Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2020 Cost of Capital
Application: A.19-04-017
Exhibit No.: SDG&E-05-S

SAN DIEGO GAS & ELECTRIC COMPANY
PREPARED SUPPLEMENTAL TESTIMONY OF
CONCENTRIC ENERGY ADVISORS
WILDFIRE RISK PREMIUM
(AB 1054)

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

A Sempra Energy utility

AUGUST 1, 2019

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2020 Cost of Capital
Application: A.19-04-017
Exhibit No.: SDG&E-05-S Chapter 1

SAN DIEGO GAS & ELECTRIC COMPANY
PREPARED SUPPLEMENTAL TESTIMONY OF
JOHN J. REED AND JAMES M. COYNE
CHAPTER 1

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

AUGUST 1, 2019

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I. INTRODUCTION

Q. Please state your names, affiliation, and business address.

A. My name is John J. Reed. I am Chairman and Chief Executive Officer ("CEO") of Concentric Energy Advisors, Inc. ("Concentric") and CE Capital, Inc.

My name is James M. Coyne, and I am Senior Vice President of Concentric Energy Advisors, Inc.

Q. On whose behalf are you testifying?

A. We are submitting this Prepared Supplemental Testimony on behalf of San Diego Gas & Electric Company ("SDG&E" or the "Company"), a subsidiary of Sempra Energy, Inc. ("Sempra"), a publicly traded holding company.

Q. Have you previously provided testimony in this proceeding?

A. Yes. We provided Prepared Direct Testimony in April 2019.

II. PURPOSE AND OVERVIEW OF TESTIMONY

Q. What is the purpose of your Prepared Supplemental Testimony?

A. The purpose of our Prepared Supplemental Testimony is to present evidence and provide a revised recommendation regarding a risk premium applicable to SDG&E's authorized return on equity ("ROE"), after accounting for the expected impacts of Assembly Bill ("AB") 1054. This risk premium is included in SDG&E's aggregate ROE proposal in this proceeding. It is attributable to the Company's financial exposure to catastrophic wildfire liabilities arising from the combination of California's application of inverse condemnation to wildfires contributed to by investor-owned utilities ("IOUs") and the separate prudence review for cost recovery associated with such liabilities applied by the California Public Utility Commission ("Commission" or "CPUC"). We have continued to calculate this risk premium above the ROE recommended by Dr. Morin, which is based on a traditional proxy group-based cost of equity analysis. Our analyses and recommendations are supported by the data presented in Exhibit SDG&E-Concentric-05-S-1, which has been prepared by us or under our direction.

Q. What was your conclusion regarding the required wildfire risk premium for the Company prior to the passage of AB 1054?

A. Prior to its passage, our analysis identified a wildfire risk premium in the range of 1.87 to 6.50 percent. We concluded that a risk premium of 3.4 percent best represented the wildfire liability risk borne by SDG&E's shareholders.

Q. What was the basis for your recommended risk premium in your Prepared Direct Testimony?

A. Our estimated risk premium range was based on six methods designed to measure the shareholder risk associated with SDG&E's exposure to wildfires. Our recommendation was ultimately derived from the "Estimated Loss," "Insurance," and "CAT Bond" Approaches, as we determined these approaches most reliably indicated the incremental cost of equity for SDG&E for its risks that were not reflected in Dr. Morin's analysis for the proxy group utilities.

We also had to make certain assumptions regarding the legal and regulatory framework in California. Our estimated risk premium reflected the state of legal and regulatory affairs that existed prior to AB 1054. It was our understanding that there were several potential legislative and regulatory solutions that could reduce the risk of wildfire liabilities to California's utilities. We are now able to focus on the specific features of the enacted legislation.

Q. What is your revised conclusion regarding the required wildfire risk premium for the Company after the passage of AB 1054?

A. With the enactment of AB 1054, the shareholder risks we identified in our Prepared Direct Testimony have been reduced, but not eliminated. We have updated our risk assessment using the three primary methodologies utilized in our Prepared Direct Testimony. We now estimate an equity wildfire risk premium in the range of 1.23 to 1.72 percent, and a recommended adjustment of 1.48 percent, representing a 57 percent reduction from our original estimate.

Q. How is the remainder of your Prepared Supplemental Testimony organized?

A. The remainder of our Prepared Supplemental Testimony is organized as follows:

- Section III describes our assessment of the change in risks for California utilities resulting from the enactment of AB 1054;
- Section IV contains an update to our analysis of the appropriate risk premium for the Company's cost of equity utilizing the same primary approaches as in our Prepared Direct Testimony;
- Section V summarizes our results, conclusions, and recommendation.

III. THE IMPACTS OF AB 1054 ON SHAREHOLDER RISK

Q. Please describe the risk reducing impacts of AB 1054 on utility and shareholder risk.

A. There are many elements of AB 1054 and the risk reducing impacts remain subject to some uncertainty as the legislation is being implemented at the regulatory level. The risk-reducing effects of each change resulting from the legislation also depends on several key assumptions. As discussed in the prepared supplemental testimony of Bruce Folkmann (Exhibit SDG&E-01-S), SDG&E has opted into AB 1054's "Wildfire Fund."

As credit rating agencies have noted, there are three primary sources of risk reduction created by the Wildfire Fund:

1. Establishing a revised prudence standard for determining whether a utility's costs and expenses arising from a covered wildfire are just and reasonable;[1]

2. Establishing a cap on wildfire related expenses that have been found to be imprudently incurred equal to 20 percent of the utility's transmission and distribution ratebase;[2]

3. Creating liquidity through the creation of a Wildfire Fund that reimburses utilities' settled claims while the utility seeks cost recovery through a CPUC process.[3]

Upon first inspection, these are important and significant steps aimed at moderating the extraordinary risks of California's wildfire liability for utilities and their customers. But there are significant risks unique to California and unknowns within the legislative framework that mean that shareholders continue to bear material risk.

Q. What unique risks remain after the passage of AB 1054?

A. There are several significant wildfire risks remaining after the enactment of AB 1054 that do not apply to the utilities in Dr. Morin's peer group. Principal among these are the following:

- The legal standard known as inverse condemnation was unchanged by AB 1054, and utilities remain legally liable when their equipment is a cause of a wildfire ignition. This doctrine makes utilities strictly liable for liability damages caused by their own facilities, regardless of whether the utility acted reasonably and showed no negligence. So even though AB 1054 may cap the utilities' ultimate

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1 Cal. Pub. Util. Code § 451.1.

2 *Id.* at § 3292(h)(2)(C)(i).

3 *Id.* at § 3292(f)(1).

liability, this is a unique risk in California, and credit rating agencies continue to recognize this doctrine as a credit constraint;[4]

- There is no precedent for the CPUC operating under the revised prudence standard articulated in AB 1054. The impact on the CPUC's determination of prudence is uncharted water with significant impact on shareholders. The risk reducing effect of the adoption of the "industry norm" for prudence depends on how the CPUC implements the standard for utilities operating under the Wildfire Fund. For example, if the CPUC were to adopt a view that it only takes minimal evidence to overcome the presumption of prudence and shift the burden of proof, then the risk reducing effect is minimal. The only relevant precedent of a CPUC prudence review is the Commission's 100 percent imprudence finding in SDG&E's Wildfire Expense Memorandum Account ("WEMA") application, further increasing uncertainty. Credit rating agencies recognize the uncertainty regarding how the CPUC will implement the revised prudency standards as another credit constraint.[5]

- There are ongoing concerns about the Wildfire Fund's durability. The Fund will be created by a combination of State and utility funding totaling $21 billion, assuming all three currently eligible utilities participate (Pacific Gas and Electric Company, Southern California Edison Company, and SDG&E). Governor Newsom's Strike Force retained an energy advisory firm, Filsinger Energy Partners, ("Filsinger") to measure the probability of exhausting the Wildfire Fund. Filsinger prepared a Wildfire Fund Durability Analysis ("Filsinger Report"), that estimated various probabilities for the Fund's exhaustion, ranging from 0.1 to 21.9 percent by the year 2035, depending on the likelihood of the CPUC finding the utility to be imprudent, which ranged from 25 to 75 percent. This assumed a median wildfire loss of $7 billion per year based upon the experience of the last five years.[6] But this median loss figure is far too low if the experience of the last two years continues, where the median yearly loss was much higher.[7] Actual losses and the life of the Fund will depend on the CPUC's prudence findings (which determine whether the Fund is reimbursed), and the actual losses of all

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[4] *See, e.g.*, *Fitch Ratings, Fitch Affirms San Diego Gas & Electric's IDR at 'BBB+; Outlook Revised to Stable*, dated July 17, 2019 ("Fitch July 17 Report") at 1.

