a -2x discount to reflect above- average wildfire risk (albeit below that for Northern California peers) and uncertainty on the gas LDC's longer-term prospects as the state takes actions to reduce consumption. ²
June 30, 2021	Morgan Stanley	-10%	We value the CA utilities at a 10% discount to peers as the above-average rate base growth outlook is counterbalanced by a challenging regulatory and political backdrop along with heightened fire risk. ³

See, e.g., Standard & Poor's ("S&P"), How are California's Wildfire Risks Affecting Credit Quality? (Jun. 3, 2021) ("S&P, June 3, 2021") at 10 (discussing how S&P is unlikely to raise California electric IOUs credit ratings in the near term because of the unique combination of California's high wildfire threat climate conditions and California's interpretation of inverse condemnation), available at https://www.spglobal.com/ratings/en/research/articles/210603-credit-faq-how-are-california-s-wildfire-risks-affecting-utility-credit-quality-11954953.

² BofA Global Research, Sempra Energy, Setting the Stage for CAGR Launch: Depends Where You Start (January 19, 2022) at 9.

Morgan Stanley, Sempra Energy North America, Analyst Day Takeaways (June 30, 2021), ("Morgan Stanley June 30, 2021") at 2.

June 29, 2021	Vertical Research Partners	-7.5%	We continue to apply a 7.5% California utility discountto our 17.5x 2023E regulated target multiple. ⁴
November 7, 2021	Wells Fargo	-11%	Discounted multiple reflects lingering risks related to CA's inverse condemnation policy and highly politicized regulatory environment, partially offset by a highly supportive 5-year rate plan and, separately, constructive FERC regulation. ⁵

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As shown in Table 1, investors consider SDG&E to be higher risk compared to other utilities nationwide. For SDG&E, as the above analyses indicate, these unique risks are principally categorized as wildfire-related risks, political and regulatory risks, rising financial risks in the forms of carrying larger amounts of costs for longer time periods, rising rate pressures, and an elevated capital investment program, as further discussed below.

II. INCREASED RISK OF CATASTROPHIC WILDFIRE AND OTHER EXTREME WEATHER EVENTS FROM CLIMATE CHANGE

California has arguably felt the effects of climate change more than any other state—with the most prevalent impacts being the increased threat of wildfires—both in the terms of the intensity and length of fire season.⁶ More than half the acres burned in the Western United States is attributable to climate change, and the amount of dry and windy autumn days in California has doubled since 1980.⁷ Although other natural disasters continue to pose risks, such as earthquakes—and new risks will arise from climate change including severe drought, rising sea

Vertical Research Partners, Sempra Energy (SRE) Infrastructure is the new Energy (June 29, 2021), at 1.

Wells Fargo, Sempra Energy (SRE) SRE: Nudging up EPS on Another Positive Oncor Update; SIP Projects in Focus on Q3 Call (November 7, 2021), ("Wells Fargo November 7, 2021") at 2.

S&P, June 3, 2021 at 1 (discussing how "California's environment remains highly prone to catastrophic wildfires, continuing to pressure utility credit quality").

⁷ See Scientific American, Climate Change is Central to California's Wildfires (Oct. 29, 2020), available at https://www.scientificamerican.com/article/climate-change-is-central-to-californias-wildfires/.

levels⁸ and extreme weather volatility that can cause reliability issues such as the rolling blackouts that California faced in August 2020⁹—the focus of this testimony will be on catastrophic wildfire risk because of its immediate, direct, and negative effect on SDG&E's equity investor risks and credit ratings.

The business risk associated with catastrophic wildfires primarily comprises two related elements: (1) the increased frequency and magnitude of catastrophic wildfires in California, which are being exacerbated by climate change; and (2) the potential that SDG&E may face massive uninsured and unrecoverable liabilities if its equipment is involved in a wildfire ignition due to the state's legal and regulatory regime.

A. Wildfire Risk is Increasing in Frequency and Magnitude

Wildfire risk is now a nearly year-round threat in Southern California. "Wildfires are increasing in size and intensity in the Western United States, and wildfire seasons are growing longer." As S&P stated, "California's environment remains highly prone to catastrophic wildfires" 11

Climate change has both lengthened wildfire seasons and increased fire potential with the amount of available dry fuels. Severe drought and an increasing amount of heat waves is exacerbating the problem. Warmer spring and summer temperatures, reduced snowpack, and

See California Energy Commission, Rising Seas and Electricity Infrastructure: Potential Impacts and Adaptation Options For San Diego Gas and Electric (August 2018) at 51-52, available at https://www.energy.ca.gov/sites/default/files/2019-11/Energy CCCA4-CEC-2018-004 ADA.pdf.

See CAISO, Root Cause Analysis: Mid-August 2020 Extreme Heat Wave (January 13, 2021) at 39, available at http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf.

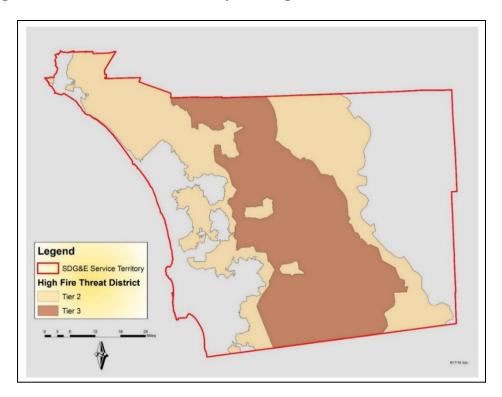
See The New York Times, Hotter Summer Days Mean More Sierra Nevada Wildfires, Study Finds (November 17, 2020), available at https://www.nytimes.com/2021/11/17/climate/climate-change-wildfire-risk.html.

¹¹ S&P Jun. 3, 2021 at 1.

earlier spring snowmelt create longer and more intense dry seasons that increase moisture stress on vegetation and make forests more susceptible to severe wildfire. On March 24, 2022, a California State Auditor report stated that "California is at a higher risk of wildfires and more frequent power shutoffs in part because of the nearly 40,000 miles of bare power lines in areas where there is a greater threat of wildfire."¹²

SDG&E's service territory, which includes San Diego County and parts of Orange County is extremely prone to wildfire outbreaks. As depicted in Figure 1 below, 57% of SDG&E's service territory is classified as being in a High Fire Threat District as classified by the California Public Utilities Commission ("CPUC" or "Commission").

Figure 1: SDG&E Service Territory and High Fire Threat District Boundaries

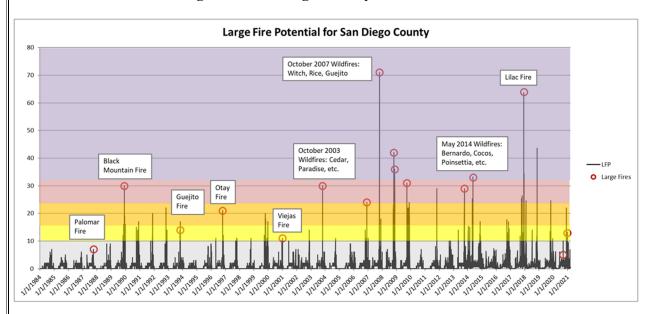


Auditor of the State of California, *Electrical System Safety - California's Oversight of the Efforts by Investor-Owned Utilities to Mitigate the Risk of Wildfires Needs Improvement* (March 24, 2022) ("Auditor Report, March 24, 2022") at 1, available at http://auditor.ca.gov/reports/2021-117/index.html - section4.

