PG&E HEARING EXHIBIT PGE-05

A.20-04-023

PG&E'S SECURITIZATION 2020

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

STRESS TEST METHODOLOGY

WITNESSES: DAVID THOMASON; JOE SAUVAGE

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A. Executive Summary

Pursuant to Senate Bill (SB) 901 (Public Utilities Code (Pub. Util. Code) Section 451.2), a utility can request that the California Public Utilities Commission (CPUC or Commission) apply the Stress Test Methodology (adopted in Decision (D.) 19-06-027) to "costs and expenses arising from, or incurred as a result of, a catastrophic wildfire with an ignition date in the 2017 calendar year."[1] In this scenario, the Commission "consider[s] the electrical corporation's financial status" in order to "determine the maximum amount the corporation can pay without harming ratepayers or materially impacting its ability to provide adequate and safe service."[2] The costs and expenses that are "disallowed for recovery but exceeding" that maximum amount are eligible to be recovered through securitization (herein, Stress Test Costs or STC).[3]

Pacific Gas and Electric Company (PG&E, the Company, or the Utility) requests that the Commission apply the Stress Test Methodology to determine that at least $7.5 billion of 2017 wildfire claims costs that PG&E paid at emergence under its Plan are eligible to be securitized.[4] The Commission can apply the Stress Test Methodology because PG&E has unconditionally and irrevocably waived the right to recover in rates any of the amounts paid in respect of Fire Claims[5] under PG&E's Plan and PG&E stipulates that all such

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1 Pub. Util. Code § 451.2(a). All statutory references are to the Public Utilities Code unless otherwise noted.

2 § 451.2(b).

3 § 451.2(c).

4 PG&E's Plan or the Plan refers to the Debtors' and Shareholder Proponents' Joint Chapter 11 Plan of Reorganization (POR), dated June 19, 2020, confirmed by the Bankruptcy Court by Order dated June 20, 2020, and which became effective on July 1, 2020, *In re PG&E Corporation*, Case No. 19-30088 (Bankr. N.D. Cal. June 19, 2020) ECF 8048.

5 Approximately $25.5 billion at Plan Value refers to PG&E's total obligation with respect to the settlement of "Fire Claims," as defined in Chapter 1, Introduction (D. Thomason) at note 16.

costs should be deemed "disallowed" and reviewed for cost recovery and eligibility for securitization solely pursuant to Section 451.2(b).[6] Moreover, the Commission can apply the Stress Test to PG&E because it emerged from Chapter 11 on July 1, 2020[7] and any decision on PG&E's application applying the Stress Test would occur *after* that date.

For a utility, like PG&E, that does not have an investment-grade issuer credit rating at the time of submitting its application, the Stress Test Methodology requires the utility to "demonstrate a path back to investment grade."[8] PG&E has demonstrated such a path to an investment-grade issuer credit rating. First, the bankruptcy process enabled PG&E to significantly improve its financial condition, including by resolving its substantial prepetition wildfire liabilities, providing for a historic capital raise to fund these wildfire liabilities and PG&E's Plan, and enabling a significant reduction in its cost of debt through refinancing certain prepetition debt. Second, the Securitization will further support PG&E's path to an investment-grade issuer credit rating, which will inure to the benefit of PG&E and its customers. Specifically, approval of the Securitization would send a positive signal to financial markets and rating agencies, with the potential to help improve PG&E's business risk profile and, more broadly, rating agency and investor views of California regulation. In addition to any qualitative benefits, the Securitization also is anticipated to provide quantitative benefits to PG&E's credit metrics. By expediting PG&E's path back to an investment-grade issuer credit rating, the Securitization also will result in cost savings for PG&E and its customers.

In this chapter, PG&E applies the Stress Test Methodology. PG&E presents analysis based on Standard & Poor's, Inc. (S&P) and Moody's Investors Service (Moody's) methodologies. PG&E demonstrates that it currently exceeds the

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6 Although PG&E does not concede that these settlements or its actions are imprudent, PG&E accepts for purposes of this application that the costs incurred in connection with the settlement of Fire Claims as defined in the Plan would be disallowed for recovery in rates but for Section 451.2.

7 *See* Notice of Entry of Confirmation Order and Occurrence of the Effective Date of Debtors' and Shareholder Proponents' Joint Chapter 11 Plan of Reorganization Dated June 19, 2020, *In re PG&E Corporation*, No. 19-30088 (Bankr. N.D. Cal. July 2, 2020), ECF No. 8252 (Notice of Effective Date).