[5] *See id.*; *see also* S&P Global Ratings, *San Diego Gas & Electric Co. Ratings Affirmed, Outlook Revised to Stable from Negative*, dated July 30, 2019, at 2 ("S&P July 30 Report").

[6] Filsinger Energy Partners, *California Wildfire Fund Durability Analysis*, dated June 26, 2019, at 2-3 (Filsinger June 26, 2019 Report") (assuming a 20 percent cap, as ultimately adopted); *see also* Moody's Investor Services, *Rating Action: Moody's affirms San Diego Gas & Electric's ratings; changes outlook to positive from negative*, dated July 29, 2019 at 1 ("Moody's July 29 Report") (referencing Filsinger analysis).

[7] *See* Prepared Supplemental Testimony of Don Widjaja (Aug. 2019) (Ex. SDG&E-03-S (Widjaja)), at 6.

three utilities. It is possible that one or two utilities could draw down the Fund, leaving no resources for the other(s).[8] If the Fund is exhausted, the risk reducing benefits of the imprudence liability cap and liquidity supported by the Fund are negated.

- Insurance coverage is an important risk management tool for each utility. Under AB 1054, a utility's insurance coverage is subject to a recommendation of "reasonable insurance coverage" by the Fund Administrator. If the Administrator should recommend a lower insurance level, and if adopted by the CPUC, the utility's shareholders would be subject to greater risk.

- The imprudence liability cap, which is approximately $825 million for SDG&E, is also subject to be lifted by the Wildfire Fund Administrator ("Administrator") if the Administrator concludes that the utility has acted in a manner that constitutes "conscious or willful disregard of the rights and safety of others."[9]

Lastly, it must be recognized that the magnitude of wildfire risk is unique to California. Post AB 1054, the state's utilities will still bear more risk than their industry peers. As a result, the combination of risk-reducing elements of the legislation and these remaining uncertainties following implementation cannot be measured within a standard industry peer group and must be measured incrementally.

IV. ESTIMATES OF THE EQUITY RISK ADJUSTMENT FOR WILDFIRE LIABILITY RISK

Q. Please describe how you have updated your approach to estimating the risk premium adjustment for wildfire liability risk.

A. As discussed in Section III, the primary benefits to shareholders from AB 1054 are: (1) a revised prudence standard; and (2) a liability cap on wildfire related expenses that have been found to be imprudently incurred. However, uncertainty remains as to how the revised prudency standard will be applied, and when the Wildfire Fund will be exhausted

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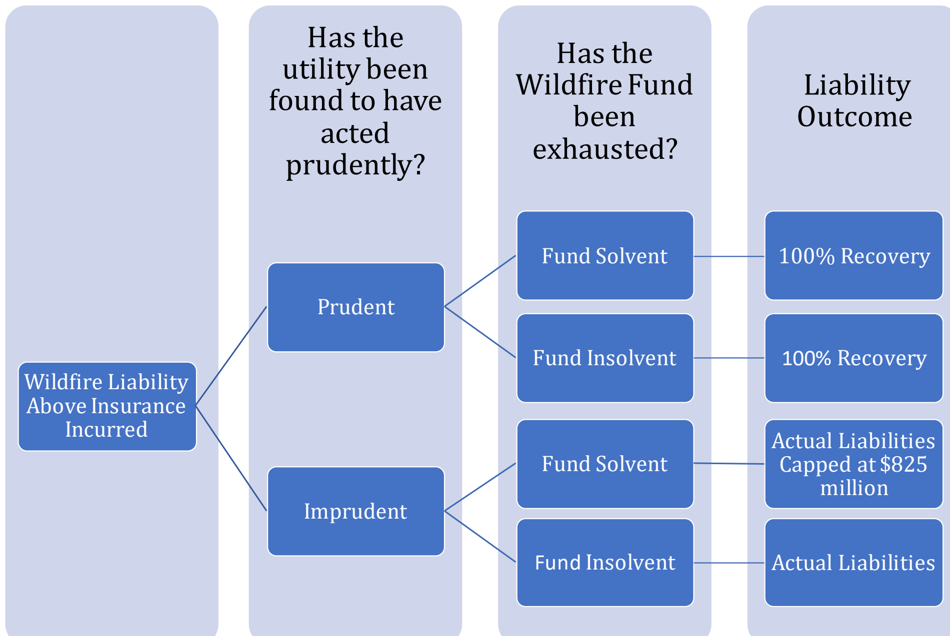
8 *See* Fitch July 17 Report (identifying "contagion risks associated with comingling of funds").

9 Cal. Pub. Util. Code § 3292(h)(3)(A).

and unable to refund for claims in excess of the liability cap. As shown in Figure 1 below, this uncertainty affects the potential liability outcomes to shareholders. Therefore, we have revised our analysis to reflect both these benefits and remaining uncertainties.

Figure 1: Wildfire Liability Risk Analysis



Q. How do the potential liability outcomes affect shareholders' exposure to liabilities?

A. Figure 2, below, demonstrates the potential liabilities to shareholders assuming a $3.68 billion wildfire liability event, which, as we described in our prepared direct testimony, is the approximate average potential wildfire liability loss for events that exceed SDG&E's present $1.5 billion in insurance coverage, based upon the Company's wildfire risk modeling.[10] Under all scenarios, it is assumed that $1.5 billion would be reimbursed through insurance policies and 18.4 percent of the remaining $2.18 billion of

[10] *See* Prepared Direct Testimony of Concentric, Chapter 1 (Apr. 2019) (Ex. SDG&E-05 (Concentric) Ch. 1) at 35.

liabilities ($401 million) would be recoverable under Federal Energy Regulatory Commission ("FERC") rates.[11] The remaining liability of $1.78 billion would be subject to a finding of prudence.[12] If the Company was found to be imprudent, shareholders would be responsible for liabilities up to the imprudence liability cap, which is approximately $825 million for SDG&E, assuming the fund is solvent.[13] If the fund had been exhausted by prior claims and is insolvent, shareholders would be responsible for the entire $1.78 billion. Conversely, if the Company was found to be prudent, we assume that $1.78 billion would be reimbursed by the fund or recoverable through CPUC-jurisdictional rates. Utilizing this framework of potential shareholder liabilities under each of these scenarios, we update our estimates of the risk premium required to compensate for the remaining risk.