1 Given the topography of SDG&E's service territory, wildfires can spread quickly and 2 3 4 5 6

cause extreme damage due to the presence of Santa Ana winds—warm, extremely dry winds that can blow upwards of 100 miles per hour east to west through mountain passes in Southern California—and dry vegetation in a region that sees very little annual rainfall. As seen in the SDG&E produced graph, Figure 2 below, there is a distinct trend of more frequent and more extreme wildfire weather events in the San Diego region since 1984. SDG&E expects this trend to continue.

Figure 2: San Diego County Fire Potential



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SDG&E's service territory has experienced the effects of wildfires in the past and SDG&E's infrastructure has previously been a source of wildfire ignitions. The California Department of Forestry and Fire Protection ("Cal Fire") attributed three of the many wildfires that ignited in the October 2007 firestorm to SDG&E infrastructure. Unfortunately, the 2007 wildfires were not isolated occurrences. Although not linked to SDG&E infrastructure, the Company's service territory has experienced several other significant wildfire events since 2007, including the Bernardo, Cocos and Poinsettia fires in May 2014, the Lilac Fire in December 2017, the West Fire in June 2018, and the Valley Fire in September 2020.

Recent events in California illustrate the increased risk and severity of wildfires. The eight largest fires in California history have occurred since 2017, of which five occurred in 2020 alone and one in 2021.¹³ As Cal Fire notes, "[t]he 2020 California wildfire season was characterized by a record-setting year of wildfires that burned across the state of California as measured during the modern era of wildfire management and record keeping." At the time, 2017 recorded the largest wildfire in the state, the Thomas Fire. This would be surpassed by a new record fire in 2018, the Mendocino Complex Fire, which would subsequently be surpassed by a fire more than twice its size in 2020, the August Complex Fire. In August 2021, the Dixie Fire became the second largest in California history.

Since the 2007 wildfires in its service territory, SDG&E has made wildfire risk mitigation a top priority and has been engaged in a series of wildfire risk mitigation efforts, as described in its Wildfire Mitigation Plan. ¹⁵ The Company is recognized as an industry leader in this area. As S&P stated in May 2021 in taking SDG&E off negative credit watch, "SDG&E is a global leader

See Cal.Gov, Cal Fire Top 20 Largest Fires, available at https://www.fire.ca.gov/media/4jandlhh/top20 acres.pdf.

See Cal.Gov, Cal Fire, 2020 Incident Archive, available at https://www.fire.ca.gov/incidents/2020/.

Wildfire Mitigation Plan (WMP) documents:

SDG&E 2020 WMP (February 6, 2019): https://www.sdge.com/sites/default/files/regulatory/R.18-10-007 SDG%26E Wildfire Mitigation Plan.pdf; SDG&E 2020 WMP (February 7, 2020): 2020 Wildfire Mitigation Plan | San Diego Gas & Electric (sdge.com); and SDG&E 2020-2022 WMP Update (February 5, 2021): 2021 Wildfire Mitigation Plan | San Diego Gas & Electric (sdge.com).

in wildfire prevention."¹⁶ All three rating agencies have repeatedly lauded SDG&E's mitigation efforts:

- S&P: "Over the past decade [SDG&E] has been a leader in wildfire prevention through the implementation of technology and system hardening. These measures reduce the probability that the company will be the cause of a catastrophic wildfire. As a direct result of the company's proactive ingenuity . . . the company has developed a strong track record of either avoiding wildfires or not being the cause of a catastrophic wildfire." ¹⁷
- Moody's: Noting "SDG&E's track record of effective wildfire risk mitigation practices." ¹⁸
- Fitch: "SDG&E's fire prevention and mitigation investments contributed to a strong safety record over the past decade."¹⁹

Nevertheless, as discuss further below, the sheer increase in the length and severity of California's wildfire season continues to create heightened risk for SDG&E and other California electric utilities that are not shared by the average utility nationwide is reflected in the fact that SDG&E's credit ratings remain *two notches* below its summer-2018 levels even with the recent Moody's upgrade.

S&P, Sempra Energy Unsecured Debt Rating Lowered To 'BBB'; Outlook On Subsidiary SDG&E Revised To Stable (May 12, 2021) ("S&P May 12, 2021") at 2.

S&P Global Ratings, *Ratings Direct, San Diego Gas & Electric Co.*, (Jun. 30, 2020) at 2; *accord* S&P Global Ratings, *Ratings Direct, San Diego Gas & Electric Co.* (July 9, 2021) ("S&P July 9, 2021") at 3 ("SDG&E has been a leader in wildfire prevention through the implementation of technology and system hardening.").

¹⁹ Fitch Ratings, Fitch Affirms Sempra and Subsidiaries; Rating Outlook Stable (Apr. 8 2021) at 5.

Table 2: SDG&E Credit Rating Updates

Rating	SDG&E					
Agency	Date	Rating	Outlook	Action Taken		
	Jul 9, 2018	A	Negative	Outlook revised to Negative		
	Sep 5, 2018	A-	Negative	Downgraded one notch to A- and Outlook remained Negative		
COD	Jan 21, 2019	BBB+	Negative	Downgraded one notch to BBB+ and Outlook remained Negative		
S&P	Jul 30, 2019	BBB+	Stable	Outlook revised to Stable		
	Sep 16, 2020	BBB+	Negative	Outlook revised to Negative		
	May 12, 2021	BBB+	Stable	Outlook revised to Stable		
	Apr 11, 2018	A1	Negative	Outlook revised to Negative		
	Sep 6, 2018	A2	Stable	Downgraded one notch to A2 and Outlook revised to Stable		
Mandala	Jan 24, 2019	A2	Negative	Placed on review for downgrade		
Moody's	Mar 5, 2019	Baa1	Negative	Downgraded two notches to Baa1 and Outlook remains Negative		
	Jul 29, 2019	Baal	Positive	Outlook revised to Positive		
	Mar 30, 2021	A3	Stable	Upgraded one notch to A3 and Outlook revised to Stable		
	Apr 20, 2018	A	Stable	Review – No Action		
	Sep 13, 2018	A-	Stable	Downgraded one notch to A- and Outlook revised to Stable		
Fitch	Jan 22, 2019	A-	Negative	Outlook revised to Negative		
	Mar 11, 2019	BBB+	Negative	Downgraded one notch to BBB+ and Outlook remains Negative		
	Jul 17, 2019	BBB+	Stable	Outlook revised to Stable		

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Credit rating agencies have stated that the higher risk of wildfires alone in California presents higher risks. For example, S&P stated that the "lack of sufficient rainfall, the dry environment, and the apparent ease that is causing routine fires to develop in catastrophic

wildfires increases the likelihood that a California investor-owned electric utility could potentially be the cause of a catastrophic wildfire."²⁰

B. Inverse Condemnation Combined with Uncertainty Regarding Cost Recovery has Heightened Risks

Nor are SDG&E and other California electric utilities only exposed to a geographic landscape more prone to wildfires and higher costs because of those fires. Instead, the risk from the underlying propensity for wildfires in SDG&E's service territory is exacerbated by the state's wildfire liability regime. Under California state law, utilities are strictly liable for property damage caused by utility facilities under the doctrine of inverse condemnation, even in the absence of fault and where the utility's facilities were one of several concurrent causes.²¹

Due to California's higher population density, higher property values, and many new housing developments being constructed near or in the High Fire Threat Districts, damages caused by wildfires in California are more costly than in other states. California has the most properties in high to extreme risk areas in the country and more properties than the second to eighth riskiest states combined, as can be seen in Figure 3. The ten most destructive wildfires in the history of the U.S. based on insured losses have all occurred in California.²² SDG&E does not have any authority or control over new construction developments in its service territory and has an obligation to service all customers. This underscores that California is the most exposed to property damages among wildfire-prone states.