8 D.19-06-027, Attachment A, Stress Test Methodology (Stress Test Methodology) at 13.

maximum amount of debt that is consistent with a minimum investment-grade issuer credit rating in light of PG&E's non-financial factor scores. Thus, PG&E's analysis yields STC that exceed the $7.5 billion that PG&E proposes to securitize.

Furthermore, PG&E does not have Excess Cash under the Stress Test Methodology, meaning cash or cash equivalents that it could direct to satisfy wildfire liabilities, when compared to cash levels for PG&E historically and industry peers.

Additionally, a Regulatory Adjustment is not warranted under the circumstances of PG&E's application. Specifically, the Securitization structure already will minimize rate impacts for customers[9] because PG&E will fund a Customer Credit designed to offset the Fixed Recovery Charges (FRCs) to customers and PG&E has exhausted "reasonable opportunit[ies]…to satisfy disallowed wildfire costs, or to otherwise access capital on reasonable terms,"[10] including through the Chapter 11 process.

Finally, PG&E's application also satisfies the Tax Adjustments and Ratepayer Protection elements of the Stress Test Methodology.[11] Through the Customer Credit, PG&E proposes to devote shareholder tax benefits arising from payment of the 2017 wildfire claims costs to customers and also will devote certain tax benefits arising from the 2015 and 2018 wildfire claims costs as well as from certain contributions to the Assembly Bill (AB) 1054 Go-Forward Wildfire Fund (together, the Shareholder Tax Benefits). By proposing a Securitization that is designed to be rate-neutral to customers, PG&E's application includes a robust ratepayer protection measure that goes well beyond the Commission's requirements in D.19-06-027. Specifically, PG&E will provide customers with a credit so that the anticipated net cost to customers of the Stress Test application and resulting Securitization will be zero. Moreover, PG&E also proposes to share with customers twenty-five percent (25 percent) of any surplus in the Customer Credit Trust at the end of the life of the Trust, which represents a significant additional benefit for customers.

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9 References to "customer" include the term "consumer" as defined in Section 850(b)(3) and as used in Section 850.1(b). *See* Chapter 1, Introduction (D. Thomason) at note 4.

10 Stress Test Methodology at 12.

11 *Id.* at 13-16.

Following the direction provided by Administrative Law Judge Haga at the June 18, 2020 prehearing conference and in the July 28, 2020 scoping memo, this updated testimony incorporates PG&E's updated financial forecast reflecting PG&E's reorganization under its Plan,[12] and includes the June and July 2020 ratings reports for PG&E issued by S&P, Moody's, and Fitch Ratings, Inc. (Fitch).[13]

B. Background (*J. Sauvage*)

SB 901 (Section 451.2) provides that:

> …the [C]ommission shall consider the electrical corporation's financial status and determine the maximum amount the corporation can pay without harming ratepayers or materially impacting its ability to provide adequate and safe service.[14]

That maximum amount is the Customer Harm Threshold or CHT.

SB 901 further provides:

> An electrical corporation may apply for a financing order pursuant to Article 5.8 (commencing of Section 850) of Chapter 4 for the amount of costs and expenses…disallowed for recovery but exceeding… [that maximum amount].[15]

On January 11, 2019, the Commission instituted a rulemaking to implement Section 451.2(b). On July 8, 2019, the Commission issued a Decision Adopting Criteria and Methodology for Wildfire Cost Recovery Pursuant to Section 451.2

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12 A prior version of this forecast was initially presented in connection with its Chapter 11 proceeding and I.19-09-016. The forecast has been updated as of July 24, 2020, including to reflect PG&E's reorganization under its Plan and to include the information from the June and July 2020 rating agency reports.

13 *See* Exhibit 5.6 (reflecting S&P Global Ratings, *PG&E Corp. and Subsidiary Assigned 'BB-' Ratings, Outlook Stable* (June 15, 2020); S&P Global Ratings, RatingsDirect, *Pacific Gas & Electric Co.* (July 10, 2020)); Exhibit 5.7 (reflecting Moody's Investors Service, *Moody's assigns Baa3 rating to Pacific Gas & Electric's first mortgage bonds and B1 rating to PG&E Corp's senior secured debt; outlooks stable* (June 15, 2020); Moody's Investors Service, Credit Opinion, *Pacific Gas & Electric Company: Update to credit profile upon exit from bankruptcy* (June 16, 2020); Moody's Investors Service, Credit Opinion, *PG&E Corporation: Update to credit profile upon exit from bankruptcy* (June 16, 2020)); and Exhibit 5.8 (reflecting Fitch Ratings Inc., *Fitch Assigns IDRs of 'BB' to PG&E Corp. and Pacific Gas and Electric Co.; Outlook Stable* (June 15, 2020)). Note, while Fitch's rating report is included for the record, consistent with the Stress Test Methodology PG&E's calculation of Stress Test Costs relies only on the methodologies of S&P and Moody's.