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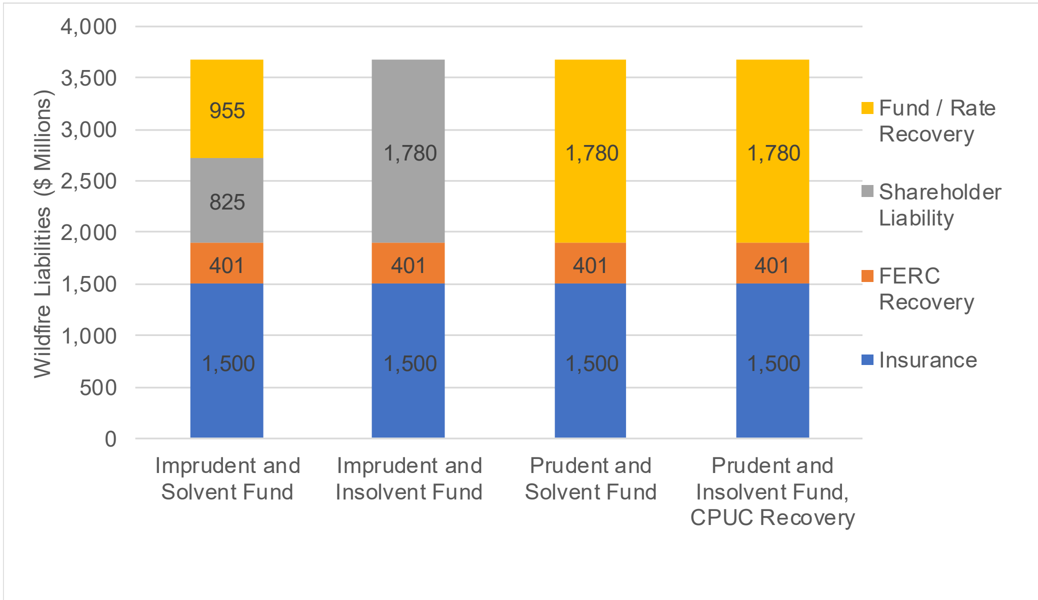
[11] *Id.*

[12] *Id.*

[13] *See* Prepared Supplemental Testimony of Bruce Folkmann (Aug. 2019) (Ex. SDG&E-01-S (Folkmann)) at 4.

Figure 2: Coverage for Wildfire Liabilities



A. The Estimated Loss Approach

Q. Please describe how your approach to estimating the risk of potential loss associated with wildfires has changed since the filing of your Prepared Direct Testimony.

A. As noted, AB 1054 has changed two key assumptions related to SDG&E's financial exposure to potential liabilities from wildfire events.

First, AB 1054 changed the prudence standard of review such that the California IOUs' conduct will be deemed reasonable if a valid Annual Safety Certificate ("ASC") is in place, unless a serious doubt is raised.[14] The Earnings Approach in our Prepared Direct Testimony assumed that, for all fires above SDG&E's insurance coverage, the CPUC would rule SDG&E to have been imprudent.[15] This assumption was based on the

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[14] *See* Ex. SDG&E-01-S (Folkmann) at 3 (citing Cal. Pub. Util. Code § 451.1(c)).

[15] *See* Ex. SDG&E-05 (Concentric) Ch. 1 at 36.

Commission's precedent set in 2017, where the CPUC denied SDG&E recovery of all of the costs associated with the 2007 fires in the Company's WEMA application. Our updated analysis now considers probabilities of imprudence findings from the CPUC that range from 75 percent to 50 percent for all fires that exceed the company's insurance coverage. We base this on the Filsinger Report, which assumes that a utility's likelihood of being found to be imprudent over the 2020 to 2022 Cost of Capital period is 70 percent, and that the average likelihood of being found to be imprudent over the 2020 to 2030 period is 50 percent.[16] We have also considered that SDG&E's wildfire liability experience under the existing prudence standard has been that no costs were found to have been prudently incurred, and that the CPUC has no track record regulating under the AB 1054 reasonableness standard.

Second, AB 1054 created a shareholder liability cap for losses found to have been imprudently incurred at 20 percent of SDG&E's transmission and distribution equity rate base, which is estimated to be approximately $825 million.[17] However, this cap only applies if the Wildfire Fund is still solvent, and no finding of "disregard of the safety of others" is made.[18] Over time, prudent findings in the wake of catastrophic wildfires will deplete and ultimately exhaust the Wildfire Fund. Our updated analysis includes a conditional probability of 25 percent that the Wildfire Fund will be insolvent for SDG&E's

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[16] *See* Filsinger June 26 Report; *see also* 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 ("Moody's July 12 Report") at 1 (discussing Filsinger study).

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

[18] Cal. Pub. Util. Code § 3292(h)(3)(A).

modeled fire scenarios. Considering an average annual loss of $8.5 billion and median loss of $7 billion based upon the last five years of wildfire experience according to the Governor's Strike Force,[19] the $21 billion Wildfire Fund could be exhausted in as few as three years of wildfire liabilities found to be prudently incurred. However, even this analysis is subject to certain assumptions holding in practice. If the wildfire liability experience of the last two years continues, where the median yearly loss was far more than $7 billion, the wildfire fund could be exhausted more quickly.[20] In addition, if the 75 percent to 25 percent assumptions of prudent findings vary, or the limitation of payments of subrogation claims to 40 percent of the claim value does not hold (reducing the fund's gross claims-paying capability), this could also affect the durability of the Wildfire Fund.[21] Given that Filsinger's assumption of a 21.9 percent likelihood that the Wildfire Fund is depleted by 2035 depends on every assumption that they make being accurate (every utility carries at least $1 billion in insurance, the median loss will be more equivalent to the last five years and not the last two, the rate of imprudence findings will occur as Filsinger predicted, and the 40 percent subrogation incentive works as intended), we believe that a 25 percent insolvency rate is appropriately cautious that not every assumption may hold, while still being conservative.

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[19] Filsinger June 26 Report at 5.

[20] *See* Ex. SDG&E-03-S (Widjaja) at 6.

[21] *Id.*

Q. What are the losses an investor can expect given the probability of wildfire liabilities after AB 1054?

A. We apply a logic similar to that which we applied in our Prepared Direct Testimony to determine the potential annual loss that investors could now face and rely upon that testimony here.[22] As discussed in our Prepared Direct Testimony, assuming a liability of $3.68 billion (the average modeled wildfire loss for events that exceed SDG&E's present insurance coverage), $1.5 billion would be reimbursed through insurance policies.[23] Under present FERC practices, 18.4 percent of the remaining $2.18 billion of liabilities ($401 million) would likely be recoverable under FERC rates.[24] The remaining potential liability to the Company would be $1.78 billion, subject to CPUC recovery. We now assume that all prudently-incurred wildfire liabilities will be fully recoverable, through FERC-approved and CPUC-approved rates, or through the Wildfire Fund. Our updated analysis breaks out the liabilities associated with imprudent conduct into two separate components: a portion below the liability cap and a portion above the liability cap. As discussed, the capped shareholder liability for SDG&E in the case of an imprudence finding is estimated to be $825 million. According to the Company's wildfire modeling, the average liability (net of insurance and FERC recovery) for events up to the cap is approximately $684 million. After applying a 50 percent to 70 percent conditional probability of imprudence, the expected pre-tax liability for the portion of shareholder liability below the cap is equal to $342 million to $479 million.

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22 Ex. SDG&E-05 (Concentric) Ch. 1 at 33-37.

23 *Id.* at 36.

24 *Id.*

The risk associated with the portion above the liability cap represents the liability if the CPUC finds the Company imprudent and the Wildfire Fund is insolvent. In this case, the liability cap no longer applies, and SDG&E shareholders must bear the entire net liability after insurance and FERC recovery. In this modeled scenario, assuming the same average liability of $3.68 billion, that total liability is $1.78 billion, with an average of $1.1 billion for liabilities above the cap. After applying a 25 percent probability of fund insolvency and a 50 percent to 70 percent probability of an imprudence finding to the remaining average liability above the cap, $1.1 billion, the expected pre-tax liability for events above the cap (*i.e.*, in situations where the Wildfire Fund is no longer available) is approximately $137 million to $192 million.