S&P Global, San Diego Gas & Electric Co. Outlook Revised to Negative on Adverse Wildfire Conditions: 'BBB+' Rating Affirmed (Sept. 16, 2020) ("S&P Sept. 16, 2020") at 1, 3.

S&P Jun. 3, 2021 at 1 ("California IOUs . . . remain exposed to onerous liability claims under the state's inverse condemnation doctrine—whereby a California utility can be financially responsible for a wildfire if its facilities were a contributing cause of a wildfire, irrespective of negligence.").

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

Figure 3: Top 10 States At High to Extreme Wildfire Risk

Rank	State	Estimated number of properties at risk
1	California	2,040,600
2	Texas	717,800
3	Colorado	373,900
4	Arizona	242,200
5	Idaho	175,000
6	Washington	155,500
7	Oklahoma	153,400
8	Oregon	147,500
9	Montana	137,800
10	Utah	136,000

Data as of October 2021

The application of inverse condemnation is exacerbated by uncertainty regarding cost recovery. California courts apply inverse condemnation on the rationale that the public entity or utility can spread costs through rates. Yet the Commission has applied its "prudent manager" standard to a utility's role in catastrophic wildfires without regard to the strict liability imposed by inverse condemnation or the cost-spreading rationale underlying that doctrine.²³ This means that a utility can be liable for a wildfire under inverse condemnation through no fault of its own, potentially without any means of recovery or cost sharing for those costs subject to the Commission's jurisdiction (subject to Assembly Bill ("AB") 1054, described below).

For instance, in the aftermath of the October 2007 wildfires, SDG&E settled approximately 2,500 claims, paying about \$2.4 billion. While SDG&E recovered a portion of those settlement costs through insurance (\$1.1 billion), recoveries from third parties (\$827 million), and the Federal Energy Regulatory Commission ("FERC") authorized recoveries (\$80

²³ See Decision ("D.")17-11-033 at 10.

million),²⁴ in December 2017 the CPUC rejected that it needed to take inverse condemnation into account and denied all recovery of the state portion of the 2007 wildfire costs, totaling \$421 million.²⁵

By contrast, as noted, FERC found that SDG&E was prudent on the same conduct and granted recovery, determining that, even if SDG&E's presumption of prudence was not dispositive, the recovery of SDG&E's wildfire costs was valid because SDG&E would likely be held responsible for such costs under inverse condemnation regardless of fault.²⁶ As Moody's stated, these differing results between FERC and the Commission regarding the same conduct threw "into doubt the ability of utilities in the state to recover wildfire costs and raised questions about how incurring such costs would affect" a California utility's financial stability.²⁷ At a minimum, it has demonstrated that any catastrophic wildfire has the potential to result in significant, years-long litigation that results in SDG&E facing a substantial risk of major legal and defense costs that it may be unable to recover in rates or insurance.

The potential liability of Pacific Gas and Electric Company ("PG&E") and Southern California Edison Company ("SCE") for the 2017 and 2018 wildfires is similarly substantial, underscored by PG&E on January 29, 2019 filing for Chapter 11 bankruptcy protection based, at

See, e.g., San Diego Gas & Elec. Co., 146 FERC ¶ 63,017 (2014) (this initial decision became the final decision of the Commission by operation of law because no exceptions were taken to it.).

See D.17-11-033 at 1. The total state portion of the 2007 wildfire costs was \$421 million. After applying a voluntary 10% shareholder contribution to this amount, SDG&E requested \$379 million in CPUC cost recovery.

SDG&E, 146 FERC ¶ 63,017 at 60.

Moody's, FAQ on the credit implications of California's new wildfire law (Aug. 6, 2019) at 2.

least in part, on risk and potential liability from wildfires.²⁸ PG&E has since reached a settlement with wildfire victims, insurance companies, and affected cities for over \$25.5 billion.²⁹

C. AB 1054 Moderated SDG&E's Wildfire Risks, But its Application Remains Uncertain and SDG&E's Credit Ratings Remain Depressed

To address the growing risk of wildfire and inverse condemnation, the state of California passed AB 1054.³⁰ This legislation established a wildfire fund, in which SDG&E is a participating utility,³¹ and provides:

- The availability of immediate liquidity to pay wildfire claims;
- A cap on utility liability to 20% of the utility's transmission and distribution equity rate base, with remaining claims paid from the wildfire fund;
- Providing a prudence standard deeming that that the conduct of a utility with a valid safety certification with regard to the cause of a wildfire will be deemed reasonable, unless a serious doubt is raised; and
- The incentive to settle subrogation claims at or below 40 percent of the claimed value.³²

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See PG&E Corporation, PG&E Files for Reorganization Under Chapter 11 (January 29, 2019), available at http://www.pgecorp.com/news/press releases/Release Archive2019/190129press release.shtml.

See PG&E Corporation, PG&E Submits Comprehensive, Multi-Party Settlement Agreement to CPUC Related to 2017 and 2018 Wildfires (December 17, 2019), available at https://investor.pgecorp.com/news-events/press-releases/press-release-details/2019/PGE-Submits-Comprehensive-Multi-Party-Settlement-Agreement-to-CPUC-Related-to-2017-and-2018-Wildfires/default.aspx.

³⁰ AB 1054, Stats. 2019-2020, Ch. 79 (Cal. 2019).

³¹ See Sempra Energy and SDG&E SEC Form 8-K, filed July 19, 2019, available at http://investor.sempra.com/static-files/c182aeaf-00b8-48cb-9d48-675852d50c33.

See, e.g., id. at 3; Moody's Investor Service, Rating Action: Moody's affirms San Diego Gas & Electric Company's ratings; outlook remains negative" (July 12, 2019) at 1 (the wildfire "fund provides a much higher level of near-term risk reduction for SDG&E [compared to the liquidity-only fund] because it caps the amount of cost disallowance associated with catastrophic wildfire and applies a more credit supportive prudency standard.").

