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Exhibit: SDG&E-03

**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**



AUGUST 23, 2021

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**PREPARED DIRECT TESTIMONY OF
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I. INTRODUCTION

My testimony provides a qualitative overview of 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 2022. I highlight SDG&E’s risks, in conjunction with the quantification and qualification of those risks discussed in the testimony of James 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 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 the 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. Therefore, SDG&E must 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.

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

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

¹ 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") p. 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).

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Table 1: Investor Analysts Valuation Discount

Date	Bank / Equity Analyst	Valuation Discount	Commentary
June 30, 2021	Bank of America Securities	-2.0x	We move our valuation discount applied to the CA utilities to -2.0x from -1.0x previously given lower savings opportunity, risk of further moderation/'convergence' and ongoing fire/resource adequacy risks baked into CA peers. 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
June 29, 2021	Vertical Research Partners	-7.5%	We continue to apply a 7.5% California utility discount...to our 17.5x 2023E regulated target multiple. ⁴
June 29, 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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3

As shown in Table 1, investors consider SDG&E to be higher risk compared to other

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utilities nationwide. For SDG&E, as the above analyses indicate, these unique risks are

5

principally categorized as wildfire-related risks, political and regulatory risks, rising rate

6

pressures, and an elevated capital investment program, as further discussed below.

² BofA Global Research, *Sempra Energy, Investor Day resets expectations lower; Downgrade to Neutral* (June 30, 2021), p. 1.

³ Morgan Stanley, *Sempra Energy | North America, Analyst Day Takeaways* (June 30, 2021), (“Morgan Stanley June 30, 2021”) p. 2.

⁴ Vertical Research Partners, *Sempra Energy (SRE) Infrastructure is the new Energy* (June 29, 2021), p. 1.

⁵ Wells Fargo, *Sempra Energy (SRE) SRE: Analyst Day Previews CapEx Upside in Texas* (June 29, 2021), (“Wells Fargo June 29, 2021”), p. 3.

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

3 California has arguably felt the effects of climate change more than any other state—with
4 the most prevalent impacts being the increased threat of wildfires—both in the terms of the
5 intensity and length of fire season.⁶ More than half the acres burned in the Western United States
6 is attributable to climate change, and the amount of dry and windy autumn days in California has
7 doubled since 1980.⁷ Although other natural disasters continue to pose risks, such as
8 earthquakes—and new risks will arise from climate change including severe drought, rising sea
9 levels⁸ and extreme weather volatility that can cause reliability issues such as the rolling
10 blackouts that California faced in August 2020⁹—the focus of this testimony will be on
11 catastrophic wildfire risk because of its immediate, direct, negative effect on SDG&E’s equity
12 investor risks and credit ratings.

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

⁶ 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/>.

⁸ See Rising Seas and Electricity Infrastructure: Potential Impacts and Adaptation Options For San Diego Gas and Electric (August 2018) p. 51-51, available at https://www.energy.ca.gov/sites/default/files/2019-11/Energy_CCCA4-CEC-2018-004_ADA.pdf.

⁹ See Root Cause Analysis: Mid-August 2020 Extreme Heat Wave (January 13, 2021), p. 39, available at <http://www.caiso.com/Documents/Final-Root-Cause-Analysis-Mid-August-2020-Extreme-Heat-Wave.pdf>.

A. Wildfire Risk Impact on Credit Ratings

SDG&E’s current credit ratings are A3 from Moody’s and BBB+ from Fitch and S&P. 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. SDG&E’s current credit ratings reflect the recent credit rating downgrades that SDG&E and the other California electric utilities have experienced since 2018 because of the prevalence of catastrophic wildfires—despite SDG&E’s equipment not being responsible for any significant fires during that time period.

Prior to the 2017 and 2018 California wildfires, SDG&E had maintained an ‘A’ credit rating for 15 years. Since then, as shown in Table 2 below, 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.

Table 2: SDG&E Credit Rating Updates

Rating Agency	SDG&E			
	Date	Rating	Outlook	Action Taken
S&P	Jul 9, 2018	A	Negative	Outlook revised to Negative
	Sep 5, 2018	A-	Negative	Downgraded one notch to A- and Outlook remained Negative
	Jan 21, 2019	BBB+	Negative	Downgraded one notch to BBB+ and Outlook remained Negative
	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

Moody's	Apr 11, 2018	A1	Negative	Outlook revised to Negative
	Sep 6, 2018	A2	Stable	Downgraded one notch to A2 and Outlook revised to Stable
	Jan 24, 2019	A2	Negative	Placed on review for downgrade
	Mar 5, 2019	Baa1	Negative	Downgraded two notches to Baa1 and Outlook remains Negative
	Jul 29, 2019	Baa1	Positive	Outlook revised to Positive
	Mar 30, 2021	A3	Stable	Upgraded one notch to A3 and Outlook revised to Stable
Fitch	Sep 13, 2018	A-	Stable	Downgraded one notch to A- and Outlook revised to Stable
	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

1
2 Although Moody's recently upgraded SDG&E's credit ratings one notch to A3 based, in
3 part, on SDG&E's "effective wildfire risk mitigation practices,"¹⁰ Table 2 shows that SDG&E's
4 credit rating has not been restored to its previous A rating largely due to wildfire-related risks.¹¹
5 Instead, they remain at least two notches below that previous A rating from all three credit rating
6 agencies. This is largely driven by the fact that, as Moody's states, "[c]atastrophic wildfires have
7 become a significant risk to California utilities over the past few years. The effects of climate
8 change and growing housing developments in fire-prone areas, along with the California courts'
9 application of the inverse condemnation legal doctrine, heightens the utilities' risk exposure to
10 property damage."¹²

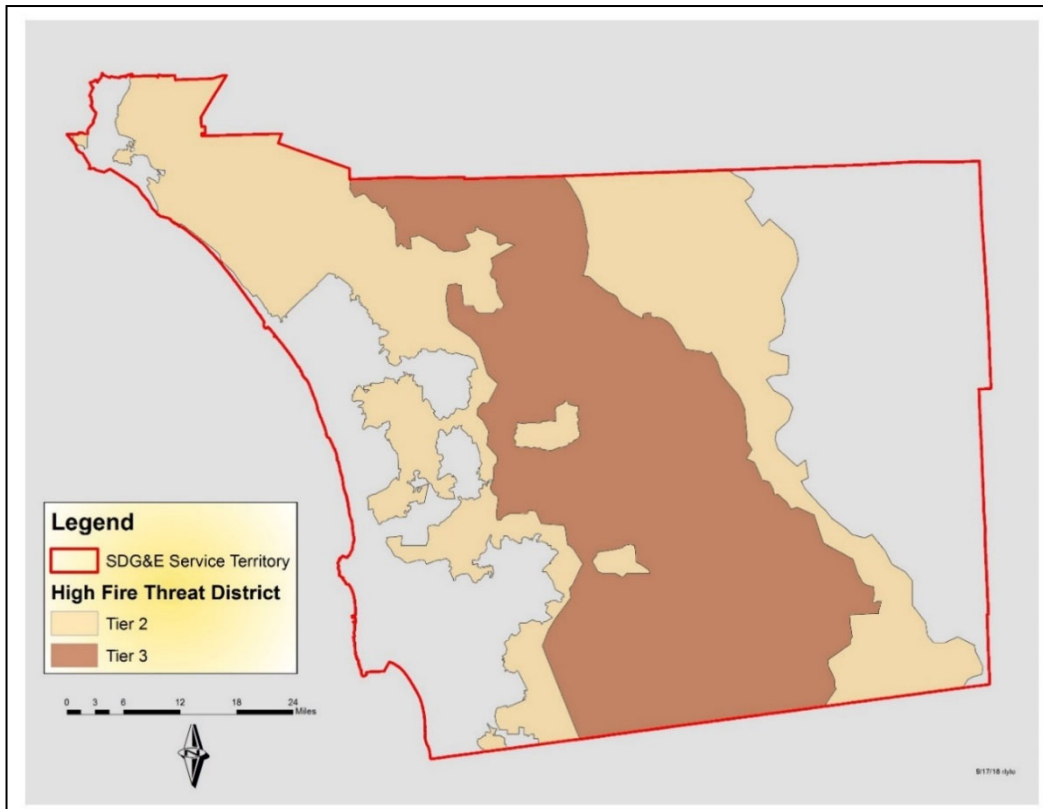
¹⁰ Moody's, *Rating Action: Moody's upgrades San Diego Gas & Electric to A3 from Baa1; outlook stable* (Mar. 30, 2021) ("Moody's Mar. 30, 2021"), p. 1.