If these liabilities were borne by shareholders, there would be a tax effect reducing the total loss borne by shareholders by 27.6 percent. This assumes that the tax shield created by the wildfire losses could be fully utilized on a timely basis and results in an after-tax exposure for the combined (below the cap and above the cap portions) expected liabilities of $347 million to $485 million. SDG&E's wildfire risk model results in an approximately 1-in-20-year event, or a 5.33 percent annual probability, in any given year of a $1.5 billion or greater financial loss.[25] Applying expected liability to an annual probability of 5.33 percent (*i.e.*, approximately 1-20-years probability) indicates an estimated annual loss of $18.48 million to $25.87 million.

[25] *Id.* at 35.

Q. How can shareholders be compensated for bearing this incremental risk above the average utility risk profile?

A. SDG&E's projected 2019 total CPUC-jurisdiction equity rate base is $3.66 billion. As shown in Exhibit SDG&E-Concentric-05-S-1, pages 2-3, providing investors a premium for compensation of potential annual wildfire liabilities of approximately $18.48 million to $25.87 million would require 0.50 percent to 0.71 percent (50 to 71 basis points) to be added to SDG&E's ROE recommendation based on the estimated loss approach, as compared to the 1.87 percent estimated in our Prepared Direct Testimony.

B. The Insurance Approach

Q. Please describe the Company's insurance coverage, and the costs associated with limiting financial exposure to wildfire liabilities and how that has changed as a result of AB 1054.

A. As previously described, the Company's current insurance policies cover wildfire related liabilities up to $1.5 billion.[26] Shareholders bear a portion of the risk for liabilities that exceed this amount. Given that the insurance industry provides a clear price signal for the cost required to bear the risk of wildfire liabilities, insurance premiums provide a suitable proxy for the incremental risk premium investors require to invest in the Company.[27] While the provisions of AB 1054 and other supporting legislation provide some protection to shareholders that could limit the risk shareholders bear for liabilities in excess of insurance coverage, there remain uncertainties as to how the provisions will

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[26] Although AB 1054 provides that a participating utility must possess $1 billion in insurance or what the Administrator recommends, Cal. Pub. Util. Code § 3280(f), for purposes of our testimony we assume that SDG&E will continue carrying $1.5 billion in insurance.

[27] Ex. SDG&E-05 (Concentric) Ch. 1 at 40-41.

be applied, and SDG&E's insurance premiums are a direct, market-based measure of the compensation required to bear these wildfire liability risks.

Q. How does the potential shareholder risk mitigation provided in AB 1054 inform your estimate of the Insurance Approach provided in your Prepared Direct Testimony?

A. We continue to assume that SDG&E possesses the same insurance coverage for wildfire liabilities of $1.5 billion and an average expected liability of $3.68 billion for events in excess of $1.5 billion (based on SDG&E's wildfire modeling), leaving $2.2 billion of incremental risk for shareholders.[28]

With the revised prudence standard, we assume that there is a higher probability that liabilities incurred will be found to be eligible for cost recovery. Based on the Filsinger Report, there is an expectation that an average of 70 percent of liabilities will be determined to be imprudent over the first three years of the Wildfire Fund. As such, this reduces the probability of shareholders bearing the risk of liabilities above the Company's insurance coverage from 100 percent to 70 percent. As discussed earlier, we have also examined an alternative scenario in which 50 percent of the liabilities are judged to be prudent. Also discussed earlier, for an imprudence finding, shareholders would be limited to $825 million in liabilities, and the Wildfire Fund would reimburse liabilities in excess of that cap as long as the Wildfire Fund has not been exhausted. As noted by Fitch Ratings:

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[28] *Id.* at 35, 39.

> Funds available to SDG&E will be affected by the frequency and severity of wildfires in other IOUs' service territories as well as their safety conduct, which is less favorable, in Fitch's view. If the fund is depleted, the limit of each utility's liability does not apply. SDG&E's much smaller and less-wooded service territory, 60% of underground distribution system, a track record of robust fire prevention and mitigation programs have contributed to the lack of large wildfires in its service territory in the last decade.[29]

Given that access to the fund is not exclusive to SDG&E, and that other utilities could access the fund and in effect exhaust the fund before SDG&E accesses the Wildfire Fund, the risk profile of the fund's viability extends beyond SDG&E's risk profile.[30]

Q. How do these assumptions affect your estimate of the risk premium under the Insurance Approach?

A. As noted, in our Prepared Direct Testimony we expected a 100 percent likelihood of shareholders bearing the risk of liabilities in excess of the $1.5 billion of insurance coverage. Based on the expectation of a revised prudence standard discussed above, we would now attribute a 50 to 70 percent probability to the likelihood that shareholders bear the risk of liabilities up to the cap of $825 million. For liabilities in excess of $825 million, we assume the same 50 percent to 70 percent probability due to a finding of imprudence, in combination with a 25 percent likelihood that the fund has been exhausted, meaning that shareholders would also be responsible for the remaining liability. Together, this results in a 12.5 to 17.5 percent probability that shareholders

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29 *See* Fitch July 17 Report at 3.

30 *See* S&P July 30 Report at 2 ("Accordingly, AB 1054 directly associates SDG&E's credit quality to the operations of its California electric utility peers. Meaning even if SDG&E continues to maintain its operational excellence, its longer-term benefit of the credit-supportive liquidity cap is ultimately dependent on the operations of California's other investor-owned electric utilities that are also contributing to the [wildfire] fund").

remain responsible for liabilities in excess of insurance coverage and the liability cap. As such, applying the probabilities attributed to the application of the revised prudence standard and the likelihood the Wildfire Fund has not been exhausted reduces the expected value of the liabilities to which shareholders are exposed. While AB 1054 provides potential reimbursement for liabilities above $1.5 billion, shareholders are self-insuring for this amount to the extent AB 1054 does not cover these liabilities. We can use insurance market data from SDG&E's Rate on Line ("ROL") as a market measure of the equivalent premium that investors require to self-insure the remaining potential shareholder liability. As shown in Exhibit SDG&E-Concentric-05-S-1, pages 4-5, based on an equity rate base of $3.66 billion, the cost of incremental insurance coverage of $421 million to $590 million of liabilities at the updated ROL[31] would be equivalent to providing equity investors a 1.33 to 1.86 percent risk premium to accept this risk, compared to a 3.68 risk premium as presented in our Prepared Direct Testimony – an overall reduction of approximately 49 percent to 64 percent. Nonetheless, as discussed in our Prepared Direct Testimony, $3.68 billion is the *average* expected liability in excess of the Company's insurance coverage. Since this analysis does not explicitly account for liabilities in excess of this amount, it is an incomplete estimate of the total risk borne by shareholders.

[31] *See* Exhibit SDG&E-Concentric-05-S-1, pgs. 4-5.

C. The CAT Bond Approach

Q. Will the investors who hold SDG&E's CAT Bonds expect a reduction in the risk profile of the CAT bonds as a result of AB 1054?

A. No, investors holding SDG&E's CAT Bonds will not be directly affected by AB 1054. As discussed in our Prepared Direct Testimony, the primary risk to CAT bond investors is the risk of a wildfire causing liabilities to the Company exceeding the prescribed attachment level during the 3-year holding period.[32] Since the CAT Bonds themselves are included in the Company's insurance coverage – and AB 1054 primarily addresses liabilities that exceed the Company's insurance coverage – the underlying risk profile to the holders of CAT Bonds is largely unaffected. That is, if a wildfire causes liabilities to the Company exceeding the prescribed attachment level during the holding period, investors would lose their principal balance, regardless of how the Wildfire Fund operates, or any CPUC determination. Therefore, any subsequent transactions related to SDG&E's CAT Bonds are likely not influenced by AB 1054.