14 § 451.2(b).

15 § 451.2(c).

(D.19-06-027, the Decision, or the Stress Test Decision), which also includes a Stress Test Methodology (Attachment A to the Decision, the Attachment or the Methodology). Together with the Attachment, the Decision adopts a methodology for conducting a financial Stress Test to consider an electrical corporation's financial status and determine the maximum amount the corporation can pay for 2017 catastrophic wildfire costs without harming ratepayers or materially impacting its ability to provide adequate and safe service.

The Methodology includes three components: (1) the additional debt the utility could take on while maintaining a minimum investment-grade issuer credit rating (the Maximum Incremental Debt Capacity (MIDC)); (2) Excess Cash; and (3) a potential adjustment by the Commission, within specified limits, to reflect the record developed in the regulatory proceeding (the Regulatory Adjustment).[16]

The Stress Test Decision also states that the Commission will preserve tax benefits of the relief sought under the Stress Test for ratepayers. Finally, the Decision requires a utility to propose ratepayer protection measures, which:

> …will mitigate harm that ratepayers would otherwise experience from being allocated imprudent catastrophic wildfire costs.[17]

This chapter describes how the Stress Test Methodology should be applied to PG&E's financial status to determine that no less than $7.5 billion in 2017 wildfire claims costs and expenses are STC eligible for securitization.

C. Disallowed Wildfire Claims Costs (*D. Thomason*)

PG&E's application requests a determination that $7.5 billion of 2017 wildfire claims costs are STC eligible for securitization. This application is appropriate because PG&E hereby stipulates that all 2017 wildfire claims costs should be "disallowed" for purposes of this proceeding.

PG&E has unconditionally and irrevocably waived the right to recover in rates any of the amounts paid or contributed in respect of Fire Claims under PG&E's Plan if the Securitization application is not granted. PG&E stated its waiver on the record in the Chapter 11 cases and in the Plan of Reorganization

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16 *See* Stress Test Methodology at 5.

17 D.19-06-027 at 55 (Finding of Fact (FOF) ¶ 19).

Order Instituting Investigation (POR OII) (I.19-09-016).[18] The Commission documented PG&E's waiver in the POR OII decision when it confirmed: "PG&E may not seek cost recovery for wildfire claims except in connection with the proposed nominally offset securitization."[19]

Here, PG&E further stipulates that all costs incurred in connection with the settlement of Fire Claims under the Plan should be deemed "disallowed" and reviewed for cost recovery and eligibility for securitization solely under the Stress Test Methodology adopted by the Commission to implement Section 451.2(b). PG&E will not seek to establish that the costs are just and reasonable or should otherwise be recovered from ratepayers other than through the proposed Securitization. Accordingly, the Commission can treat the costs as not just and reasonable, and as disallowed, and proceed to evaluate the recoverability of these disallowed costs under the Stress Test pursuant to Section 451.2(b). In Chapter 4, Allocation of Settlements to 2017 Wildfires (D. Fischel), PG&E also presents analysis that establishes that at least $7.5 billion of the costs incurred in connection with the settlement of Fire Claims are reasonably attributable to the 2017 North Bay Wildfires.[20]

PG&E's stipulation eliminates the need for a separate application and proceeding to determine whether 2017 wildfire claims costs are just and reasonable. In particular, PG&E's stipulated disallowance answers each reason