¹¹ *Id.*

¹² Moody's, *San Diego Gas & Electric Company, Update to credit analysis following upgrade to A3* (May 10, 2021) ("Moody's May 10, 2021"), p. 5.

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

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



6
7 Given the topography of SDG&E’s service territory, wildfires can spread quickly and
8 cause extreme damage due to the presence of Santa Ana winds—warm, extremely dry winds that
9 can blow upwards of 100 miles per hour east to west through mountain passes in Southern
10 California—and dry vegetation in a region that sees very little annual rainfall. SDG&E’s service
11 territory has experienced the effects of wildfires in the past and SDG&E’s infrastructure has
12 previously been a source of wildfire ignitions. The California Department of Forestry and Fire
13 Protection (“Cal Fire”) attributed three of the many wildfires that ignited in the October 2007

1 firestorm to SDG&E infrastructure. Unfortunately, the 2007 wildfires were not isolated
2 occurrences. Although not linked to SDG&E infrastructure, the Company’s service territory has
3 experienced several other significant wildfire events since 2007, including the Bernardo, Cocos
4 and Poinsettia fires in May 2014, the Lilac Fire in December 2017, the West Fire in June 2018,
5 and the Valley Fire in September 2020.

6 Since the 2007 wildfires in its service territory, SDG&E has made wildfire risk mitigation
7 a top priority and has been engaged in a series of wildfire risk mitigation efforts, as described in
8 its Wildfire Mitigation Plan.¹³ As noted, the Company is recognized as an industry leader in this
9 area. As S&P stated in May 2021 in taking SDG&E off negative credit watch, “SDG&E is a
10 global leader in wildfire prevention.”¹⁴ All three rating agencies have repeatedly lauded

11 SDG&E’s mitigation efforts:

- 12 • S&P: “Over the past decade [SDG&E] has been a leader in wildfire
13 prevention through the implementation of technology and system
14 hardening. These measures reduce the probability that the company will
15 be the cause of a catastrophic wildfire. As a direct result of the company's
16 proactive ingenuity . . . the company has developed a strong track record
17 of either avoiding wildfires or not being the cause of a catastrophic
18 wildfire.”¹⁵

¹³ 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](https://www.sdge.com/sites/default/files/regulatory/R.18-10-007%20SDG%26E%20Wildfire%20Mitigation%20Plan.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 \(sdge.com\)](#).

¹⁴ S&P May 21, 2021 at 2.

¹⁵ S&P Global Ratings, *Ratings Direct, San Diego Gas & Electric Co.*, (Jun. 30, 2020) p. 2; accord S&P Global Ratings, *Ratings Direct, San Diego Gas & Electric Co.* (July 9, 2021) (“S&P July 9, 2021”), p. 3 (“SDG&E has been a leader in wildfire prevention through the implementation of technology and system hardening.”).

- 1 • Moody's: "SDG&E's track record of effective wildfire risk mitigation
2 practices."¹⁶
- 3 • Fitch: "SDG&E's fire prevention and mitigation investments contributed
4 to a strong safety record over the past decade."¹⁷

5 SDG&E's extensive wildfire mitigation efforts have helped to partly reverse some of the
6 downgrades to SDG&E's credit ratings from the increase risk of wildfires and wildfire liability
7 in California. As noted, Moody's recently upgraded SDG&E to A3 from Baa1. And S&P
8 removed SDG&E's BBB+ rating from negative watch in the spring of 2021 after placing
9 SDG&E and other California electric utilities on negative watch in fall 2020 due to the sheer
10 number of wildfires last year in California.¹⁸ As S&P opined, "SDG&E's long track record of
11 either not causing a catastrophic wildfire or experiencing only insignificant wildfires within its
12 service territory leads us to believe that it can consistently manage the wildfire risks with
13 reduced likelihood that it would require use of the wildfire fund."¹⁹

14 Nevertheless, the sheer increase in the length and severity of California's wildfire season
15 continues to create heightened risk for SDG&E and other California electric utilities that are not
16 shared by the average utility nationwide. This ongoing risk is reflected in the fact that SDG&E's
17 credit ratings remain *two notches* below its pre-2017 levels—despite the Company's wildfire
18 mitigation efforts. Since the downgrades in 2018-2019, only Moody's has upgraded SDG&E's
19 credit rating one level to A3 from Baa1 in March 2021. Yet that rating is still well below the

¹⁶ Moody's Mar. 30, 2021 at 1.

¹⁷ Fitch Ratings, *Fitch Affirms Sempra and Subsidiaries; Rating Outlook Stable* (Apr. 8 2021), p. 4.

¹⁸ S&P, *Research Update: San Diego Gas & Electric Co. Outlook Revised to Negative on Adverse Wildfires Conditions; BBB+ Rating Affirmed* (Sept. 16, 2020) ("S&P Sept. 16, 2020"), p. 1.

¹⁹ S&P, *Sempra Energy Unsecured Debt Rating Lowered To 'BBB'; Outlook On Subsidiary SDG&E Revised To Stable* (May 12, 2021), p. 2.

1 Company’s pre-2018 A1 rating. Moreover, S&P placed SDG&E’s credit rating on negative
2 watch in the fall of 2020 due to the significant wildfire activity in the state, only removing that
3 negative watch in the spring of 2021; showing that wildfire risk remains an ever-present threat.²⁰

4 The lack of further restoration of SDG&E’s credit rating demonstrates that SDG&E
5 continues to be negatively impacted by catastrophic wildfires from investors’ perspective. As
6 S&P stated, “because we view the likelihood of a change to California’s interpretation of inverse
7 condemnation as remote, and favorable climate change patterns are also unlikely to emerge for a
8 state with a long history of drought conditions, we are unlikely to raise ratings for utilities with
9 meaningful wildfire-related risks in the near term”²¹—reflecting heightened ongoing risks for
10 SDG&E and resulting in higher costs for customers.

11 **B. Wildfire Risk is Increasing in Frequency and Magnitude**

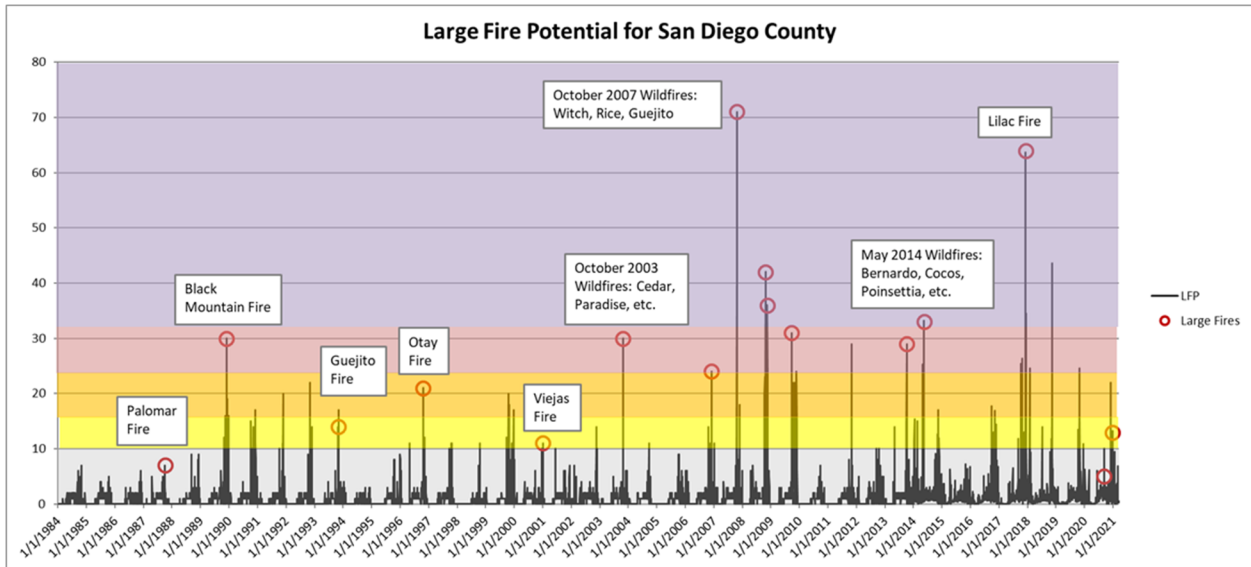
12 Wildfire risk is now a nearly year-round threat in Southern California. Climate change
13 has both lengthened wildfire seasons and increased fire potential with the amount of available
14 dry fuels. Severe drought and increasing amount of heat waves is exacerbating the problem. Cal
15 Fire notes that “the fire season in California and across the West is starting earlier and ending
16 later each year. Climate change is considered a key driver of this trend. Warmer spring and
17 summer temperatures, reduced snowpack, and earlier spring snowmelt create longer and more
18 intense dry seasons that increase moisture stress on vegetation and make forests more susceptible
19 to severe wildfire.