AB 1054 is a significant improvement in addressing the issue of cost recovery,³³ potentially moderating some of the risks facing SDG&E from California's catastrophic wildfire liability regime of inverse condemnation strict liability and the Commission's separate prudence review. As Moody's stated, its stable outlook on SDG&E, reflects "our view that SDG&E's underlying wildfire risk exposure has been reduced and that access to the state's wildfire fund and new prudency standard under Assembly Bill 1054 will support credit quality going forward."³⁴

Yet even with AB 1054's benefits, SDG&E continues to face heightened risk and uncertainty surrounding potential wildfire losses. This ongoing, above average risk—even after AB 1054—is reflected in SDG&E's still-depressed credit ratings. Although, as Mr. Coyne discusses, credit ratings are not entirely indicative of equity risks—as equity investors face more immediate, acute risks of unrecoverable wildfire liabilities that are not shared by creditors (as evidenced by the discount that equity analysts apply to California electric utilities)—credit ratings provide an additional independent, third-party accounting of risks.

As noted, SDG&E's current credit ratings are A3 from Moody's and BBB+ from Fitch and S&P. Those ratings reflect the credit rating downgrades that SDG&E and the other California electric utilities have experienced since 2018 because of the prevalence of catastrophic wildfires and potential wildfire liability from inverse condemnation and uncertain cost recovery—despite SDG&E's equipment not being responsible for any significant fires during that time period and being recognized as an industry leader in wildfire mitigation. Prior to the 2017 and 2018 California wildfires, SDG&E had maintained an 'A' credit rating for 15 years.

See also S&P Jun. 3, 2021 at 1 (stating that AB 1054 is "supportive of the IOUs' credit quality").

³⁴ Moody's Mar. 30, 2021 at 1.

Since then, as shown in Table 2 above, SDG&E has faced multiple negative ratings actions as credit ratings agencies reassessed the increasing regulatory and cost recovery risks from potential wildfires in California; despite, as discussed below, repeatedly lauding SDG&E's wildfire mitigation programs.

Although on March 30, 2021, Moody's upgraded SDG&E's credit ratings one notch to A3 based, in part, on SDG&E's "effective wildfire risk mitigation practices," ³⁵ Table 2 shows that, while AB 1054 halted the slide in SDG&E's credit ratings, SDG&E's credit rating has not been restored to its previous A1 rating largely due to wildfire-related risks despite AB 1054's passage. ³⁶ Instead, they remain two notches below the previous rating from each of the three credit rating agencies.

This is partly driven by the fact that, as discussed above, AB 1054 cannot halt the sheer increased risk of wildfires occurring. As Moody's states (and as noted above), "[c]atastrophic wildfires have become a significant risk to California utilities over the past few years. The effects of climate change and growing housing developments in fire-prone areas, along with the California courts' application of the inverse condemnation legal doctrine, heightens the utilities' risk exposure to property damage."³⁷ This increases the threat that SDG&E's equipment is involved in an ignition, increasing the risks of costs and cost recovery.

Nor has AB 1054 has not fully ameliorated SDG&E's heightened risks regarding cost recovery in the view of credit rating agencies because it is unclear how effectively AB 1054 will be applied. Moody's stated that it could again downgrade SDG&E's credit rating if there is an

³⁵ *Id*.

³⁶ *Id*.

Moody's, San Diego Gas & Electric Company, Update to credit analysis following upgrade to A3 (May 10, 2021) ("Moody's May 10, 2021") at 5.

"unsupportive application of the new prudency standard implemented under the wildfire legislation" or if the non-replenishing wildfire fund is exhausted. ³⁸ As S&P has likewise stated that if "the CPUC does not implement AB 1054 in a credit-supportive manner then much of the new law's credit-supportive elements related to the revised standards of a utility's reasonable conduct could be negligible." ³⁹ Specifically, as Mr. Coyne describes, investors and credit rating agencies continue to question whether the new prudence review standard will be applied in a way that matches the "industry norm," such as seen at FERC, or whether it will remain more difficult to recover costs associated with inverse condemnation then it would be under a prudence review at FERC or in other states. ⁴⁰

Similarly, S&P's "base case scenario" assumes that SDG&E will be found able to maintain its safety certification, ⁴¹ a key component to participating in the AB 1054 wildfire fund. As of July 1, 2021, the Office of Energy Infrastructure Safety—an entirely new office outside of the Commission—is administering the wildfire aspects of AB 1054, evaluating Wildfire Mitigation Plans, and issuing safety certificates. ⁴² The March 24, 2022 California State Auditor report advocated for making it more difficult for utilities to obtain safety certification plans—

³⁸ Moody's Mar. 30, 2021 at 2.

³⁹ S&P Jun. 3, 2021 at 6; accord Fitch, Fitch Affirms San Diego Gas & Electric's IDR at 'BBB+'; Outlook Revised to Stable, dated July 17, 2019 at 1 ("Fitch July 17, 2019") ("the lack of a track record of implementing the new legislation" – "especially the new prudence standard which is subject to interpretation" – is a "credit constraint[].").

Prepared Direct Testimony of James M. Coyne – Return of Equity on Behalf of SDG&E (April 20, 2022) ("SDG&E-04 (Coyne)") at JMC-53.

⁴¹ S&P May 12, 2021 at 4; accord S&P July 9, 2021 at 4.

AB 111, Stats. 2019, Ch. 81, Section 3 (adding Part 7.3 to Division 3 of Title 2 of the Government Code).

despite, as the Auditor notes, the "bill establishing the requirements for safety certifications describes how the Wildfire Fund will support the creditworthiness of electrical corporations." ⁴³

If it becomes exceedingly difficult to maintain a safety certificate, then much of the law's benefits go away, such as the revised prudence standard and the wildfire fund's cap on potentially disallowed costs, placing electric utilities back in the pre-AB 1054 environment. Similarly, SDG&E and other California electric utilities face ongoing risks from conflicting guidance between the two agencies. Or SDG&E could receive a mandate from Office of Energy Infrastructure Safety that is not supported by the Commission, increasing the uncertainty of cost recovery.

Credit rating agencies also have outstanding concerns about the wildfire fund's durability because it lacks any replenishment mechanism once it is exhausted. As Moody's notes, "[i]f and when the insurance fund's claims paying capability is exhausted, the majority of the credit friendly structures, including the disallowance cap, will terminate." Although the exhaustion of the wildfire fund is not an immediate threat, it is limiting the potential positive effect on SDG&E's credit ratings. As S&P stated in assessing SDG&E at the lower end of the excellent business risk profile category, "this view incorporates the higher wildfire risk at California's other investor-owned electric utilities that could potentially lead to the faster-than-expected depletion of the state's wildfire fund." Similarly, JP Morgan notes "that investors may continue

⁴³ Auditor Report, March 24, 2022 at 36.

Moody's May 10, 2021 at 6 (noting that AB 1054 is credit positive so long as a utility has a safety certification).

Moody's July 12, 2021 at 1; *accord* S&P Jun. 3, 2021 at 6 (if the wildfire fund is exhausted, SDG&E "loses the [...] wildfire fund as a source of liquidity and more importantly loses the credit protection of the liability cap.").