Q. Can SDG&E's CAT bond yields be used to determine a wildfire risk premium?

A. As discussed in our Prepared Direct Testimony, to assess a CAT Bond investors' required return for this risk, the appropriate comparison is the CAT Bond yield relative to the 3-year U.S. Treasury note as a measure of the risk-free rate. This provides an estimate that is analogous to the ROL for insurance discussed in the context of the Insurance Approach. In the Insurance Approach, we used the ROL as a price signal for the cost required to bear the risk of wildfire liabilities that could be applied to the residual risk

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[32] Ex. SDG&E-05 (Concentric) Ch. 1 at 41-42.

that shareholders bear to self-insure above the Company's insurance limits. As discussed above, we expect that residual risk to be reduced by AB 1054. We would expect that reduction to apply in a similar manner to the price signal we see from the CAT Bond Approach, meaning that we can also apply the price signals from the CAT Bond as a separate market measure of the equivalent premium that investors require to self-insure the remaining potential liability. In the Insurance Approach, we saw a decline in the estimated risk premium of approximately 49 to 64 percent. As shown in Exhibit SDG&E-Concentric-05-S-1, page 6, updating the CAT Bond Approach for more recent transactions[33] and applying the same reduction in the estimated risk primum indicates an updated risk premium between 1.53 and 2.14 percent.

V. CONCLUSIONS AND RECOMMENDATION

Q. Please summarize your approach to estimating the wildfire risk premium analyses.

A. As discussed above, we have updated our analysis of the equity risk adjustment required to compensate SDG&E for the unique risks it faces in order to help inform SDG&E's ultimate ROE proposal. These estimates now assume the implementation of AB 1054, in contrast to the California legislative and regulatory mechanisms in force at the time of our Prepared Direct Testimony.

As in our Prepared Direct Testimony, we place most weight on the Estimated Loss Approach, the Insurance Approach, and the CAT Bond Approach, which offer the most specifically identifiable and quantifiable risk premium values. Taken together, we believe these analyses provide the Commission with an appropriate range of the required risk

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[33] The CAT Bond Approach has been updated to reflect market data for two recent transactions occurring May 16, 2019 and June 14, 2019.

premium. The Credit Rating assessment provided by Mr. Todd Shipman reinforces these results, although restoration of a debt credit rating does not necessarily satisfy the risk exposure of equity shareholders.

In order to estimate the risk adjustment, we have taken a probabilistic approach capturing the principal uncertainties and risks remaining after the implementation of the legislation. The risks to shareholders have been reduced by AB 1054, but not eliminated. Our analysis focuses on two remaining risks: a wildfire with a finding of imprudence by the CPUC; and the potential insolvency of the Wildfire Fund.

Q. What is your recommended ROE adjustment to the Commission?

A. Based on our analysis, we recommend an ROE adjustment in the range of 1.23 to 1.72 percent, and a midpoint of these results of 1.48 percent (see Figure 3, below). This represents the midpoint between the mean and median of the three methods that allow the most specific quantification of the equity risk, as shown below, and contrasted with the results from our Prepared Direct Testimony. The adjusted range, post AB 1054, reflects findings of imprudence ranging from 70 to 50 percent, which we believe is appropriate, especially considering the lack of experience with decisions implementing the new legislation. As experience with the regulatory process and demands on the Fund are gained, this premium should be reconsidered accordingly.

Figure 3: Summary of Results

Range of Results - Direct Filing

Approach Description	ROE Adjustment
Estimated Loss Approach	1.87%
Insurance Approach	3.68%
CAT Bond Approach	3.87%
Mean	**3.14%**
Median	**3.68%**
Midpoint of Mean and Median	**3.41%**

Supplemental Range of Results - 0.5 Imprudence

Approach Description	ROE Adjustment
Estimated Loss Approach	0.50%
Insurance Approach	1.33%
CAT Bond Approach	1.53%
Mean	**1.12%**
Median	**1.33%**
Midpoint of Mean and Median	**1.23%**

Supplemental Range of Results - 0.7 Imprudence

Approach Description	ROE Adjustment
Estimated Loss Approach	0.71%
Insurance Approach	1.86%
CAT Bond Approach	2.14%
Mean	**1.57%**
Median	**1.86%**
Midpoint of Mean and Median	**1.72%**

Summary Results

	ROE Adjustment
Midpoint of Mean and Median - 0.5 Imprudence	1.23%
Midpoint of Mean and Median - 0.7 Imprudence	1.72%
Midpoint of Scenarios	**1.48%**

Q. Does this complete your Prepared Supplemental Testimony?

A. Yes.

Exhibit SDG&E-Concentric-05-S-1

Analytical Assumptions

Notes	Assumptions	
[1]	SDG&E Average Wildfire Financial Impact Above Insurance ($millions)	$3,681
[2]	SDG&E Current Wildfire Insurance ($millions)	($1,500)
[3]	SDG&E Transmission Labor Allocator in 2019	18.4%
[4]	CA Effective Tax Rate	27.6%
[5]	SDG&E Requested Equity Ratio in 2019 Rate Case	56.0%
[6]	SDG&E 2019 CPUC Rate Base ($millions)	$6,537.08
[7]	SDG&E CPUC Equity Rate Base ($millions)	$3,660.76
[8]	SDG&E Liability Cap in Event of Imprudence Finding	$825.00
[9]	Rate-On-Line (ROL) For Wildfire Insurance Renewals	11.56%
[10a]	P(imprudence) 1	70.00%
[10b]	P(imprudence) 2	50.00%
[11]	P(fund insolvent)	25%

Notes

[1] Company-provided data
[2] Company-provided data
[3] Company-provided data
[4] Company-provided data
[5] Company-provided data
[6] Company-provided data
[7] Equals [5] x [6]
[8] Company-provided data
[9] Company-provided data
[10] Concentric Assumption
[11] Concentric Assumption

Earnings Approach

Notes		
[1]	p(imprudent)	70%
[2]	p(insolvent)	25%

Estimated Fire Above Insurance Coverage

Notes	Category	$ (millions)
[3]	SDG&E's Average Financial Impact in Excess of Insurance ($millions)	$ 3,681
[4]	SDG&E Wildfire Insurance	$ (1,500)
[5]	Wildfire Costs in Excess of Insurance	$ 2,181
[6]	Less Amount - FERC Recovery	$ (401)
[7]	Wildfire Costs in Excess of FERC Recovery	$ 1,780
[8]	SDG&E Average Liability Below the Cap	$ 684
[9]	SDG&E Average Liability Above the Cap	$ 1,095
[10]	SDG&E Expected Liability if Found Imprudent, Below the Cap	$ 479
[11]	SDG&E Expected Liability if Found Imprudent, Above the Cap, Fund Insolvent	$ 192
[12]	SDG&E Total Liability Pre-Tax	$ 671
[13]	**SDG&E Liability After-Tax**	**$ 485**
[14]	Probability of Fire Above $1.5B	5.33%

Annualized Estimated Loss

	[13]	[15]
Description	Net Estimated Fire Liabilities ($millions)	Annual Estimated Loss ($millions)
SDG&E Liability After-Tax	$ 485	$ 25.87

2019 Test Year Rate Base ($ millions)

[16]	2019 Projected SDG&E Rate Base	$ 6,537.08
[17]	Equity Ratio	56.0%
[18]	Equity Base	$ 3,660.76

ROE Adjustment

	[13]	[19]
Description	Net Estimated Fire Liabilities ($millions)	ROE Adjustment
Expected Annual Shareholder Loss	$ 485	0.71%

Notes

[1] See assumptions
[2] See assumptions
[3] See assumptions
[4] See assumptions
[5] Equals sum of [3] and [4]
[6] Equals [5] x FERC labor allocator [18.4%] (see assumptions)
[7] Equals sum of [5] and [6]
[8] $684 million is the modeled average liability less than or equal to SDG&E's shareholder liability cap [$825 million]. (Company-provided data)
[9] Equals [7] less [8]
[10] Equals [8] * [1]
[11] Equals [9] * [1] * [2]
[12] Equals sum of [10] and [11]
[13] Equals [12] x (1- Effective Tax Rate [27.6%])
[14] Expected probability of a $3.68B fire based on company modeling (Company-provided data)
[15] Equals [13] * [14]
[16] See assumptions
[17] See assumptions
[18] Equals [17] x [16]
[19] Equals [13] / [18] * [14]