²⁰ S&P Sept. 16, 2020 at 1.

²¹ S&P Jun. 3, 2021 at 10.

1 “The length of fire season is estimated to have increased by 75 days across the Sierras
 2 and seems to correspond with an increase in the extent of forest fires across the state.”²² As seen
 3 in the SDG&E produced graph, Figure 2 below, there is a distinct trend of more frequent and
 4 more extreme wildfire weather events in the San Diego region since 1984. SDG&E expects this
 5 trend to continue.

6 **Figure 2: San Diego County Fire Potential**



7
 8 Recent events in California illustrate the increased risk and severity of wildfires. At the
 9 time, 2017 recorded the largest wildfire in the state, the Thomas Fire. This would be surpassed
 10 by a new record fire in 2018, the Mendocino Complex Fire, which would subsequently be
 11 surpassed by a fire more than twice its size in 2020, the August Complex Fire. As of August
 12 2021, the Dixie Fire has become the second largest in California history and continues to burn.
 13 The eight largest fires in California history have occurred since 2017, of which five occurred in

²² See Cal.Gov, Cal Fire 2021 Incident Archive, available at <https://www.fire.ca.gov/incidents/2021/>.

1 2020 alone and one in 2021.²³ As Cal Fire notes, “[t]he 2020 California wildfire season was
2 characterized by a record-setting year of wildfires that burned across the state of California as
3 measured during the modern era of wildfire management and record keeping.”²⁴

4 As S&P similarly states, SDG&E faces “risks stemming from California’s frequent
5 wildfires,”²⁵ and that “California’s environment remains highly prone to catastrophic
6 wildfires, [...] continuing to pressure utility credit quality.”²⁶ As the rating agency stated in
7 putting SDG&E’s credit rating on negative watch in the fall of 2020—despite SDG&E’s
8 equipment not being responsible for any significant fires last year—the “[u]nprecedented
9 wildfire activity throughout California” in 2020 “at just the beginning of this wildfire season, in
10 our view, could be indicative of a worsening environment that is more susceptible to frequent
11 and more severe wildfires.”²⁷ S&P noted that, as of September 16, 2020, California in 2020 had
12 already “experienced more than 7,700 wildfires that burned more than 3 million acres, damaged
13 more than 5,300 structures and has led to more than 20 fatalities;” in contrast with even 2019,
14 when “California experienced for the entire wildfire season about 7,900 wildfire, less than
15 260,000 acres burned, less than 750 structures destroyed, and 3 fatalities.”²⁸ As of the end of the
16 year, nearly 10,000 fires had burned over 4.2 million acres, more than 4% of the state's roughly

²³ See Cal.Gov, Cal Fire Top 20 Largest Fires, available at https://www.fire.ca.gov/media/4jandlhh/top20_acres.pdf.

²⁴ See Cal.Gov, Cal Fire, 2020 Incident Archive, available at <https://www.fire.ca.gov/incidents/2020/>.

²⁵ S&P July 9, 2021 at 6.

²⁶ S&P Jun. 3, 2021 at 1.

²⁷ S&P, Sept. 16, 2020 at 1.

²⁸ *Id.* at 2.

1 100 million acres of land, making 2020 the largest wildfire season recorded in California's
2 modern history.”²⁹

3 Unfortunately, this is the new normal for California. As S&P stated, “in advance of the
4 2021 wildfire season, it appears that California, for the second consecutive year, will receive
5 below-average rainfall, indicative of drier-than-normal conditions. We believe that these dry
6 conditions increase the susceptibility that a smaller wildfire may grow into a catastrophic
7 wildfire.”³⁰ S&P added that they “also believe that the duration of the wildfire season may be
8 increasing,”³¹ exacerbated by climate change.

9 Moreover, the significant wildfire risk that California electric utilities face is not solely
10 attributable to the frequency but also the magnitude of damage wildfires increasingly cause. Due
11 to California’s higher population density, higher property values, and many new housing
12 developments being constructed near or in the High Fire Threat Districts, damages caused by
13 wildfires in California are more costly than other states. California has the most properties in
14 high to extreme risk areas in the country and more properties than the second to eighth riskiest
15 states combined, as can be seen in Figure 3. The ten most destructive wildfires in the history of
16 the U.S. based on insured losses have all occurred in California.³² This underscores that
17 California is the most exposed to property damages among wildfire-prone states.

²⁹ See Cal Fire 2020 Incidents, available at <https://www.fire.ca.gov/incidents/2020/>.

³⁰ S&P Jun. 3, 2021 at 2.

³¹ *Id.*

³² 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	2,019,800
2	Texas	717,800
3	Colorado	371,100
4	Arizona	237,900
5	Idaho	175,000
6	Washington	160,500
7	Oklahoma	153,400
8	Oregon	151,400
9	Montana	137,800
10	Utah	136,000

Data as of September 2019

The upshot is that SDG&E's faces an elevated risk level compared to non-California utilities through no fault of its own, based upon the increased wildfire risk in California. For instance, S&P noted that, "[d]espite SDG&E's leadership role in wildfire prevention, we assess the company at the lower end of the range for excellent business risk profile category."³³ As S&P continued, this elevated risk designation "reflects the company's higher wildfire threat compared to utility peers across North America. We reflect this by assessing the comparable rating analysis modifier as negative."³⁴ The rating agency continued 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."³⁵

³³ S&P, *Sempra Energy Unsecured Debt Rating Lowered To 'BBB'; Outlook On Subsidiary SDG&E Revised To Stable* (May 12, 2021) p. 2.

³⁴ *Id.*; 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").

³⁵ S&P July 9, 2021 at 1.

1 **C. Wildfire Risk – Legal and Regulatory Regime**

2 Nor are SDG&E and other California electric utilities only exposed to a geographic
3 landscape more prone to wildfires and higher costs as a result of those fires. Instead, the risk
4 from the underlying propensity for wildfires in SDG&E’s service territory is exacerbated by the
5 state’s wildfire liability regime. Under California state law, utilities are strictly liable for property
6 damage caused by utility facilities under the doctrine of inverse condemnation, even in the
7 absence of fault and where the utility’s facilities were one of several concurrent causes. As
8 Regulatory Research Associates (“RRA”), a group within S&P determined, the more
9 constructive aspects of California’s regulatory regime are “offset by the expectation that inverse
10 condemnation risk, which thus far is unique to California, will remain a significant issue going
11 forward.”³⁶

12 California courts apply inverse condemnation on the rationale that the public entity or
13 utility can spread costs through rates. Yet the Commission has applied its “prudent manager”
14 standard to a utility’s role in catastrophic wildfires without regard to the strict liability imposed
15 by inverse condemnation or the cost-spreading rationale underlying that doctrine.³⁷ This means
16 that a utility can be liable for a wildfire under inverse condemnation through no fault of its own,
17 potentially without any means of recovery or cost sharing for those costs subject to the
18 Commission’s jurisdiction (subject to the Wildfire Fund described below). As S&P has stated
19 “California IOUs . . . remain exposed to onerous liability claims under the state’s inverse

³⁶ S&P, RRA Regulatory Focus, *California Regulatory Review*, (Dec. 14, 2020) (“RRA Dec. 14, 2020”), p. 2.