⁴⁶ S&P Jul. 9, 2021 at 3.

to employ a cautious approach to California and may seek proof that wildfire fund recovery mechanics works as advertised before narrowing the CA group utility discount (though SRE stands far less exposed than peers due to a generally lower risk service territory and previous grid hardening investments)."⁴⁷

Additionally, the durability of the wildfire fund is largely outside of SDG&E's control. As Fitch states, the amount of funding that will be available to SDG&E from the Wildfire Fund depends on the "frequency and severity of wildfires in other IOUs service territories as well as their safety conduct." S&P similarly noted that this concern led to it placing SDG&E at the lower end of the excellent business category. In sum, as RRA states:

[T]here is no assurance claims would not exceed [the wildfire fund's] amount, that the fund will maintain sufficient funds or that the utility will have access to the fund if it fails to maintain a valid safety certification. Hence, the distinct possibility exists that a utility would be unable to fully recover its costs if inverse condemnation is applied by the courts and the PUC finds imprudence or negligence on the part of the utility.⁵⁰

This, combined with the fact that AB 1054 did not address inverse condemnation and the frequency with which wildfire events are occurring, "argue[s] for a more comprehensive approach in RRA's view," "offset[ing]" the more "constructive aspects" of California's regulatory regime, 51 which resulted in RRA reducing its ranking of California's regulatory environment in 2019 to Average/2. As S&P similarly noted, "[d]espite SDG&E's leadership role in wildfire prevention, we assess the company at the lower end of the range for excellent

⁴⁷ JP Morgan, Sempra Energy: 3Q Earnings Preview: Expect Another Look at Oncor Capex, Focus on Numerous CA Items (October 4, 2021) at 2.

⁴⁸ Fitch July, 17, 2019 at 3.

⁴⁹ S&P July 9, 2021 at 3.

S&P, RRA Regulatory Focus, California Regulatory Review, (Dec. 14, 2020) ("RRA Dec. 14, 2020") at 9.

⁵¹ *Id.* at 1.

business risk profile category," reflecting "the company's higher wildfire threat compared to utility peers across North America." As S&P thus later concluded, "because we view the likelihood of a change to California's interpretation of inverse condemnation as remote, and favorable climate change patterns are also unlikely to emerge for a state with a long history of drought conditions, we are unlikely to raise ratings for utilities with meaningful wildfire-related risks in the near term." And, as noted, investor analysts similarly continue to "discount" the stock of SDG&E's publicly traded parent company Sempra Energy partly based on the overall wildfire threat, 4 and the "lingering risks related to [California's] inverse condemnation policy." 55

The ongoing risk is also reflected in the fact that SDG&E's wildfire insurance market continues to experience increasing premiums and reduced insurance availability, as some insurers leave the California wildfire market altogether, reducing available capacity. SDG&E believes this trend will continue and is a quantified indication of the abnormal amount of risk the insurance companies have accounted for in California. Due to the unique impact the California utilities face in this area, the Commission authorized SDG&E and Southern California Gas

S&P May 12, 2021 at 2; *accord* S&P July 9, 2021 at 6 ("we view the threat of wildfires in its service territory as high relative to that of its utility peers across North America.").

⁵³ S&P Jun. 3, 2021 at 10.

See Morgan Stanley June 30, 2021 ("We value the CA utilities at a 10% discount to peers as the above-average rate base growth outlook is counterbalanced by a challenging regulatory and political backdrop along with heightened fire risk.") at 2; BofA Global Research, Sempra Energy, Investor Day resets expectations lower; Downgrade to Neutral Bank of America (June 30, 2021) at 7 (noting ongoing fire risks).

Wells Fargo November 7, 2021 at 2.

⁵⁶ SDG&E-04 (Coyne) at JMC-55 – JMC-56.

⁵⁷ *Id*.

Company ("SoCalGas") to establish the Liability Insurance Premium Balancing Account (LIPBA) in the 2019 GRC decision, finding that "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."⁵⁸

If SDG&E experiences wildfire costs or liabilities that exceed its insurance coverage and is not covered by the AB 1054 wildfire fund or that cannot be recovered in rates (as discussed below), its financial condition, cash flows, and results of operations can be adversely affected. SDG&E also faces situations that may not be covered by insurance (including costs in excess of applicable policy limits) or that may be disputed by insurers.

Finally, the rates and bill impacts to ratepayers from making critical and necessary wildfire mitigation investments are significant. The March 24, 2022 California State Auditor report found that potentially billions in further investments will be needed to underground lines or cover conductors to minimize power shutoffs. ⁵⁹ In sum, both equity analysts and the three credit rating agencies have seemingly concluded that—even with AB 1054's passage—the higher overall fire risk in the state combined with inverse condemnation and uncertainty over AB 1054's implementation has increased.

III. POLITICAL AND REGULATORY RISKS

In addition to the heightened wildfire threat, equity analysts and credit rating agencies also see SDG&E facing "high political risk and public scrutiny in both San Diego and the state of California." For instance, Moody's recently stated that "SDG&E's credit also factors in our

⁵⁸ D.19-09-051 at 534.

Auditor Report March 24, 2022 at 30 (finding that replacing the nearly 40,000 miles of bare lines in areas of elevated and extreme fire risk would be \$28 billion.).

⁶⁰ Moody's May 10, 2021 at 5.

view that political risk, in terms of media attention and the demand on utilities to implement the state's clean energy policy goals, is higher in California compared to most other jurisdictions in the US."⁶¹ The ratings agency added that a credit downgrade is possible if there is a further "deterioration in regulatory support or an increase in regulatory contentiousness."⁶²

Investor analysts have similarly noted that they discount Sempra's stock price based, in part, on the "highly politicized regulatory environment" that is only "partially offset by a highly supportive 5-year rate plan and, separately, constructive FERC-regulation" and that California utilities face a "challenging regulatory and political backdrop."

A. Wildfire Mitigation Efforts are Controversial

Credit rating agencies and others see political and regulatory risks regarding the need for further wildfire mitigation efforts and the need to respond to extreme weather events with interruptions in service. For example, credit agencies and other analysts are monitoring the reactions to SDG&E and other California electric utilities' need to utilize public safety power shutoffs ("PSPS")—where circuits are preventively deenergized to guard against SDG&E equipment contributing to wildfires—as a measure of last resort to protect public safety by preventing infrastructure-related, catastrophic wildfires.⁶⁵

For instance, Technosylva, a wildfire modeler hired by the Commission, recently noted 15 instances in 2019 where damage to SDG&E's de-energized equipment was found during

⁶¹ *Id.* at 1.

⁶² *Id.* at 3.

Wells Fargo November 7, 2021 at 2.

Morgan Stanley June 30, 2021 at 2.

See SDG&E 2020-2022 WMP Update (February 5, 2021), available at https://www.sdge.com/sites/default/files/regulatory/SDG%26E%202021%20WMP%20Update%2002-05-2021.pdf.

post-patrols.⁶⁶ Technosylva determined that 13 of those would likely have ignited significant fires if SDG&E had not de-energized that equipment in a PSPS event.⁶⁷ The California State Auditor's March 24, 2022 report likewise found that power shutoffs "have proven effective at preventing possible ignitions resulting from broken equipment and hazards during high wind conditions" and a "necessary mitigation tool."⁶⁸ And S&P similarly concluded that "we believe that the use of [PSPS] in addition to the deployment of advanced technologies and system hardening, such as undergrounding or cover conductors, are becoming effective tools for California's utilities to more predictably avert causing a catastrophic wildfire, which we view as supportive of credit quality."⁶⁹

Nevertheless, despite PSPS being an effective wildfire mitigation tool of last resort, the use of PSPS itself has negative political impacts. Moody's stable outlook for SDG&E "assumes that the relationship of the utility with the CPUC and other stakeholders in the state will remain constructive, including with regard to the implementation of its wildfire mitigation and power shut-off programs." But Moody's noted the "significant regulatory and political backlash" faced by SDG&E's peers with regards to PSPS events. S&P similarly added that, should "the frequency of [PSPS events] increase, frustrated customers and politicians could negatively affect California's investor-owned electric utilities ability to consistently manage regulatory risk."