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18 *See* I.19-09-016, *PG&E's Motion for Official Notice of Documents Or, In the Alternative, To Accept Documents As Late-Filed Exhibits* (Mar. 23, 2020), at 3 ("PG&E has agreed that if PG&E's anticipated application for a post-emergence Securitization is not granted, then the Utility will not seek to recover in rates any of the amounts paid in respect of Fire Victim Claims under PG&E's Plan"); I.19-09-016, *PG&E's Post-Hearing Reply Brief* (Mar. 26, 2020), at 2 ("If the Commission does not grant approval of PG&E's anticipated application for a post-emergence Securitization, then the Utility will not seek to recover in rates any of the amounts paid in respect of Fire Victim Claims under the Plan"); *id.* at 28 ("If the Commission does not approve the Securitization, PG&E will not seek to recover in rates any portion of the amounts paid in respect of Fire Claims under the Plan"). *See also* Debtors' Motion Pursuant to 11 U.S.C. §§ 105 and 363 and Fed. R. Bankr. P. 9019 for Entry of an Order (I) Approving Case Resolution Contingency Process, and (II) Granting Related Relief at 18-19 (the Resolution Motion), *In re PG&E Corporation*, No. 19-30088 (Bankr. N.D. Cal. Mar. 20, 2020), ECF No. 6398 ("If the CPUC does not grant approval of the Securitization, the Reorganized Utility will not seek to recover in rates any portion of the amounts paid in respect of Fire Claims under the Plan[.]").

19 D.20-05-053 (May 28, 2020), at 82.

20 The North Bay Wildfires are described in Exhibit A to PG&E's Plan.

why the Commission determined that in the ordinary course a phased process would be appropriate.

- First, "the amount of disallowed wildfire costs" is already "known"[21] because PG&E has accepted the disallowance of all costs arising from the Fire Claims, and has identified at least $7.5 billion of those costs that arise from the 2017 wildfires.
- Second, there is no need for the Commission to review the costs for reasonableness before applying the Methodology in order to "conserve administrative and judicial resources."[22] PG&E stipulates that it will not seek to show that the 2017 wildfire claims costs are just and reasonable, and PG&E's testimony confirms that there are at least $7.5 billion of those costs. Accordingly, there is no possibility that the 2017 wildfire costs will be determined to be just and reasonable (which would obviate the need to apply the Stress Test framework).
- Third, PG&E's application already "ensure[s] the wildfire liabilities the utility seeks are reasonably quantified and in excess of insurance proceeds."[23] Again, the wildfire liabilities that the Utility seeks to recover through the proposed Securitization are reasonably quantified because at least $7.5 billion of costs and expenses is admitted to be disallowed and is attributable to 2017 wildfires.[24] As discussed in more detail in Chapter 4, Allocation of Settlements to 2017 Wildfires (D. Fischel), those costs are in excess of insurance proceeds.[25]

D. PG&E's Exit From Chapter 11 (*D. Thomason*)

The Commission can apply the Stress Test to PG&E because it can consider PG&E's financial status after giving effect to PG&E's Plan, which became effective and was consummated on July 1, 2020.

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[21] Stress Test Methodology at 16.

[22] *Id.*

[23] *Id.*

[24] Chapter 4, Allocation of Settlement Costs to 2017 Wildfires (D. Fischel).

[25] *See also* I.19-09-016, Jan. 31, 2020 Opening Testimony, Chapter 2, Description of PG&E's Plan and Plan Funding (Jason P. Wells), at 2-2 and Table 2-1. Roughly $807.5 million of those insurance proceeds are attributable to the 2017 North Bay fires. *See* Chapter 4, Section E.4.

1) The Decision explains that in order to administer the Stress Test, the Commission must be able to:

> …consider the electrical corporation's financial status[26][—]to assess, among other considerations, the electrical corporation's capital structure, liquidity needs, and liabilities as well as its capacity to take on additional debt, and all cash or resources that are reasonably available to the utility.[27]

Whatever the Commission's ability is to assess the "financial status" of a utility when a utility enters bankruptcy and has not yet put forth a plan of reorganization,[28] the situation here is different. The Commission and other stakeholders have ample visibility into the financial status of PG&E. PG&E filed a plan of reorganization and collaborated transparently with a broad range of stakeholders to resolve the Chapter 11 filings after just 18 months in a manner that is supported by individual fire victims, subrogation and public entity claimants, noteholders, and the Governor's Office. On June 1, 2020, the Commission issued a decision approving PG&E's Plan with certain conditions and modifications.[29] On June 20, 2020, the United States Bankruptcy Court for the Northern District of California confirmed PG&E's Plan.[30] And on July 1, 2020, PG&E emerged from Chapter 11.[31]

In addition to the information provided in POR OII (I.19-09-016), which involved an extensive review of PG&E's Plan, its proposed treatment of capital structure, liquidity needs, resolution of liabilities, and debt and other financing, PG&E has updated its projections and this testimony to reflect its post-emergence financial condition.