³⁷ See D.17-11-033, p. 1.

1 condemnation doctrine—whereby a California utility can be financially responsible for a wildfire
2 if its facilities were a contributing cause of a wildfire, irrespective of negligence.”³⁸

3 For instance, in the aftermath of the October 2007 wildfires, SDG&E settled
4 approximately 2,500 claims, paying about \$2.4 billion. While SDG&E recovered a portion of
5 those settlement costs through insurance (\$1.1 billion), recoveries from third parties (\$827
6 million), and the Federal Energy Regulatory Commission (“FERC”) authorized recoveries (\$80
7 million),³⁹ in December 2017 the CPUC rejected that it needed to take inverse condemnation into
8 account and denied all recovery of the state portion of the 2007 wildfire costs, totaling \$421
9 million.⁴⁰

10 By contrast, FERC found that SDG&E was prudent on the same conduct and granted
11 recovery, determining that even if SDG&E’s presumption of prudence was not dispositive, the
12 recovery of SDG&E’s wildfire costs was valid because SDG&E would likely be held responsible
13 for such costs under inverse condemnation regardless of fault.⁴¹ As Moody’s stated, these
14 differing results between FERC and the Commission regarding the same conduct threw “into
15 doubt the ability of utilities in the state to recover wildfire costs and raised questions about how
16 incurring such costs would affect” a California utility’s financial stability.⁴² At a minimum, it has
17 demonstrated that any catastrophic wildfire has the potential to result in significant, years-long

³⁸ S&P Jun. 3, 2021 at 1.

³⁹ *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.).

⁴⁰ *See* D.17-11-033, p.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.

⁴¹ *SDG&E*, 146 FERC ¶ 63,017, P 60.

⁴² Moody’s, *FAQ on the credit implications of California’s new wildfire law* (Aug. 6, 2019), p. 2.

1 litigation that results in SDG&E facing a substantial risk of major legal and defense costs that it
2 may be unable to recover in rates or insurance.

3 The potential liability of Pacific Gas and Electric Company (“PG&E”) and Southern
4 California Edison Company (“SCE”) for the 2017 and 2018 wildfires is similarly substantial,
5 while the fires in 2019 and 2020 remain under investigation. According to the California
6 Department of Insurance, statewide wildfire insurance claims for the October and December
7 2017 wildfires total nearly \$12 billion,⁴³ over \$12 billion for the 2018 wildfires,⁴⁴ and up to \$9
8 billion for the 2020 wildfires.⁴⁵ This unique risk was underscored by PG&E on January 29, 2019
9 filing for Chapter 11 bankruptcy protection based, at least in part, on risk and potential liability
10 from wildfires.⁴⁶ PG&E has since reached a settlement with wildfire victims, insurance
11 companies, and affected cities for over \$25.5 billion.⁴⁷

12 To help mitigate SDG&E’s economic risk of wildfires, SDG&E procures wildfire
13 insurance coverage, which is renewed every year. Over the past few years, the wildfire insurance

⁴³ See California Department of Insurance, *California Statewide Insurance Claims Nearly \$12 Billion* (January 31, 2018), available at <http://www.insurance.ca.gov/0400-news/0100-press-releases/2018/release013-18.cfm>.

⁴⁴ See California Department of Insurance, *Wildfire Insurance Losses from November 2018 Blazes Top \$12 Billion* (May 8, 2019), available at <http://www.insurance.ca.gov/0400-news/0100-press-releases/2019/release041-19.cfm>.

⁴⁵ See RMS Estimates that Total Insured Losses from the 2020 Western US Wildfires Will Be Between US\$7bn-US\$13bn, (December 15, 2020), available at <https://www.rms.com/newsroom/press-releases/press-detail/2020-12-15/rms-estimates-that-total-insured-losses-from-the-2020-western-us-wildfires-will-be-between-us7bn-us13bn>.

⁴⁶ See 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.

⁴⁷ See PG&E Submits Comprehensive Settlement Agreement to CPUC Related to 2017 and 2018 Wildfires, available at https://www.pge.com/en/about/newsroom/newsdetails/index.page?title=20191217_pge_submits_comprehensive_multi-party_settlement_agreement_to_cpuc_related_to_2017_and_2018_wildfires_-:~:text=Announcing%20an%20%2411%20billion%20settlement,and%202018%20Camp%20Fire%3B%20and.

1 market continues to experience increasing premiums and reduced capacity available to be
2 procured. As Mr. Coyne details, although SDG&E has not experienced an insurance loss from a
3 wildfire since 2007, its premiums continue to increase due to the insurance market suffering
4 from wildfire losses throughout the rest of California.⁴⁸ Some insurers have since left the
5 California wildfire market altogether, reducing available capacity. SDG&E believes this trend
6 will continue and is an indication of the abnormal amount of risk the insurance companies have
7 accounted for in California; as quantified by Mr. Coyne.⁴⁹

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

14 To address the growing risk of wildfire and inverse condemnation, the state of California
15 passed AB 1054.⁵⁰ This established the aforementioned wildfire fund, in which SDG&E is a
16 participating utility,⁵¹ and provides:

- 17 • The availability of immediate liquidity to pay wildfire claims;

⁴⁸ See Prepared Direct Testimony of James M. Coyne SDG&E-04 (Aug. 23, 2021) (“Coyne SDG&E-04”), pp. JMC-59, and JMC-64 – JMC-68.

⁴⁹ *Id.*

⁵⁰ AB 1054, Stats. 2019, Ch. 79.

⁵¹ 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>.

- 1 • A cap on utility liability to 20% of the utility’s transmission and
2 distribution equity rate base, with remaining claims paid from the wildfire
3 fund;
- 4 • Providing a prudence standard deeming that that the conduct of a utility
5 with a valid safety certification with regard to the cause of a wildfire will
6 be deemed reasonable, unless a serious doubt is raised; and
- 7 • The incentive to settle subrogation claims at or below 40 percent of the
8 claimed value.⁵²

9 AB 1054 is a significant improvement in addressing the issue of cost recovery.⁵³ It
10 potentially moderates some of the risks facing SDG&E from California’s catastrophic wildfire
11 liability regime of inverse condemnation strict liability and the Commission’s separate prudence
12 review. As Moody’s stated, its stable outlook on SDG&E, reflects “our view that SDG&E’s
13 underlying access to the state’s wildfire fund and new prudency standard under Assembly Bill
14 1054 will support credit quality going forward.”⁵⁴

15 Yet even with AB 1054’s benefits, SDG&E continues to face heightened risk and
16 uncertainty surrounding potential wildfire losses. This is principally reflected by the fact that,
17 although the freefall in credit ratings was halted when SDG&E opted into the wildfire fund in
18 July 2019, credit rating agencies did not immediately increase SDG&E’s credit rating in
19 response to the legislation. SDG&E’s credit ratings instead remain multiple levels below
20 historical levels today.

⁵² 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*, dated 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.”).

⁵³ See also S&P Jun. 3, 2021 at 1 (stating that AB 1054 is “supportive of the IOUs’ credit quality”).

⁵⁴ Moody’s Mar. 30, 2021 at 1.

1 The credit ratings agencies have noted two primary reasons for why risks remain
2 regarding AB 1054. First, it is unclear how effectively AB 1054 will be applied. As S&P has
3 stated, if “the CPUC does not implement AB 1054 in a credit-supportive manner then much of
4 the new law’s credit-supportive elements related to the revised standards of a utility’s reasonable
5 conduct could potentially be negligible.”⁵⁵ In recently upgrading SDG&E’s credit rating to A3,
6 Moody’s similarly noted that it could again downgrade SDG&E if there is an “unsupportive
7 application of the new prudency standard.”⁵⁶ Although the revisions to the standard seem
8 intended to mirror the standard used at the FERC, it is unclear if it will be applied in the same
9 manner.⁵⁷

10 S&P’s “base case scenario” similarly assumes that SDG&E will be found able to
11 maintain its safety certification.⁵⁸ A key component to participating in the AB 1054 wildfire fund
12 is to obtain a wildfire safety certification. As of July 1, 2021, the Office of Energy Infrastructure
13 Safety—an entirely new office outside of the Commission—is administering the wildfire aspects
14 of AB 1054, evaluating Wildfire Mitigation Plans, and issuing safety certificates.⁵⁹ Ongoing
15 uncertainty regarding how the Office of Energy Infrastructure Safety will implement that safety
16 certification review process presents additional implementation uncertainty and risk to investors.