⁶⁶ CPUC, *Public Meeting on Technosylva 2019 PSPS Wildfire Risk Analysis Results* (Mar. 26, 2021), available at http://www.adminmonitor.com/ca/cpuc/other/20210326/.

⁶⁷ *Id*.

⁶⁸ Auditor Report, March 24, 2022 at 14-15.

⁶⁹ S&P Jun. 3, 2021 at 2.

⁷⁰ Moody's Mar. 30, 2021 at 1.

⁷¹ Moody's May 10, 2021 at 6.

⁷² S&P Sept. 16, 2020 at 2.

That is, if PSPS events are unpopular—even if necessary—it could result in political pressures that could have downstream impacts, preventing SDG&E from obtaining the support through both approval and the ability to raise sufficient capital to make necessary investments in things such as wildfire mitigation that can, in turn, reduce the need for PSPS events. Moreover, PG&E's recent fine for its handling of PSPS events demonstrates that this necessary, last-resort response to prevent wildfire ignitions in and of itself bears risks for investors.⁷³

B. Risk That Affordability Measures Could be Implemented in an Ill-Suited Manner that Undermines Critical Investments that Benefit Californians

SDG&E likewise faces heighted risks from potentially misguided or ill-considered outcomes arising from otherwise legitimate affordability concerns. The Commission has expressed that it "is deeply concerned with understanding and measuring the affordability of essential utility services" While SDG&E agrees with those sentiments, and has proposed measures to address affordability, affordability concerns should be addressed holistically. They cannot be implemented in a narrow or cribbed way that harms SDG&E's ability to make critical investments in wildfire mitigation and electrification or denying cost recovery for those measures.

For example, as the California State Auditor noted, while further wildfire mitigation efforts such as undergrounding lines or covering conductors are effective tools to mitigate risks and limit PSPS events, it would cost \$28 billion to cover all conductors in elevated and extreme

See Natural Gas Intelligence, PG&E Fined \$106M for 2019 Power Shutoff Events (June 2, 2021), available at https://www.naturalgasintel.com/pge-fined-106m-for-2019-power-shutoff-events/.

CPUC, 2019 Annual Affordability Report (April 2021) at 1, available at https://www.cpuc.ca.gov/media/cpuc-website/industries-and-topics/reports/2019-annual-affordability-report.pdf.

⁷⁵ R.18-07-006, Order Instituting Rulemaking to Establish a Framework and Processes for Assessing the Affordability of Utility Service (July 12, 2018).

fire risk areas. The audit continues that such programs already face significant opposition from those that want to limit such programs to only the highest wildfire risk areas. The audit thus finds that the "significant cost of making improvements necessary to prevent the need for power shutoffs, such as installing covered power lines or moving them underground, may be one of the reasons why the improvements have not yet been made." Yet the audit simultaneously suggested steps that would make it more difficult for utilities to recover wildfire mitigation costs.

This underscores the political contentiousness of the current environment. SDG&E is prioritizing reducing utility-caused ignitions and PSPS events by investing in critical wildfire mitigation—while simultaneously having the investments needed to accomplish those goals opposed or potentially blocked from recovery. Similarly, SDG&E's cost of capital must adequately reflect its higher risk and cannot be lowered below the cost of equity simply to reduce rates. Setting an ROE that fairly represents the true cost of equity balances the interest of both ratepayers as well as shareholders.⁷⁸

If ROE is set too low it harms both groups, as it impairs "the financial health and integrity of the utility [such] that they're unable to make the investments they need to maintain the safety and integrity of the system in addition to meeting important public policy goals." As noted, SDG&E faces critical needed investments, including in wildfire mitigation, electrification, and greenhouse gas emissions reductions. As S&P recently stated, "[s]tate regulatory support,

Auditor Report, March 24, 2022 at 31.

⁷⁷ *Id.* at 33-34, 52.

SDG&E-4 (Coyne) at JMC-10 (setting an ROE that "fairly represents the true cost of equity balances the interest of both ratepayers as well as shareholders.").

⁷⁹ *Id*.

including in the form of adequate returns on equity, to ensure ongoing capital attraction in the utility sector will be instrumental" as the "industry strengthens the grid against climate change and other risks." 80

Credit rating agencies have likewise repeatedly identified the Utilities' current ROEs as credit supportive and a counterbalance to the Utilities' above-average wildfire and other risks. 81 As S&P stated, California's "unique" and "significant" wildfire and wildfire liability risks are somewhat offset by the other aspects of California's regulatory structure that are "relatively constructive for investors" including ROE "authorizations that have been above the industry average." If ROE is reduced such that this credit supportive feature is removed, it could increase risks for SDG&E and threaten the Company's credit ratings, harming both investors and ratepayers through higher borrowing costs or a higher required ROE.

In sum, should affordability concerns drive the Commission to decline to authorize sufficient revenue requirement or a rate of return for SDG&E to continue to adequately invest in safety, reliability, and resiliency to meet wildfire mitigation, electrification, and clean energy policy goals, this both increases SDG&E's risks and harms ratepayers through both higher costs and the failure to achieve those goals.

S&P, *The Big Picture: 2022 Electric, Natural Gas and Water Utilities Outlook* (October 2021) at 3, available at https://www.spglobal.com/marketintelligence/en/news-insights/blog/the-big-picture-2022-electric-natural-gas-and-water-utilities-outlook.

⁸¹ S&P, Ratings Direct: PG&E Corp. (May 20, 2021).

⁸² RRA Dec. 14, 2020 at 2.

C. Risks Associated with Regulatory Accounts

Mr. Coyne analyzes the regulatory mechanisms that are in place for SDG&E. 83 Although regulatory accounts provide some benefit in mitigating uncertainty, the use of such accounts also presents cash flow concerns and recovery of balances in the accounts are not guaranteed. In particular, memorandum accounts have no revenue authorized by the Commission; only actual expenditures are recorded in memorandum accounts for which there is no presumption of cost recovery. The utility must seek Commission authorization after the fact to recovery already incurred costs.

By contrast, balancing accounts have revenue authorized by the Commission. Yet spending that differs from the authorized amounts (above or below) requires an additional step of being implemented into future rates. For balancing accounts, there appears to be a trend at the Commission to establish thresholds where any overspending is subject to additional regulatory processes.

Thus, both memorandum and balancing accounts can have a multi-year lag in cost recovery for which the short-term debt interest rate subject to regulatory accounts no longer compensates those expenditures. This combination of regulatory lag and uncertainty of cost increases risk, as SDG&E will be required to incur costs for what may be considerable time periods without assurance that the Commission agrees that such costs should be incurred. And the amount of costs in those accounts and length of time until cost recovery is approved only continue to grow.