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26 § 451.2(b).

27 D.19-06-027 at 26.

28 *See id.* (agreeing with the City and County of San Francisco (CCSF) "that applying § 451.2 in an application by a company *in* chapter 11 bankruptcy is impossible") (emphasis added).

29 *See* D.20-05-053; *see also* California Public Utilities Commission's Statement Regarding the Debtors' Plan of Reorganization and Confirmation Order, *In re PG&E Corporation,* No. 19-30088 (Bankr. N.D. Cal. June 26, 2020), ECF No. 8132.

30 *See* Order Confirming Debtors' and Shareholder Proponents' Joint Chapter 11 Plan of Reorganization Dated June 19, 2020, *In re PG&E Corporation*, No. 19-30088 (Bankr. N.D. Cal. June 20, 2020), ECF No. 8053 (Confirmation Order).

31 *See* Notice of Effective Date.

2) The Stress Test Decision also explains that application of the Stress Test to a utility in Chapter 11 would not make sense because:

> [A]ny reorganization plan of an electrical corporation in a Chapter 11 case confirmed by the Bankruptcy Court and approved by the Commission in the future will inevitably address all prepetition debts, including 2017 wildfire claims costs, in the bankruptcy process.[32]

But the Decision does not directly address PG&E's scenario, where the Utility has a Plan that addresses all 2017 wildfire claims liabilities, but still seeks to securitize certain 2017 wildfire claims liabilities separate from the Plan financing. In fact, the Decision quotes The Utility Reform Network's (TURN) argument that:

> [A]s a practical matter, the determination of the CHT cannot be reliably made *without an approved Bankruptcy Plan* which would incorporate all protections and special arrangements available from the Chapter 11 reorganization process, reflecting the most likely outlook for the utility going forward.[33]

PG&E now has reorganized under a Plan that resolves prepetition liabilities, including 2017 North Bay Wildfires claims costs, through the contribution of approximately $25.5 billion at Plan Value in settlement of Fire Claims. Indeed, AB 1054—which was enacted after SB 901 and after the issuance of the Stress Test Decision—expressly required PG&E to resolve all prepetition wildfire claims in a manner that was "neutral, on average, to ratepayers."[34] Accordingly, AB 1054 prohibits PG&E from recovering wildfire claims costs that could not meaningfully be reviewed by the Commission for reasonableness or otherwise approved for recovery from customers in light of the June 30, 2020 deadline set by AB 1054. Pursuant to the applicable provisions of AB 1054, the Plan therefore addressed all prepetition wildfire liabilities, including 2017 wildfire claims costs, but did so without seeking to recover such costs from ratepayers as part of the Plan. The Plan did not rely on application of the Stress Test or the proposed Securitization. Instead, in contrast to the scenario contemplated by the Stress Test Decision, PG&E is seeking Securitization as a rate-neutral and

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32 D.19-06-027 at 26.

33 *Id.* at 42 (emphasis added); *see also id.* at 44.

34 *See* § 3292(a)(1)(B), (D)(ii); *see also* I.19-09-016, PG&E's Post-Hearing Reply Brief (Mar. 26, 2020), at 21.

customer-protective means of improving credit metrics and borrowing costs after having paid wildfire claim liabilities satisfied through the Plan and accelerating an additional payment to be paid under the Plan. Having emerged and updated this testimony to reflect emergence as required at the June 18, 2020 prehearing conference, there is no impediment to the Commission applying the Stress Test and using the date of this updated testimony as the measurement date.

Finally, the Stress Test Methodology states that the MIDC value will:

> …use the utility's 3-year financial forecast including the current fiscal year…to see how much additional debt the company can add.[35]

Consistent with that instruction, the calculation of STC herein is based on the period 2020 through 2022.[36]

E. Rating Agencies and the Customer Harm Threshold (*J. Sauvage*)

The premise of the Stress Test Methodology is that a utility's ability to pay disallowed wildfire costs without harming ratepayers or materially impacting service is calibrated based on the utility's ability to retain a minimum investment-grade issuer credit rating. Credit ratings are essential signaling mechanisms to the capital and debt markets, which represent holistic evaluations of a company's financial and business situation, including its debt obligations and debt capacity. As such, credit ratings are important to a utility's ability to access capital markets and borrow on reasonable terms. Indeed, the premise of the Stress Test Decision and Methodology is that:

> [C]redit ratings are a good proxy for a utility's overall financial status because they are based on rating agencies' views of a utility's ability to meet its contractual obligations based on (i) non-financial factors, i.e., business and regulatory environment, as well as (ii) financial factors, e.g., utilities' financial statements, accounting assumptions, and forecasted cash flow.[37]

Credit rating agencies assign an issuer credit rating to a utility based on numerous factors, primarily business risk and financial leverage. In assigning a final issuer credit rating, S&P also accounts for rating modifiers, which can

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35 *Id.* at 9.