Notes	Earnings Approach		
[1]	p(imprudent)		50%
[2]	p(insolvent)		25%

Estimated Fire Above Insurance Coverage

Notes	Category		$ (millions)
[3]	SDG&E's Average Financial Impact in Excess of Insurance ($millions)	$	3,681
[4]	SDG&E Wildfire Insurance	$	(1,500)
[5]	Wildfire Costs in Excess of Insurance	$	2,181
[6]	Less Amount - FERC Recovery	$	(401)
[7]	Wildfire Costs in Excess of FERC Recovery	$	1,780
[8]	SDG&E Average Liability Below the Cap	$	684
[9]	SDG&E Average Liability Above the Cap	$	1,095
[10]	SDG&E Expected Liability if Found Imprudent, Below the Cap	$	342
[11]	SDG&E Expected Liability if Found Imprudent, Above the Cap, Fund Insolvent	$	137
[12]	SDG&E Total Liability Pre-Tax	$	479
[13]	**SDG&E Liability After-Tax**	**$**	**347**
[14]	Probability of Fire Above $1.5B		5.33%

Annualized Estimated Loss

	[13]		[15]	
Description	Net Estimated Fire Liabilities ($millions)		Annual Estimated Loss ($millions)	
SDG&E Liability After-Tax	$	347	$	18.48

2019 Test Year Rate Base ($ millions)

[16]	2019 Projected SDG&E Rate Base	$	6,537.08
[17]	Equity Ratio		56.0%
[18]	Equity Base	$	3,660.76

ROE Adjustment

	[13]		[19]
Description	Net Estimated Fire Liabilities ($millions)		ROE Adjustment
Expected Annual Shareholder Loss	$	347	0.50%

Notes

[1] See assumptions
[2] See assumptions
[3] See assumptions
[4] See assumptions
[5] Equals sum of [3] and [4]
[6] Equals [5] x FERC labor allocator [18.4%] (see assumptions)
[7] Equals sum of [5] and [6]
[8] $684 million is the modeled average liability less than or equal to SDG&E's shareholder liability cap [$825 million]. (Company-provided data)
[9] Equals [7] less [8]
[10] Equals [8] * [1]
[11] Equals [9] * [1] * [2]
[12] Equals sum of [10] and [11]
[13] Equals [12] x (1- Effective Tax Rate [27.6%])
[14] Expected probability of a $3.68B fire based on company modeling (Company-provided data)
[15] Equals [13] * [14]
[16] See assumptions
[17] See assumptions
[18] Equals [17] x [16]
[19] Equals [13] / [18] * [14]

Insurance Approach

[1]	2019 Rate-On-Line (ROL) For Wildfire Insurance Renewals	11.56%
[2]	p(imprudent)	70%
[3]	p(insolvent)	25%

Annualized Estimated Insurance Premium

	Description	Amount of Insurance ($ millions)	[10] Estimated Annual Premium $ millions)
[4]	Wildfire Costs in Excess of Insurance	$ 2,181	
[5]	Capped Portion	$ 825	
[6]	Uncapped Portion	$ 1,356	
[7]	SDG&E Expected Liability if Found Imprudent, Below the Cap	$ 578	
[8]	SDG&E Expected Liability if Found Imprudent, Above the Cap, Fund Insolvent	$ 237	
[9]	Cost of Incremental Wildfire Insurance	$ 815	$ 94

Annualized Estimated Insurance Premium (Net of Tax)

Description	[11] Amount of Insurance ($ millions)	[12] Estimated Annual Premium (Net of Tax)
Cost of After-tax Incremental Wildfire Insurance	$ 590	$ 68.19

[13] SDG&E CPUC Equity Rate Base ($millions) $ 3,661

ROE Adjustment Based on Estimated Insurance Premium (Net of Tax)

Description	[11] Amount of Insurance ($ millions)	[14] ROE Adjustment
Cost of Incremental Wildfire Insurance	$ 590	1.86%

Notes

[1] Company-provided data
[2] See assumptions
[3] See Assumptions
[4] $2.18 billion represents the amount SDG&E would have to pay to fully cover uninsured portion of $3.68 billion in liabilities.
[5] $825 million is the shareholder liability cap if SDG&E is found imprudent.
[6] Equals [4] less [3]
[7] Equals [5] * [2]
[8] Equals [6] * [2] * [3]
[9] Equals sum of [7] and [8]
[10] Equals ROL x [9]
[11] Equals [9] x (1-Effective Tax Rate [27.6%])
[12] Equals ROL * [11]
[13] See assumptions
[14] Equals [12] / [13]

Insurance Approach

[1]	2019 Rate-On-Line (ROL) For Wildfire Insurance Renewals	11.56%
[2]	p(imprudent)	50%
[3]	p(insolvent)	25%

Annualized Estimated Insurance Premium

		[1]	[2]
	Description	Amount of Insurance ($ millions)	Estimated Annual Premium $ millions)
[4]	Wildfire Costs in Excess of Insurance	$ 2,181	
[5]	Capped Portion	$ 825	
[6]	Uncapped Portion	$ 1,356	
[7]	SDG&E Expected Liability if Found Imprudent, Below the Cap	$ 413	
[8]	SDG&E Expected Liability if Found Imprudent, Above the Cap, Fund Insolvent	$ 169	
[9]	Cost of Incremental Wildfire Insurance	$ 582	$ 67.30

Annualized Estimated Insurance Premium (Net of Tax)

	[11]	[12]
Description	Amount of Insurance ($ millions)	Estimated Annual Premium (Net of Tax)
Cost of Incremental Wildfire Insurance	$ 421	$ 48.71

[13]	SDG&E CPUC Equity Rate Base ($millions)	$ 3,661

ROE Adjustment Based on Estimated Insurance Premium (Net of Tax)

	[11]	[14]
Description	Amount of Insurance ($ millions)	ROE Adjustment
Cost of Incremental Wildfire Insurance	$ 421	1.33%

Notes

[1] Company-provided data
[2] See assumptions
[3] See Assumptions
[4] $2.18 billion represents the amount SDG&E would have to pay to fully cover uninsured portion of $3.68 billion in liabilities.
[5] $825 million is the shareholder liability cap if SDG&E is found imprudent.
[6] Equals [4] less [3]
[7] Equals [5] * [2]
[8] Equals [6] * [2] * [3]
[9] Equals sum of [7] and [8]
[10] Equals ROL x [9]
[11] Equals [9] x (1-Effective Tax Rate [27.6%])
[12] Equals ROL * [11]
[13] See assumptions
[14] Equals [12] / [13]

CAT Bond Approach

Dates	3Y Treasury Bond Yield	SDG&E CAT Bond Yield	SDG&E CAT over 3Y Treasury	CAT Over 3Y Treasury (Net of Tax)
	[1]	[2]	[3]	[4]
10/12/2018	2.93%	6.44%	3.51%	2.54%
12/10/2018	2.73%	7.55%	4.82%	3.49%
12/19/2018	2.61%	7.60%	4.99%	3.61%
3/5/2019	2.52%	7.42%	4.90%	3.55%
4/2/2019	2.26%	7.63%	5.37%	3.89%
4/3/2019	2.29%	7.61%	5.32%	3.85%
5/1/2019	2.28%	7.90%	5.62%	4.07%
5/16/2019	2.15%	7.87%	5.72%	4.14%
6/14/2019	1.79%	7.75%	5.96%	4.31%
Last 2 Average			5.84%	**4.22%**