This concern is underscored by the recently issued Proposed Decision ("PD") denying SDG&E's request to establish an interim rate recovery mechanism for costs recorded to

⁸³ Coyne SDG&E-04 at JMC-65 – JMC-66.

SDG&E's Wildfire Mitigation Plan Memorandum Accounts ("WMPMAs"). ⁸⁴ In that proceeding, SDG&E proposed to annually recover 50 percent of the recorded WMPMA balances—wildfire mitigation costs that SDG&E incurred to implement its approved Wildfire Mitigation Plans—until its next General Rate Case takes effect (through 2023) subject to refund and a later reasonableness review. SDG&E proposed costs to recover were incremental to those authorized for recovery in SDG&E's prior GRC and other wildfire-related regulatory accounts.

Yet the current PD denies SDG&E's request, concluding that "SDG&E did not sufficiently demonstrate a need for interim rate relief" and citing "SDG&E's financial standing" and "the timing of SDG&E's next General Rate Case filing." The PD ignores that SDG&E's began incurring the costs in question in 2019 and have been carrying these growing wildfire mitigation-related balances for years—and would have to do so for years more if the PD is adopted. This situation demonstrates the regulatory lag associated with recovering costs recorded to regulatory accounts—and the deleterious impact that such decision would have in terms of increasing SDG&E's debt and harming its credit metrics. 86

D. Franchise Uncertainty

SDG&E's also faces increased risks regarding its franchise rights in certain counties and municipalities that it serves—facing franchise terms and uncertainty from the primary city that it serves that are not shared by other utilities. Specifically, the City of San Diego recently awarded new electric and gas franchises to SDG&E for a ten-year term with an automatic ten-year

A.21-07-017, Proposed Decision Denying San Diego Gas & Electric Company's Application for Interim Rate Relief (March 15, 2022). On April 18, 2022, a revised PD was issued that would still deny the request for an interim rate recovery mechanism.

Id. at 2.

Prepared Direct Testimony of Maritza Mekitarian – Authorized Capital Structure on Behalf of SDG&E (April 20, 2022) at MM-13.

extension. The franchise terms permit the City to void the automatic extension by a two-thirds vote of the City Council. The City may also terminate either franchise upon the recommendation of the Mayor and City Attorney, if the termination is approved by a two-thirds vote of the City Council without a showing of breach.

The new City of San Diego franchises have a relatively short term and may be a source of uncertainty and risk with a city that comprises 40% of SDG&E's service territory. Additionally, the new agreements with the City includes \$110 million of shareholder contributions not recoverable through rates. This is a significant and unprecedented sum for a franchise fee, which may further dilute investors' rate of return.

IV. RISK OF RISING RATE PRESSURES FROM CHANGES IN CALIFORNIA UTILITY MODEL AND OTHER SOURCES

As Moody's noted, SDG&E's elevated risk profile analysis must also consider "the significant demands that are placed on the California utilities amid many ambitious public policy initiatives." The energy industry in California is in a period of unprecedented change as government policies, customer needs, and technology innovation are transforming towards a more decentralized, less utility centric environment; all while simultaneously advancing increasingly aggressive clean energy goals. California's clean energy goals are the most aggressive in the country. And there is an increasing amount of departing load via community choice aggregators launching or exploring formation creating uncertainty.

Not only are these risks increasing for SDG&E, but they are also increasing at a rate above national utility averages. While SDG&E generally supports the policies, and each has its

⁸⁷ See, Moody's May 10, 2021 at 10.

merits, combined they can lead to substantial change in business operations and increase complexity, and therefore risk.

A. Increased Rooftop Solar Creates Inequitable Rate Pressure

California, and San Diego in particular, is experiencing increasing adoption of distributed energy resources ("DER"), such as rooftop solar. The City of San Diego has the second highest level of rooftop solar in the country. Realifornia passed a law requiring rooftop solar on new housing effective January 2021, meaning that this rooftop solar penetration will only further grow. And California regulators have implemented similar requirements for commercial buildings.

This heavy rooftop solar adoption presents risks given the Company's current system design and volumetric based rate structure and puts SDG&E in a distinct position on two fronts. First, high levels of customer DER adoption under today's current volumetric rate structure impedes SDG&E's ability to collect the cost of utility infrastructure investments equitably from all customers. As CPUC Staff stated in a 2021 White Paper, the current Net Energy Metering ("NEM") framework shifts costs from rooftop solar owners to often lower-income and otherwise vulnerable customers. 90 Moody's has noted similar cost-shifting concerns. 91

This inequitable rate shift can create political and regulatory pressures that amplify the affordability concerns discussed above, potentially having deleterious downstream consequences

See SDG&E NewsCenter, Going Solar in San Diego: It's as Easy as 1-2-3 (March 19, 2021), available at https://www.sdgenews.com/article/going-solar-san-diego-its-easy-1-2-3.

See NPR.org, California Gives Final OK To Require Solar Panels On New Houses (December 6, 2018), available at https://www.npr.org/2018/12/06/674075032/california-gives-final-ok-to-requiring-solar-panels-on-new-houses.

⁹⁰ CPUC, Utility Costs and Affordability of the Grid of the Future: An Evaluation of Electric Costs, Rates, and Equity Issues Pursuant to P.U. Code Section 913.1 (May 2021) ("White Paper") at 6.

⁹¹ Moody's May 10, 2021 at 6.

on the regulatory compact and SDG&E's ability to receive sufficient support to make necessary investments. Again, as noted, to the extent that these rate pressures result in an environment where SDG&E cannot adequately invest in wildfire mitigation and state policy goals, it harms all Californians.

B. Clean Energy Goals Increase Perceived Risks

California and local policy continue to evolve with a greater emphasis on clean and sustainable energy solutions and on an accelerated timeline. With that comes a higher perceived risk of California utilities by investors and a potential upward pressure on retail rates as significant increases in demand for energy over time—coupled with the intermittency of renewable generation resources—challenges the grid's reliability and requires flexible generation and storage. As Moody's stated regarding SDG&E last spring, "[o]ur analysis considers the significant demands that are placed on the California utilities. Including the "state's ambitious energy policy goals on clean energy, efficiency and pipeline safety place a high level of demand on the utilities that affect not only SDG&E's electric operations but also natural gas operations."

This massive infrastructure overhaul must be accomplished while appropriately accounting for reliability, flexibility, and affordability. "It is estimated that electric generation capacity will need to increase to 356 gigawatts (GW) by 2045 in California to meet this increasing demand for clean electricity, approximately four times the capacity that existed in

See Moody's Investor Service, Credit Opinion: San Diego Gas & Electric Company; Update following downgrade to Baal negative. (March 14, 2019) at 5.

⁹³ Moody's May 10, 2021 at 5.

⁹⁴ *Id.* at 10.