36 *See* Exhibit 5.4 (Financial Forecast Without Securitization). The financial forecast for 2020 includes PG&E's projected debt upon emergence from Chapter 11.

37 Stress Test Methodology at 4.

separately alter a credit rating by one or more notches. The Stress Test relies on analysis from the two primary rating agencies, Moody's and S&P.[38]

Business Risk

Business risk considerations include the underlying stability of the Utility's cash flows. For utilities, the rating agencies also give significant weight to the regulatory framework, including the transparency, predictability, and consistency of the regulatory framework; the recoverability of costs; timeliness of cost recovery; flexibility to allow for recovery of unexpected costs; and attractiveness of the framework to attract long-term capital, among other factors.[39] The rating agencies apply different weighting factors to determine business risk. S&P weighs "regulatory advantage" at 60 percent. Moody's bases 25 percent of its rating on the regulatory framework and 25 percent on the ability to recover costs and earn returns.

As evidenced by the June and July 2020 S&P and Moody's credit reports, the rating agencies are conservative in assessing PG&E's business risk upon emergence from Chapter 11. A number of non-financial factors weaken PG&E's business risk profile including continued wildfire risk, inverse condemnation and uncertainty regarding the implementation of AB 1054.[40] PG&E has greater exposure to wildfire risk compared with the other California utilities because of the size and character of its service territory.[41] The magnitude of the 2017 and 2018 wildfire liabilities, along with PG&E seeking Chapter 11 protection, creates additional public scrutiny leading to enhanced political and regulatory risk. Indeed, this greater exposure as compared to peers drives one of the two one-notch negative modifiers S&P applies to PG&E.[42] In particular, rating agencies are likely to view PG&E conservatively until there is sufficient

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38 *Id.* at 6.

39 S&P Global Ratings, *Key Credit Factors for the Regulated Utilities Industry* (Nov. 19, 2013) at 4-7; Moody's, *Regulated Electric and Gas Utilities* (June 23, 2017) at 4.

40 *See* Exhibit 5.6 at 5-Exh5.6-2 to 5-Exh5.6-3, 5-Exh5.6-5 to 5-Exh5.6-6, 5-Exh5.6-13 to 5-Exh5.6-14, 5-Exh5.6-21; Exhibit 5.7 at 5-Exh5.7-2, 5-Exh5.7-9, 5-Exh5.7-13 to 5-Exh5.7-14.

41 *See* Exhibit 5.6 at 5-Exh5.6-5.

42 *See* Exhibit 5.6 at 5-Exh5.6-2, 5-Exh5.6-16 ("Given these higher risks, … we assess the company toward the lower end of the range for its business risk profile category, relative to peers. Additionally, to fully account for these higher risks, we assess the company's comparable rating analysis modifier as negative.").

confidence in a constructive regulatory environment, including implementation of AB 1054, and PG&E's ability to execute on its financial, operational, and governance plan post-emergence.

Financial Leverage

The assessment of financial leverage turns primarily on measures that compare cash flows to total debt or debt service, because a utility's ability to repay debt depends in part on its expected future cash flows from operations. A key ratio for the utility sector is the relationship between a company's funds from operations (FFO) and a company's total debt and debt-equivalents. S&P utilizes that ratio, called FFO / Debt, in order to evaluate the financial risk profile of a utility.[43] S&P also assesses a utility's ratio of Debt / EBITDA (earnings before interest, tax, depreciation and amortization).[44] Moody's similarly uses Cash Flow from Operations Before Changes in Working Capital (CFO Pre-WC), and the ratio of CFO Pre-WC / Debt as an indicator of the utility's ability to cover the costs of its borrowed capital.[45] Moody's also evaluates three other ratios: (1) (CFO Pre-WC + Interest) / Interest; (2) (CFO Pre-WC – Dividends) / Debt; and (3) Debt / Total Capitalization. While both S&P and Moody's examine a variety of metrics, financial markets tend to focus primarily on one metric from each agency that, in effect, measures the amount of time a company would require to repay its outstanding debt. For S&P, this is FFO / Debt; for Moody's this is CFO Pre-WC / Debt.