⁵⁵ 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[.]”).

⁵⁶ Moody’s Mar. 30, 2021 at 2.

⁵⁷ See Moody’s May 10, 2021 at 6 (noting the difference in how the CPUC found SDG&E not prudent and FERC found SDG&E prudent on the same 2007 wildfires).

⁵⁸ S&P, *Sempra Energy Unsecured Debt Rating Lowered To ‘BBB’; Outlook On Subsidiary SDG&E Revised To Stable* (May 12, 2021) at 4; accord S&P July 9, 2021.

⁵⁹ AB 111, Stats. 2019, Ch. 81, Section 3 (adding Part 7.3 to Division 3 of Title 2 of the Government Code).

1 If it becomes exceedingly difficult to maintain a safety certificate, then much of the law’s
2 benefits go away, such as the revised prudence standard and the wildfire fund’s cap on
3 disallowed costs.⁶⁰ Similarly, SDG&E and other California electric utilities face ongoing risks
4 from conflicting guidance between the two agencies. Or SDG&E could receive a mandate from
5 Office of Energy Infrastructure Safety that is not supported by the Commission, increasing the
6 uncertainty of cost recovery.

7 Second, credit rating agencies have outstanding concerns about the wildfire fund’s
8 durability because it lacks any replenishment mechanism once it is exhausted. As Moody’s
9 notes, “if and when the insurance fund’s claims paying capability is exhausted, the majority of
10 the credit friendly structures, including the disallowance cap, will terminate.”⁶¹ Moody’s thus
11 subsequently stated that an exhaustion of the wildfire fund could also lead to a credit rating
12 downgrade for SDG&E.⁶²

13 If the wildfire fund is exhausted, SDG&E’s investors would once again be exposed to
14 unmitigated downside risks from inverse condemnation.⁶³ S&P thus sees “the lack of automatic
15 replenishing mechanism and possibility of depleting the wildfire fund whenever there is a
16 wildfire caused by the IOU” as long-term threats that are currently weighing down SDG&E and
17 other California utilities’ credit ratings⁶⁴ Although the exhaustion of the wildfire fund is not an

⁶⁰ Moody’s May 10, 2021 at 6 (noting that AB 1054 is credit positive so long as a utility has a safety certification).

⁶¹ 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.”).

⁶² Moody’s Mar. 30, 2021 at 2.

⁶³ S&P Jun. 3, 2021 at 6.

⁶⁴ *Id.* at 6.

1 immediate threat, it is having an immediate downward effect on SDG&E’s credit ratings. As
2 S&P stated in assessing SDG&E at the lower end of the excellent business risk profile category,
3 “this view incorporates the higher wildfire risk at California’s other investor-owned electric
4 utilities that could potentially lead to the faster-than-expected depletion of the state’s wildfire
5 fund.”⁶⁵

6 Additionally, the durability of the wildfire fund is largely outside of SDG&E’s control.
7 As Fitch states, the amount of funding that will be available to SDG&E from the Wildfire Fund
8 depends on the “frequency and severity of wildfires in other [investor-owned utilities’] service
9 territories as well as their safety conduct.”⁶⁶ S&P similarly noted that this concern led to it
10 placing SDG&E at the lower end of the excellent business category.⁶⁷

11 In short, a poorly applied AB 1054 through an “unsupportive application of the new
12 prudence standard” or an exhaustion of the wildfire fund, could have an overall negative impact,
13 imposing significant costs on investors with little resulting benefit and further credit rating
14 downgrades.⁶⁸ As RRA states:

15 There is no assurance claims would not exceed [the wildfire fund’s] amount, that the fund
16 will maintain sufficient funds or that the utility will have access to the fund if it fails to
17 maintain a valid safety certification. Hence, the distinct possibility exists that a utility
18 would be unable to fully recover its costs if inverse condemnation is applied by the courts
19 and the PUC finds imprudence or negligence on the part of the utility.⁶⁹

20 This, combined with the fact that AB 1054 did not address inverse condemnation and the
21 frequency with which wildfire events are occurring, “argue[s] for a more comprehensive

⁶⁵ S&P Jul. 9, 2021 at 3.

⁶⁶ Fitch July, 17 2019 at 3.

⁶⁷ S&P July 9, 2021 at 3.

⁶⁸ Moody’s May 10, 2021 at 3.

⁶⁹ RRA Dec. 14, 2020 at 9.

1 approach in RRA’s view.”⁷⁰ Fitch similarly added that, a “track record of successful
2 implementation of AB 1054 in providing appropriate cost recovery for SDG&E or its peers”
3 would provide stability and a potential ratings upgrade, while the “implementation of the wildfire
4 recovery framework [that] is unfavorable in providing sufficient recovery in a timely manner”
5 increases risks and could lead to further downgrades.⁷¹

6 And, as noted, investor analysts similarly continue to “discount” the stock of SDG&E’s
7 publicly traded parent company Sempra Energy partly based on the overall wildfire threat,⁷² and
8 the “lingering risks related to [California’s] inverse condemnation policy.”⁷³ While SDG&E is
9 lauded for its wildfire mitigation program, credit rating agencies and investor analysts thus see
10 ongoing challenges from the overall wildfire risk in the state and execution risks in implementing
11 AB 1054.⁷⁴

12 Finally, even if utilities are successful in receiving cost recovery related to wildfires, the
13 rates and bill impacts to ratepayers will be very significant. Credit rating agencies view high bills
14 as credit negative. Higher rates may crowd out headroom for other costs and capital investments.
15 Credit ratings and rates pressures will likely continue to exist in such fashion even if there is
16 legislative or regulatory reform addressing wildfire liability.

⁷⁰ *Id.* at 1.

⁷¹ Fitch Ratings, *Fitch Affirms Sempra and Subsidiaries; Rating Outlook Stable* (Apr. 8, 2021), p. 9.

⁷² 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.”), p. 2 (Jun. 30, 2021) BofA Global Research, *Sempra Energy, Investor Day resets expectations lower; Downgrade to Neutral Bank of America* (June 30, 2021), p. 7 (noting ongoing fire risks).

⁷³ Wells Fargo June 29, 2021 at 3.

⁷⁴ *Id.*; Moody’s May 10, 2021.

1 In sum, both equity analysts and the three credit rating agencies have seemingly
2 concluded that—even with AB 1054’s passage—the higher overall fire risk in the state combined
3 with inverse condemnation and uncertainty over AB 1054’s implementation has increased
4 SDG&E’s risks relative to what it faced prior to the Company’s credit rating downgrades.
5 SDG&E’s credit ratings remain well below its longstanding pre-2018 levels, with only Moody’s
6 recently upgrading SDG&E’s credit rating to a level that is still two notches below its prior
7 position. As noted, S&P recently stated that it is “unlikely to raise ratings for utilities with
8 meaningful wildfire-related risks in the near term,” reflecting the ongoing, unique risks to
9 California utilities from a combination of the propensity for wildfires in the state, combined with
10 the state’s wildfire liability regime.⁷⁵

11 **III. POLITICAL AND REGULATORY RISKS**

12 In addition to the heightened wildfire threat, equity analysts and credit rating agencies
13 also see SDG&E facing “high political risk and public scrutiny in both San Diego and the state
14 of California.”⁷⁶ For instance, Moody’s recently stated that “SDG&E’s credit also factors in our
15 view that political risk, in terms of media attention and the demand on utilities to implement the
16 state’s clean energy policy goals, is higher in California compared to most other jurisdictions in
17 the US.”⁷⁷ The ratings agency added that a credit downgrade is possible if there is a further
18 “deterioration in regulatory support or an increase in regulatory contentiousness.”⁷⁸

⁷⁵ S&P Jun. 3, 2021 at 10.

⁷⁶ Moody’s May 10, 2021 at 5.

⁷⁷ *Id.* at 1.

⁷⁸ *Id.* at 3.