2020."⁹⁵ Depending on the policies adopted to implement SB 100, a substantial amount of new renewable energy generation, storage, and transmission lines must be developed, potentially increasing generation and transmission rates.⁹⁶

The zero-carbon resources by 2045 also puts significant pressure on gas-fired generation and related-infrastructure in California at a time when reliability and resiliency is of the utmost importance. While other states have joined in the shift from carbon to natural gas, California is shifting to renewable resources with an overall negative sentiment towards natural gas, increasing the risk of stranded assets or lack of cost recovery for needed investments in the natural gas system. For instance, Moody's recently clarified that its rating outlook for Southern California Gas Company 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." "97

The Commission initiated the Long-Term Gas System Planning Order Instituting
Rulemaking in January 2020 to develop a strategy for transitioning towards California's
decarbonization goals while ensuring safe and reliable gas service and just and reasonable rates
in California. 98 As part of the long-term planning framework, the CPUC is considering methods

SDG&E, *The Path to Net Zero: A Decarbonization Roadmap for California* (April 2022) at 4, available at https://www.sdge.com/sites/default/files/documents/path to net zero.pdf?nid=21961.

Issues in Science and Technology, *Clean Firm Power is the Key to California's Carbon-Free Energy Future* (March 24, 2021), available at https://issues.org/california-decarbonizing-power-wind-solar-nuclear-gas/.

Moody's, Credit Opinion, Southern California Gas Company (January 4, 2022) at 2. Moody's "A2" rating is equivalent to "A."

Rulemaking 20-01-007, Order Instituting Rulemaking to Establish Policies, Processes, and Rules to Ensure Safe and Reliable Gas Systems in California and perform Long-Term Gas System Planning (January 16, 2020).

to address the useful life and cost recovery of assets. This proceeding is closely monitored by the investment community and factored into credit rating assessments, due to the proceeding's focus on transitioning away from natural gas-fueled technologies to meet California's decarbonization goals.

C. Customer Choice, Load Migration, and Proper Cost Allocation

The growing flexibility for customers to choose their energy service provider, such as through Community Choice Aggregation ("CCA"), presents business risks for SDG&E as a provider of last resort ("POLR") and potential rate pressure for customers. Currently, SDG&E performs these procurement functions for most customers. But San Diego Clean Power began operations in 2021, other cities and the county of San Diego are exploring forming CCAs, which would drop SDG&E electric commodity load below 20% by 2025.

Yet SDG&E will remain the POLR for 100% of its service territory load. It must provide electrical service to any retail customer whose service is transferred because the customer's load-serving entity (CCA or Direct Access provider) failed to provide, or denied, service to the customer or otherwise failed to meet its obligations. Most recently this occurred when a CCA in SCE's territory, Western Community Energy, declared bankruptcy in June 2021 and its customers were migrated back to SCE.⁹⁹

This may require substantial liquidity from SDG&E to procure energy on behalf of the returned customers prior to billing and receiving revenues from them. As the CPUC's Choice Action Plan notes, a POLR "must have the administrative capacity and financial standing to

See The San Diego Union Tribune, Riverside County community choice energy program closes its doors for good after bankruptcy (June 16, 2021), available at https://www.sandiegouniontribune.com/business/story/2021-06-16/riverside-county-community-choice-energy-program-closes-its-doors-for-good.

absorb an uncertain number of customers and uncertain electric load" as well as resources available to ensure reliability of supply to meet that load. ¹⁰⁰ The CPUC's Choice Action Plan goes on to note that the current environment does not have policies to appropriately value the services of the POLR. ¹⁰¹ California has not created a cost recovery scheme for a POLR with a native load that is the minority for its territory.

This also does not remove long-term PPAs from SDG&E's balance sheet. This has debt-equivalency implications as discussed in Ms. Mekitarian's testimony. And it increases political pressure regarding SDG&E's rates, as CCAs have often objected to their customers paying their share of legacy system costs.

D. Increased Technology Risk

SDG&E 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. While all utilities face cyber risk, California utilities face unique cyber security challenges compared to other utilities nationwide.

This is because California utilities are required to collect and disclose certain data to support decarbonization efforts while also being subject to enhanced state privacy laws compared to utilities outside the state. For example, per the building decarbonization rulemaking proceeding, California utilities are now required to disclose a significant amount of data,

¹⁰⁰ CPUC, California Customer Choice, An Evaluation of Regulatory Framework Options for an Evolving Electricity Market (August 2018) ("Choice Action Plan") at 33.

¹⁰¹ *Id*.

including customer information—and confidential information ¹⁰²—a business risk that Sempra Energy noted in its 10-K. ¹⁰³

In addition, SDG&E as a "critical" pipeline operator is subject to new Transportation Security Administration ("TSA") regulations to strengthen critical energy infrastructure cybersecurity—requiring SDG&E to share with the TSA sensitive cybersecurity information. This information is, in turn, vulnerable to potential disclosure in response to a Freedom of Information Act (FOIA) request or through other means.

Digitization will only increase as SDG&E will have to deploy advanced technologies and analytics as a necessary part of its strategy to meet California's clean energy goals.

Consequences of data being leaked because of a cyber-attack include SDG&E 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 SDG&E's exposure to bad actors, increasing business risk.

V. SDG&E'S ABOVE-AVERAGE RISKS UNDERSCORE THE IMPORTANCE OF STRONG CREDIT RATINGS

Between 2022-2026, SDG&E plans to invest \$11.4 billion in capital projects. SDG&E will require access to capital markets to finance these large capital investments. As Moody's notes, SDG&E faces a credit challenge from its "[m]aterial capital investment program" that will "require incremental debt." 104

An elevated level of investment increases the risk of under-recovery or delayed recovery of invested capital. Furthermore, a company with a greater amount of expected development

¹⁰² D.21-11-002 at 74-79.

¹⁰³ Sempra Energy 2022 Form 10-K (February 25, 2022) at 38.

¹⁰⁴ Moody's May 10, 2021 at 2.

capital is inherently riskier than a similar company that is operating since it carries the risk of execution. And increased capital needs also require increased amount of investment from the market, which is not infinite, especially when considering the higher-risk profile relative to other lower-risk peers.

As S&P has noted, because utilities generally operate with "negative discretionary cash flow, reflecting the high capital spending necessary to maintain and improve their electrical systems," a utility's credit rating is critical. The "lack of consistent access to the capital markets or lack of steady affordable capital can add considerable strain to a utility's business model." To offset this risk, "a utility's credit quality depends on its operating under a credit-supportive regulatory construct that is consistent and predictable." These lower credit ratings result in higher borrowing costs for ratepayers—again underscoring the need to maintain a strong credit rating through both ROE and capital structure.

VI. CONCLUSION

SDG&E faces significant business, regulatory, and financial risks that are not present for utilities nationwide. These are primarily concentrated in catastrophic wildfire risk, political and regulatory risks, increasing rate pressures and an elevated capital investment program.

S&P Global Ratings, Will California Still Have an Investment-Grade Investor-Owned Electric Utility? (February 19, 2019) at 4.

¹⁰⁶ *Id*.

¹⁰⁷ *Id*.

VII. WITNESS QUALIFICATIONS

My name is Ari Beer. I am the Energy Risk Manager for SDG&E. My business address is 8330 Century Park Court, San Diego, California 92123. My current responsibilities include the development, implementation, and analysis of SDG&E's energy procurement risk management and credit risk management process. I received a Bachelor of Science degree in Applied Economics and Management from Cornell University.

Prior to this role I worked in Sempra International's project development and acquisitions team and Sempra Energy's Corporate Risk Management group.

I have not previously testified before this Commission.