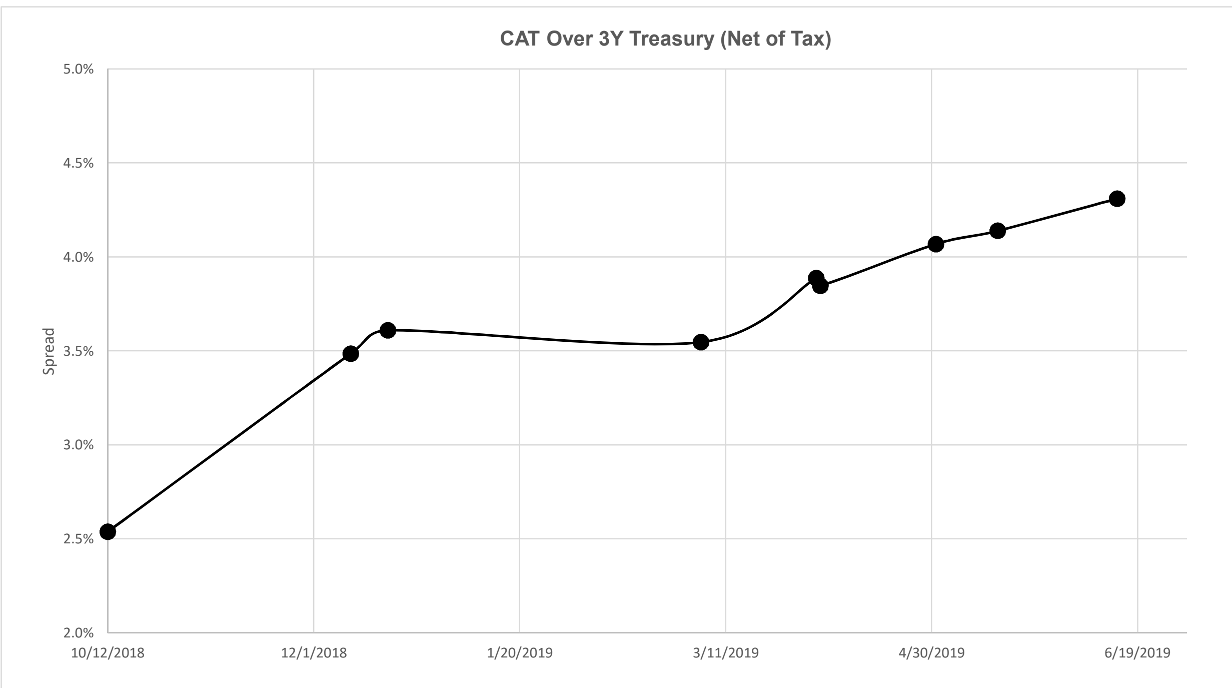
Notes

[1] Source: Bloomberg

[2] Source: Bloomberg SD RE Ltd (Series 2018-1). 6.44% is 400 basis points over LIBOR as of 10/12/18 [2.44%].

[3] Equals [2] - [1]

[4] Equals [3]*(1-Effective Tax Rate [27.6%]



Range of Results - Direct Filing

Approach Description	ROE Adjustment
Estimated Loss Approach	1.87%
Insurance Approach	3.68%
CAT Bond Approach	3.87%
Mean	**3.14%**
Median	**3.68%**
Midpoint of Mean and Median	**3.41%**

Supplemental Range of Results - 0.5 Imprudence

Approach Description	ROE Adjustment
Estimated Loss Approach	0.50%
Insurance Approach	1.33%
CAT Bond Approach	1.53%
Mean	**1.12%**
Median	**1.33%**
Midpoint of Mean and Median	**1.23%**

Supplemental Range of Results - 0.7 Imprudence

Approach Description	ROE Adjustment
Estimated Loss Approach	0.71%
Insurance Approach	1.86%
CAT Bond Approach	2.14%
Mean	**1.57%**
Median	**1.86%**
Midpoint of Mean and Median	**1.72%**

Summary Results

	ROE Adjustment
Midpoint of Mean and Median - 0.5 Imprudence	1.23%
Midpoint of Mean and Median - 0.7 Imprudence	1.72%
Midpoint of Scenarios	**1.48%**

Notes

[1] The CAT bond ROE adjustment results are reduced proportionally to the change in Insurance Approaches.

Company: San Diego Gas & Electric Company (U 902 M)
Proceeding: 2020 Cost of Capital
Application: A.19-04-017
Exhibit: SDG&E-05-S Chapter 2

SAN DIEGO GAS & ELECTRIC COMPANY
PREPARED SUPPLEMENTAL TESTIMONY OF
TODD A. SHIPMAN, CFA
CHAPTER 2

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

SDGE
A Sempra Energy utility®

AUGUST 1, 2019

TABLE OF CONTENTS

I. INTRODUCTION

Q. Please state your name, affiliation, and business address.

A. My name is Todd A. Shipman. I am an Executive Advisor with Concentric Energy Advisors, Inc. ("Concentric").

Q. On whose behalf are you testifying?

A. I am submitting this prepared supplemental testimony on behalf of San Diego Gas & Electric Company ("SDG&E" or the "Company"), a subsidiary of Sempra Energy, Inc. ("Sempra"), a publicly-traded holding company.

Q. Have you previously provided testimony in this proceeding?

A. Yes. I provided prepared direct testimony in April 2019.

II. SUMMARY

Q. Please summarize your prepared direct testimony.

A. Credit ratings are an influential and reliable measure of a company's risk that are used by investors and other interested parties to assist in assessing risk. Ratings are derived by an analysis of an issuer's business risk, a qualitative exercise, and its financial risk, a quantitative exercise. For utilities, regulatory risk is a major component of the analysis. The actions of regulators exert significant influence on a utility's ratings by affecting both sides of the ratings equation – *i.e.*, business risk and financial risk. The recognition of growing risks surrounding the severe wildfires that have occurred in California in recent years and the regulatory response to the developments have resulted in multiple ratings downgrades. Reversing the credit quality deterioration and restoring ratings to previous levels would require an improvement in financial risk that implies an equity return premium for SDG&E within the wildfire risk premium in the range of 1.87 to 6.50 percent range, with an adjustment of 3.4 percent, recommended by witnesses Jim Reed and Jim Coyne (Exhibit SDG&E-05, Chapter 1), that was ultimately included in SDG&E's aggregate return on equity ("ROE") request.[1]

Q. How does the enactment of Assembly Bill ("AB") 1054 affect the conclusions in your prepared direct testimony?

A. The enactment of wildfire reform legislation has improved the risk profile of SDG&E, but it has not restored the regulatory environment and the regulatory compact in the state to the *status quo ante*. The legislation leaves California as an outlier among the states. The state and its utilities will continue to invite closer scrutiny from investors and rating agencies, and uncertainties surrounding the implementation of the reforms will suppress the credit quality of SDG&E for the foreseeable future. The conclusions I reached in my prepared direct testimony continue to hold, except that the lessening of risk in the short to intermediate term eases the pressure on credit ratings and the magnitude of the equity return premium necessary to improve financial risk and restore SDG&E's credit quality. The equity return premium for SDG&E within the wildfire risk premium is now in the range of 1.23 to 1.72 percent, with an adjustment of 1.48 percent, as recommended in the supplemental testimony by Messrs. Reed and Coyne.[2]

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[1] Prepared Direct Testimony of Concentric, Chapter 1 (April 2019) (Ex. SDG&E-05 (Concentric) Ch. 1) at 6.

[2] *See* Prepared Supplemental Testimony of Concentric, Chapter 1 (Aug. 2019) (Ex. SDG&E-05-S (Concentric) Ch. 1) at 3.

III. THE IMPACT OF WILDFIRE LEGISLATION ON CREDIT QUALITY AND RATINGS

Q. How did wildfire risk affect SDG&E and its credit quality before the wildfire reform legislation was enacted?

A. As I stated in previous testimony, the risks associated with the legal doctrine of inverse condemnation combined with the California Public Utilities Commission's ("CPUC") separate prudence review resulted in numerous ratings downgrades of electric utilities in the state and had the potential to further erode credit quality. The risk attaches to both sides of the credit analysis equation. But it most directly and urgently affects the business risk of California electric utilities through the perception that the regulatory environment in the state has worsened. It threatened the regulatory compact and increased regulatory risk for those utilities, including SDG&E.