1 Investor analysts have similarly noted that they discount Sempra’s stock price based, in
2 part, on the “highly politicized regulatory environment” that is only “partially offset by a highly
3 supportive 5-year rate plan and, separately, constructive FERC-regulation”⁷⁹ and that California
4 utilities face a “challenging regulatory and political backdrop.”⁸⁰

5 **A. Wildfire Mitigation Efforts are Challenged by Political Concerns**

6 In particular, credit rating agencies see political and regulatory risks regarding the need to
7 respond to extreme weather events with interruptions in service. For example, credit agencies
8 and other analysts are monitoring the reactions to SDG&E and other California electric utilities’
9 need to utilize public safety power shutoffs (“PSPS”)—where circuits are preventively
10 deenergized to guard against SDG&E equipment contributing to wildfires—as a measure of last
11 resort to protect public safety by preventing infrastructure-related, catastrophic wildfires.⁸¹

12 For instance, Technosylva, a wildfire modeler hired by the Commission, recently noted
13 15 instances in 2019 where damage to SDG&E’s de-energized equipment was found during
14 post-patrols.⁸² Technosylva determined that 13 of those would likely have ignited significant
15 fires if SDG&E had not de-energized that equipment in a PSPS event.⁸³ S&P similarly recently
16 concluded that “we believe that the use of [PSPS] in addition to the deployment of advanced
17 technologies and system hardening, such as undergrounding or cover conductors, are becoming

⁷⁹ Wells Fargo June 29, 2021 at 3.

⁸⁰ Morgan Stanley June 30, 2021 at 2.

⁸¹ 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>.

⁸² CPUC, Public Meeting on Technosylva 2019 PSPS Wildfire Risk Analysis Results (Mar. 26, 2021), available at <http://www.adminmonitor.com/ca/cpuc/other/20210326/>.

⁸³ *Id.*

1 effective tools for California’s utilities to more predictably avert causing a catastrophic wildfire,
2 which we view as supportive of credit quality.”⁸⁴

3 Nevertheless, despite PSPS being an effective wildfire mitigation tool of last resort, the
4 use of PSPS itself has negative political impacts. Moody’s stable outlook for SDG&E “assumes
5 that the relationship of the utility with the CPUC and other stakeholders in the state will remain
6 constructive, including with regard to the implementation of its wildfire mitigation and power
7 shut-off programs.”⁸⁵ But Moody’s noted the “significant regulatory and political backlash”
8 faced by SDG&E’s peers with regards to PSPS events,⁸⁶ and stated that SDG&E would face
9 higher risks—and a potential ratings downgrade—if there is a “deterioration in regulatory
10 support or an increase in regulatory contentiousness.”⁸⁷ S&P similarly added that, should “the
11 frequency of [PSPS events] increase, frustrated customers and politicians could negatively affect
12 California’s investor-owned electric utilities ability to consistently manage regulatory risk.”⁸⁸

13 That is, if PSPS events are unpopular—even if necessary—it could result in political
14 pressures that could have downstream impacts, preventing SDG&E from obtaining the support
15 through both approval and the ability to raise sufficient capital to make necessary investments in
16 things such as wildfire mitigation that can, in turn, reduce the need for PSPS events. Moreover,

⁸⁴ S&P Jun. 3, 2021 at 2.

⁸⁵ Moody’s Mar. 30, 2021 at 1.

⁸⁶ Moody’s May 10, 2021 at 6.

⁸⁷ *Id.* at 3.

⁸⁸ S&P Sept. 16, 2020 at 2.

1 PG&E’s recent fine for its handling of PSPS events demonstrates that this necessary, last-resort
2 response to prevent wildfire ignitions in and of itself bears risks for investors.⁸⁹

3 **B. Franchise Uncertainty**

4 SDG&E’s also faces increased risks regarding its franchise rights in certain counties and
5 municipalities it serves. Recently, the City of San Diego awarded new electric and gas franchises
6 to SDG&E for a ten-year term with an automatic ten-year extension. The terms of the franchises
7 permit the City of San Diego to void the automatic extension by a two-thirds vote of the City
8 Council. The City of San Diego may also terminate either franchise upon the recommendation of
9 the Mayor and City Attorney, if the termination is approved by a two-thirds vote of the City
10 Council without a showing of breach.

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

16 **C. CCM May Create Disconnect Between Risk Profile and ROE**

17 Finally, investors note the inherent risk regarding the CCM process (“adjustment
18 mechanism”) potentially triggering in 2020 to significantly reduce SDG&E and other California
19 utilities’ ROE near the industry average ROE—despite the higher risks and factors beyond
20 SDG&E’s control. As RRA has noted, one of the factors counterbalancing SDG&E and other
21 California electric utilities’ heightened wildfire risks is their above average ROEs, reflective of

⁸⁹ 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/>.

1 their above-average risk.⁹⁰ Moody’s similarly noted the CCM’s adjustment mechanism as a
2 potential risk to reduce SDG&E’s ROE below its risk profile.⁹¹

3 If SDG&E’s ROE is reduced near the national average—despite its above-average
4 risks—it could prevent SDG&E from raising sufficient capital (as investors would move their
5 investments to utilities with the same ROE but lower risk), and potentially reduce SDG&E’s
6 credit ratings; increasing costs for customers. The Commission seemingly noted this as well in
7 its 2019 cost of capital decision when, after “considering the evidence on market conditions,
8 trends, creditworthiness, interest rate forecasts, quantitative financial models, additional risk
9 factors including business risk,” it “conclude[d] that” SDG&E’s “adopted ROE should be set at
10 the upper end of the just and reasonable range.”⁹² It found that, in setting SDG&E’s ROE at 10.2
11 percent, that a “10.20% authorized ROE is significantly higher than the 9.60% average ROEs
12 granted to United States electric utilities during 2018.”⁹³

13 **D. Risks Associated with Regulatory Accounts**

14 Mr. Coyne analyzes the regulatory mechanisms that are in place for SDG&E.⁹⁴ Although
15 regulatory accounts provide some benefit in mitigating uncertainty, the use of such accounts also
16 presents cash flow concerns. In particular, memorandum accounts have no revenue authorized by
17 the Commission; only actual expenditures are recorded in memorandum accounts for which there
18 is no presumption of cost recovery. The utility must seek Commission authorization after the fact
19 to recovery already incurred costs.

⁹⁰ See RRA Dec. 14, 2020 at 2.

⁹¹ See Moody’s May 10, 2021 at 8.

⁹² D.19-12-056, p. 42.

⁹³ *Id.* at 42-43 (citing S&P RRA Global Market Intelligence, Jul. 22, 2019 at Table 1).

⁹⁴ Coyne SDG&E-04, pp. JMC-78 – JMC-79.

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

6 Thus, both memorandum and balancing accounts can have a multi-year lag in cost
7 recovery for which the short-term debt interest rate subject to regulatory accounts no longer
8 compensates those expenditures. The combination of regulatory lag and uncertainty of cost
9 recovery related to regulatory accounts increases risk, as SDG&E will be required to incur costs
10 for longer time periods on wildfire mitigation and other matters without assurance that the
11 Commission agrees that such costs should be incurred.

12 **IV. RISK OF RISING RATE PRESSURES FROM CHANGES IN CALIFORNIA** 13 **UTILITY MODEL AND OTHER SOURCES**

14 As Moody's noted, SDG&E's elevated risk profile analysis must also consider "the
15 significant demands that are placed on the California utilities amid many ambitious public policy
16 initiatives."⁹⁵ The energy industry in California is in a period of unprecedented change as
17 government policies, customer needs, and technology innovation are transforming towards a
18 more decentralized, less utility centric environment; all while simultaneously advancing
19 increasingly aggressive clean energy goals. California's clean energy goals are the most
20 aggressive in the country. And there is an increasing amount of departing load via customer
21 choice aggregators launching or exploring formation creating uncertainty.

⁹⁵ See, Moody's May 10, 2021 at 5.

1 Not only are these risks increasing for SDG&E, but they are also increasing at a rate
2 above national utility averages. While SDG&E supports many of the policies, and each has its
3 merits, combined they can lead to substantial change in business operations as well as lead to
4 potential rate increases. Credit rating agencies view high bills as credit negative and higher rates
5 may increase political pressure and inhibit required investments or proper cost recovery.