The disconnect between the strict liability standard imposed by the courts and the prudence standard applied by the CPUC, which did not take that strict liability into account, brought the rising risk to the attention of the rating agencies and led to credit rating downgrades. The potential for substantial non-recovery of large wildfire costs was very high with near-term financial and liquidity effects that increase the utility's financial risk. The prospect of less than full recovery also negatively affected the utility's business risk by highlighting the eroding regulatory environment that forms the foundation of all utility ratings. For a utility like SDG&E that is exposed to wildfire risk in general but is not presently experiencing any actual costs from a major wildfire, the primary effect is on the business risk profile.

That deterioration in its business risk profile resulted in multiple ratings downgrades, as set forth in my prepared direct testimony and that of Don Widjaja (Exhibit SDG&E-03)

and Bruce MacNeil (Exhibit SDG&E-06). It has left SDG&E with much lower ratings than before the wildfire risk began to attract investor and rating agency attention. In the last year, S&P Global ratings ("S&P"), Moody's, and Fitch, each reduced SDG&E's credit rating by at least two notches and maintained a negative stance on the ratings.[3]

Q. Did wildfire reform legislation affect SDG&E's ratings?

A. No. The legislation was not sufficient to restore SDG&E's credit ratings. The legislation has prompted no ratings upgrades. The rating agency reactions (see below) indicate to me that incremental wildfire liability reform is a first step in a process that will take a long time to prove out before leading to widespread ratings improvement.

Q. How did wildfire reform legislation affect SDG&E and its credit quality?

A. SDG&E's business risk and regulatory risk are somewhat abated in the near term and intermediate term from a credit quality perspective. The legislation accomplished two potentially important reforms that could relieve immediate pressure on SDG&E's risk profile. First, the prudence standard for recovering wildfire costs was specified in a way that, depending on how it is applied, should improve the balance of the utility's burden of proof and the interests of ratepayers. Second, the provisions creating a catastrophic wildfire fund and a cap on shareholder liabilities alleviate liquidity concerns over the near term and intermediate term for SDG&E. The provisions better support credit quality for California utilities, in my opinion, but the latter is the feature the rating agencies are more focused upon.

[3] *See* Prepared Direct Testimony of Don Widjaja (April 2019) (Ex. SDG&E-03 (Widjaja)) at 13-14.

A negative rating factor that I think will persist for a considerable time is what I call "ratepayer fatigue," which was articulated by S&P as a secondary credit risk in a June 2019 commentary.[4] If rate increases are necessitated for wildfire cost recovery, it could crowd out the ability of a utility to fully and timely recover other costs in rates. This lingering risk, a function of the continuing threat that inverse condemnation's burden-shifting poses to California utilities and their ratepayers, could act to limit the ratings upside for SDG&E and other utilities by suppressing the agencies' view of regulatory risk in California.

Q. How did the rating agencies react to the legislation?

A. Initially, Moody's and S&P affirmed the ratings at the Baa1/BBB+ level and retained negative outlooks on the company.[5] In both cases, the prospect of returning to a stable stance or moving to a positive stance on the ratings was noted, depending on the company's choice to participate in the wildfire fund. Fitch Ratings affirmed at the same ratings level and changed its outlook to stable right away based on the assumption that the company would choose to participate in the wildfire fund.[6] Moody's changed to a positive outlook after the SDG&E opted for the wildfire fund and received its wildfire

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[4] S&P Global Ratings, *Credit FAQ: The Looming California Wildfire Season Prompts an Examination of Investor-Owned Utilities' Risks*, dated June 7, 2019 at 3.

[5] Moody's Investors Service, *Moody's affirms San Diego Gas & Electric Company's ratings; outlook remains negative*, dated July 12, 2019 ("Moody's July 12 Report"); S&P Global Ratings, *Research Update: Sempra Energy And Subsidiaries Ratings Affirmed; Outlooks Remain Negative*, dated July 15, 2019 ("S&P July 15 Report").

[6] Fitch Ratings, *Fitch Affirms San Diego Gas & Electric's IDR at 'BBB+'*; *Outlook Revised to Stable*, dated July 17, 2019, at 1 ("Fitch July 17 Report").

safety certification.[7] S&P also changed its outlook, but only to stable, based on the same reasoning.[8] The ratings affirmations and mostly stable outlooks are an indication that the legislation has removed the pressure on the ratings only through the ratings horizon, which is in general about three years. Moody's positive outlook, which implies a one-in-three chance of an upgrade, is likely a longer-term proposition as well. It appears to be contingent on sustainable financial performance, no significant wildfires, and credit supportive outcomes in this cost of capital proceeding and SDG&E's pending general rate case – for example through approving SDG&E's requested equity ratio.[9] All of these will take time to assess. An upgrade would also leave SDG&E multiple notches lower at all three agencies than where the ratings started before the catastrophic wildfire era.

Q. Do the rating affirmations and your assessment of the effect of wildfire reform legislation on SDG&E's credit quality affect the recommendations contained in your prepared direct testimony?

A. Not in its essentials, but the lower risk profile of SDG&E that is possible in the wake of the legislation and its future implementation do affect the degree of improvement in financial risk needed to return ratings to the former level. The wildfire reform legislation has stemmed the credit quality deterioration caused by the development of wildfire risks in California. But it has not reversed it. SDG&E's ratings have now settled at a "new

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[7] Moody's Investors Service, *Moody's affirms San Diego Gas & Electric Company's ratings; changes outlook to positive from negative*, dated July 29, 2019 at 1 ("Moody's July 29 Report").

[8] S&P Global Ratings, *Research Update: San Diego Gas & Electric Co. Ratings Affirmed; Outlook Revised to Stable From Negative*, dated July 30, 2019 at 1 ("S&P July 30 Report").

[9] *See* Moody's July 29 Report at 1-2.

normal," so to speak, below the 'A' category that both myself[10] and Dr. Roger Morin (Exhibit SDG&E-04)[11] recommend to be targeted to restore credit quality to a level that the CPUC has historically found to be desirable to protect ratepayer interests by supporting the financial integrity of utilities. The rating agencies are still concerned about the residual risk over the long term from inverse condemnation as applied in California, uncertainties surrounding the effectiveness of wildfire reform implementation, and that the operational challenges of heightened wildfire risk could act to impair future utility credit quality in the state. The credit rating agencies have made clear that AB 1054 alone is not sufficient to restore credit quality to its former level. Therefore, I reaffirm the recommendations in my prepared direct testimony, as amended by the prepared supplemental testimony of Reed and Coyne on the risk premium for wildfire risks.

IV. <u>CONCLUSIONS</u>

Q. Please summarize your key conclusions.

A. Strong investment-grade credit ratings should be targeted by the CPUC to support SDG&E's ability to provide safe, reliable service at a reasonable cost to the benefit of its ratepayers. One way to support that goal is to authorize a ROE that corresponds to SDG&E's cost of capital that includes a risk premium for heightened wildfire risk as recommended by Messrs. Reed and Coyne. SDG&E's aggregate ROE proposal, which is

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[10] Prepared Direct Testimony of Concentric, Chapter 2 (April 2019) (Ex. SDG&E-05 (Concentric) Ch. 2) at 21-22.

[11] *See* Prepared Direct Testimony of Dr. Roger Morin (April 2019) (Ex. SDG&E-04) at 62-64.

partly based on Messrs. Reed and Coyne's recommended risk premium, is consistent with what I estimate would be required to restore SDG&E's credit rating to a strong investment grade.

Q. Does this conclude your prepared supplemental testimony?

A. Yes.