6 **A. Increased Rooftop Solar Use Creates Complexity and Rate Pressure**

7 California, and San Diego in particular, is experiencing increasing adoption of distributed
8 energy resources (“DER”), such as rooftop solar. The City of San Diego has the second highest
9 level of rooftop solar in the country. California passed a law requiring rooftop solar on new
10 housing effective January 2021, meaning that this rooftop solar penetration will only further
11 grow.

12 This heavy rooftop solar adoption places SDG&E in a unique position of being at the
13 forefront of addressing the risks and challenges from this transition. Specifically, this
14 decentralized and less utility-centric model presents risks given the Company’s current system
15 design and volumetric based rate structure. The high adoption rate of rooftop solar⁹⁶ and behind
16 the meter energy storage in SDG&E’s service territory puts SDG&E in a distinct position on two
17 fronts.

18 First, high levels of customer DER adoption under today’s current volumetric rate
19 structure impedes SDG&E’s ability to collect the cost of utility infrastructure investments
20 equitably from all customers. As CPUC Staff stated in its recent White Paper, the Commission’s

⁹⁶ Environment America Research & Policy Center, *Shining Cities 2020: Top US Cities for Solar Energy* (June 2020), available at https://environmentamerica.org/sites/environment/files/reports/Shining-Cities-2020/EA_Shining_Cities_scrn.pdf.

1 current Net Energy Metering (“NEM”) framework shifts costs from rooftop solar owners to often
2 lower-income and otherwise vulnerable customers.⁹⁷ Moody’s has noted similar cost-shifting
3 concerns.⁹⁸ This inequitable rate shift can create political and regulatory pressures, which could
4 have deleterious downstream consequences on the regulatory compact and SDG&E’s ability to
5 receive sufficient support to make necessary investments.

6 This results in greater rate pressure due to shrinking customer load volume, potentially
7 threatening SDG&E’s ability to collect on its investments. The current rate structure was
8 developed for the vertically integrated, unidirectional electricity model that SDG&E has operated
9 in for most of its history. Under the current net energy metering rate structure, bidirectional (two-
10 way energy flow) model, rooftop solar customers are often not paying for their full share of grid
11 services. This shifting of costs from one customer class to another can impact affordability.

12 Moreover, from 2010 to 2020, the average net monthly use per residential customer has
13 declined about 24%, primarily due to the installation of rooftop solar and the success of energy
14 efficiency programs. This decline in usage and sales is a contributing factor to the rising rates
15 SDG&E has experienced. Indeed, the CPUC’s Choice Action Plan recognizes this tension,
16 highlighting the need for additional analysis to assess “[s]eparating appropriate customer costs
17 associated with distribution grid services from bundled customers’ volumetric rates.”⁹⁹

18 Second, higher levels of DERs on the utility’s system may also increase the risk related to
19 operating that system. As a result of the highly unpredictable and geographically diverse two-

⁹⁷ 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”) p. 6.

⁹⁸ Moody’s May 10, 2021 at 6.

⁹⁹ CPUC, *California Customer Choice Project, Choice Action Plan and Gap Analysis* (December 2018) (“CPUC’s Choice Action Plan”), p. 15.

1 way energy flow from distributed generation, the planning and operation of the system becomes
2 progressively more complex and therefore riskier. This growth will require modernization of the
3 electric distribution grid to accommodate two-way flows of electricity from multiple
4 decentralized endpoints.

5 Areas with high concentration of distributed generation pose a greater risk to local
6 distribution system reliability, as transformers can become overloaded. Additionally, DERs such
7 as rooftop solar that could be increasingly relied-upon as a component of overall energy supply
8 to the grid are dependent on the sun to shine. Therefore, DERs, particularly without paired
9 storage, compound longer-term reliability risks as supply risk are added on top of the operational
10 risk. As SDG&E's customers continue to install DER at high rates, SDG&E must continue to be
11 at the forefront of this business change and uncertainty, providing the example (good and bad) to
12 other utilities, which increases the risk profile for SDG&E.

13 **B. Clean Energy Goals Increase Perceived Risks**

14 California and local policy continue to evolve with a greater emphasis on clean and
15 sustainable energy solutions and on an accelerated timeline. To execute on the increasing number
16 of aggressive decarbonization goals, regulators will continue to rely on the utility as the primary
17 vehicle for implementation. Part of the State's decarbonization efforts includes a heavy reliance
18 on renewable energy.

19 Renewable energy procurement, however, presents business risk and potential rate
20 pressure. In 2002, California established its Renewables Portfolio Standard ("RPS"), under
21 which utilities must increase their procurement of electricity from renewable sources. The RPS
22 procurement percentages have sharply increased over time. Senate Bill ("SB") 100¹⁰⁰ sets the

¹⁰⁰ SB 100, Stats. 2018, Ch. 312.

1 current RPS standard at 60% by 2030, with the remaining 40% of energy supplied by zero-
2 carbon resources by 2045.¹⁰¹ This is one of the most ambitious targets in the country.¹⁰²

3 With that comes a higher perceived risk of California utilities by investors and a potential
4 upward pressure on retail rates as significant increases in demand for energy over time—coupled
5 with the intermittency of renewable generation resources—challenges the grid’s reliability and
6 requires flexible generation and storage.¹⁰³ As Moody’s stated last spring, “[o]ur analysis
7 considers the significant demands that are placed on the California utilities”¹⁰⁴ including the
8 “state’s ambitious energy policy goals on clean energy, efficiency and pipeline safety place a
9 high level of demand on the utilities that affect not only SDG&E’s electric operations but also
10 natural gas operations.”¹⁰⁵

11 This massive infrastructure overhaul must be accomplished while appropriately
12 accounting for reliability, flexibility, and affordability. Depending on the policies adopted to
13 implement SB 100, a substantial amount of new renewable energy generation, storage, and
14 transmission lines must be developed, potentially increasing generation and transmission rates by
15 65%.¹⁰⁶ Although the final path to 100% renewable and zero-carbon electricity remains

¹⁰¹ Cal. Pub. Utils. Code § 399.11(a).

¹⁰² Lawrence Berkley National Laboratory, *U.S. Renewables Portfolio Standards, 2017 Annual Status Report* (July 2017), available at <http://eta-publications.lbl.gov/sites/default/files/2017-annual-rps-summary-report.pdf>.

¹⁰³ See Moody’s Investor Service, *Credit Opinion: San Diego Gas & Electric Company; Update following downgrade to Baa1 negative*. (March 14, 2019), p. 5.

¹⁰⁴ Moody’s May 10, 2021 at 5.

¹⁰⁵ *Id.* at 10.

¹⁰⁶ 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/>.

1 undecided, recent blackouts confirm that California must maintain an adequate and flexible
2 energy supply. Similarly, evidence of severe and systemic economic disparities, heightened by
3 the COVID-19 pandemic, confirms that SDG&E must maintain affordability even as the state
4 embarks upon decarbonization.

5 The zero-carbon resources by 2045 also puts significant pressure on gas-fired generation
6 and related-infrastructure in California at a time when reliability and resiliency is of the utmost
7 importance. While other states have joined in the shift from carbon to natural gas, California is
8 shifting to renewable resources with an overall negative sentiment towards natural gas.

9 California has moved closer to banning new natural gas connections as more than 40 cities, and
10 counties in California have tightened rules on natural gas use in new homes. And new legislation
11 is being considered across the state.¹⁰⁷

12 More expenditures are needed for pipeline safety and reliability. Yet gas throughput and
13 connections are anticipated to decline, which may lead to rate pressures for the gas infrastructure.
14 This could exacerbate reliability concerns noted above if affordability concerns related to gas
15 bills accelerate fuel switching and electrification, creating a downward spiral effect.

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

17 The growing flexibility for customers to choose their energy service provider, such as
18 through Community Choice Aggregation (“CCA”), presents business risks for SDG&E and
19 potential rate pressure for customers. Currently, SDG&E performs these procurement functions
20 for the majority of its customers. But CCAs—cities, counties, and other authorized entities that
21 purchase or generate electricity for customers within their jurisdiction—continue to grow. San

¹⁰⁷ 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/>.

1 Diego Clean Power will begin operations in 2021, as will other cities that are joining Solana
2 Beach to form Clean Energy Alliance. The operation of these CCAs will reduce SDG&E's
3 served load to about half in 2022. Other cities and the county of San Diego are exploring forming
4 CCAs, which would drop SDG&E served load below 20% by 2025.

5 While potentially serving less than 20% of the load in its service territory, SDG&E
6 remains the provider of last resort ("POLR") for 100% of its service territory load. It must
7 provide electrical service to any retail customer whose service is transferred because the
8 customer's load-serving entity (CCA or Direct Access provider) failed to provide, or denied,
9 service to the customer or otherwise failed to meet its obligations. Most recently this occurred
10 when a CCA in SCE's territory, Western Community Energy, declared bankruptcy in June 2021
11 and its customers were forced to migrate back to SCE.¹⁰⁸ This adds complexity to the market and
12 creates unplanned procurement obligations that could put a strain on SDG&E's procurement
13 activity.

14 As the CPUC's Choice Action Plan notes, "[t]hese entities must have the administrative
15 capacity and financial standing to absorb an uncertain number of customers and uncertain
16 electric load as well as resources available to ensure reliability of supply to meet that load."¹⁰⁹
17 The CPUC's Choice Action Plan goes on to note that the current environment does not have
18 policies to appropriately value the services of the POLR.¹¹⁰ California has not created a cost
19 recovery scheme for a POLR with a native load that is the minority for its territory.

¹⁰⁸ 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>.

¹⁰⁹ CPUC's Choice Action Plan at 33.

¹¹⁰ *Id.*

1 The formation of CCAs and subsequent load migration away from SDG&E also increases
2 business complexity regarding the Company’s supply portfolio. Contracts were previously
3 signed when SDG&E was the only load serving entity, including resource adequacy and
4 renewable Power Purchase Agreements (“PPAs”) to meet RPS standards. For the most part,
5 these are long-term contracts that have been in place for years. The rules for allocating costs and
6 attributes of these contracts, Power Charge Indifference Adjustment, continue to develop.
7 SDG&E must find a way to right-size its portfolio to account for the reduced served load.
8 However, reducing its supply will increase complexity in the medium term. To the extent
9 SDG&E sells its excess portfolio, rather than cancel or assign specific contracts, risks increase—
10 as there is now counterparty risk from the supplier and purchaser, more contracts to administer,
11 and does not remove long-term PPAs from SDG&E’s balance sheet, which has debt-equivalency
12 implications as discussed in Ms. Mekitarian’s testimony (Exhibit SDG&E-02).

13 **D. Customer Relief Programs and Financial Assistance**

14 SDG&E supports initiatives to provide financial assistance, including direct bill relief and
15 financing end-use adoption of clean energy technology. Yet this carries its own financial risks
16 without compensating investors for such risk. Moody’s notes that California has a significant
17 number of initiatives, initiated both before and during COVID-19 pandemic, that attempt to
18 protect vulnerable customers. Although the credit rating agency expects that the implementation
19 of these initiatives will largely be credit neutral, they “can potentially exacerbate the risk of cost
20 shifting cross customer classes in the state which may indirectly expose the utilities to some risk
21 of public backlash amid increasing monthly bills.”¹¹¹

¹¹¹ Moody’s May 10, 2021 at 7.

1 One such risk is regarding the financial relief provided to customers such as collection
2 moratoriums during the COVID-19 pandemic. For instance, California’s service-disconnection
3 moratorium has pushed SDG&E’s net undercollected balances to \$256 million as of June 30,
4 2021 compared to the average 2019 past due balance of approximately \$70 million.¹¹² California
5 is one of the remaining states with such an ongoing moratorium, and has had “one of the longest
6 moratorium periods in the U.S.”¹¹³ As discussed further in Ms. Mekitarian’s testimony, the
7 increased debt to support these outstanding arrearages puts pressure on SDG&E’s credit metrics.

8 As Moody’s noted, SDG&E’s uncollectible balance has nearly doubled in 2020
9 compared to 2019.¹¹⁴ As RRA adds, this results in reduced revenues and cash flow and shifts in
10 burdens among customer classes.¹¹⁵ As RRA continues, deferring how to address recovering
11 these costs “is not a guarantee of recovery,” and the longer the moratoriums remain in place, “the
12 larger the balances grow, the more difficult recovery will be.”¹¹⁶ These deferred costs—in
13 combination with the wildfire mitigation investments necessary to counterbalance the ever-
14 increasing wildfire risks—could also create rate pressures that could impact the political and/or
15 regulatory environment.

¹¹² See, Form 10-Q - Sempra Energy Period Ending June 30, 2021 – Note 4: Regulatory Matters, p. 57, available at <https://investor.sempra.com/static-files/ebeb1ccc-1aa9-47d2-8709-93309f1b1b32>.

¹¹³ Moody’s May 10, 2021 at 7.

¹¹⁴ *Id.*

¹¹⁵ S&P Global Market Intelligence, RRA Regulatory Focus, *2021 Energy Utility Regulatory Outlook* (Feb. 11, 2021), p. 3.

¹¹⁶ *Id.*

1 Another recent example includes financial assistance for customer adoption of clean
2 energy technologies. While the Clean Energy Financing Rulemaking proceeding¹¹⁷ was just
3 opened to explore additional utility financial support for expansion of clean energy financing
4 programs, SDG&E currently funds loan loss reserves for various California Alternative Energy
5 and Advanced Transportation Financing Authority programs promoting energy efficiency
6 technology adoption. Potentially using SDG&E capital as an end-user financing source may
7 further put investor capital at higher risk than traditional utility business models without
8 commensurate returns.

9 **V. ELEVATED LEVELS OF CAPITAL INVESTMENT**

10 Between 2021-2025, SDG&E plans to invest \$9.6 billion in capital projects. SDG&E will
11 require access to capital markets to finance these large capital investments. Lower credit ratings
12 for SDG&E increases its financial risks due to reduced access to capital and higher interest costs.
13 As S&P has noted, because utilities generally operate with “negative discretionary cash flow,
14 reflecting the high capital spending necessary to maintain and improve their electrical systems,”
15 a utility’s credit rating is critical.¹¹⁸ The “lack of consistent access to the capital markets or lack
16 of steady affordable capital can add considerable strain to a utility’s business model.”¹¹⁹ To
17 offset this risk, “a utility’s credit quality depends on its operating under a credit-supportive

¹¹⁷ See Rulemaking 20-08-022, *Order Instituting Rulemaking to Investigate and Design Clean Energy Financing Options for Electricity and Natural Gas Customers* (August 27, 2020).

¹¹⁸ S&P Global Ratings, *Will California Still Have an Investment-Grade Investor-Owned Electric Utility?* (February 19, 2019), p. 4.

¹¹⁹ *Id.*

1 regulatory construct that is consistent and predictable.”¹²⁰ These lower credit ratings result in
2 higher borrowing costs.

3 As Moody’s notes, SDG&E faces a credit challenge from its “[m]aterial capital
4 investment program” that will “require incremental debt.”¹²¹ An elevated level of investment
5 increases the risk of under-recovery or delayed recovery of invested capital. Furthermore, a
6 company with a greater amount of expected development capital is inherently riskier than a
7 similar company that is operating since it carries the risk of execution. And increased capital
8 needs also require increased amount of investment from the market, which is not infinite,
9 especially when considering the higher-risk profile relative to other lower-risk peers.

10 Credit rating agencies and investors consistently analyze and focus on the effect that
11 elevated capital investments may have on cash flows and corresponding pressure on credit
12 metrics. Equity investors are equally aware of the pressure on cash flows associated with a
13 utility’s elevated capital investments and resultant effect on the cost of capital. To ensure that
14 SDG&E has ready access to capital funding at a reasonable cost, SDG&E requires a just and
15 reasonable ROE.

16 **VI. CONCLUSION**

17 SDG&E faces significant business, regulatory, and financial risks that are not present for
18 utilities nationwide. These are primarily concentrated in catastrophic wildfire risk, political and
19 regulatory risks, increasing rate pressures and an elevated capital investment program. This
20 concludes my prepared direct testimony.

¹²⁰ *Id.*

¹²¹ Moody’s May 10, 2021 at 2.

1 **VII. WITNESS QUALIFICATIONS**

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

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

9 I have not previously testified before this Commission.