A utility with a stronger business risk profile may have weaker leverage metrics, or vice-versa, at the same credit rating. For reference, the scale of possible credit ratings is illustrated in Figure 5-1 below:

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43 *See* S&P Global Ratings, *Corporate Methodology* (Nov. 19, 2013) at 29. Funds from operation reflects EBITDA, minus net interest expense, minus current tax expense, plus or minus all applicable S&P adjustments.

44 *Id.*

45 Moody's, *Regulated Electric and Gas Utilities* (June 23, 2017) at 20. CFO Pre-WC is calculated by taking net income, plus depreciation and amortization, plus or minus any applicable Moody's adjustments that reflect one-time events. Moody's explains that unlike FFO, CFO Pre-WC "captures the changes in long-term regulatory assets and liabilities." *Id.*

FIGURE 5-1
CREDIT RATINGS SCALE

S&P	Moody's	
AAA	Aaa	Investment Grade
AA+	Aa1	
AA	Aa2	
AA-	Aa3	
A+	A1	
A	A2	
A-	A3	
BBB+	Baa1	
BBB	Baa2	
BBB-	Baa3	
BB+	Ba1	Speculative Grade or High Yield
BB	Ba2	
BB-	Ba3	
B+	B1	
B	B2	
B-	B3	
CCC+	Caa1	
CCC	Caa2	
CCC-	Caa3	
CC	Ca	

1. Rating Agency Methodologies and Recent Assessments of PG&E (*J. Sauvage*)

This section provides an overview of the S&P and Moody's methodologies and describes their recent updated ratings and reports for PG&E and PG&E Corporation in June and July 2020 released in connection with PG&E's exit financing to fund its Plan and emergence from Chapter 11 on July 1, 2020.[46] In addition to assigning current ratings, which necessarily inform how PG&E applies the Stress Test Methodology herein, the reports also specifically address the potential for PG&E to receive an upgrade to its issuer credit ratings in the near term. This information from the rating agencies is both new (i.e., it was not known at the time PG&E submitted Application 20-04-023 and served its prepared testimony on

46 *See* Exhibits 5.6, 5.7 and 5.8.

April 30, 2020) and highly relevant. In fact, while the recent reports largely confirm PG&E's expectations regarding its post-emergence credit ratings, the new information has driven certain changes to how PG&E proposes to apply the Methodology here—in particular the target financial metrics necessary for PG&E to achieve an investment-grade issuer credit rating.

S&P Methodology and Assessment

S&P uses a "Business and Financial Risk Matrix," depicted below, to determine a company's credit score.[47] The orange shading reflects investment-grade credit ratings. Under S&P, the lowest investment-grade credit rating is "BBB-."

FIGURE 5-2
S&P ANCHOR RATING MATRIX

S&P Anchor Rating Matrix

Business Risk Profile	Financial Risk Profile: Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Excellent	aaa / aa+	aa	a+ / a	a-	bbb	bbb- / bb+
Strong	aa / aa-	a+ / a	a- / bbb+	bbb+ / bbb	bb+	bb
Satisfactory	a / a-	bbb+	bbb / bbb-	bbb- / bb+	bb	b+
Fair	bbb / bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b / b-
Vulnerable	bb-	bb-	bb- / b+	b+	b	b-

Financial Risk Indicative Ratios – Medial Volatility

	Minimal	Modest	Intermediate	Significant	Aggressive	Highly Leveraged
Core Ratios						
FFO / Debt	> 50%	35% – 50%	23% – 35%	**13% – 23%**	9% – 13%	< 9%
Total Debt / EBITDA	<1.75x	1.75x – 2.5x	2.5x – 3.5x	**3.5x – 4.5x**	4.5x – 5.5x	> 5.5x
Supplementary Coverage Ratios						
FFO / Cash Interest	> 10.5x	7.5x – 10.5x	5x – 7.5x	**3x – 5x**	1.75x – 3x	< 1.75x
EBITDA / Interest	> 14x	9x – 14x	5x – 9x	**2.75x – 5x**	1.75x – 2.75x	< 1.75x

Note: S&P Global Ratings, *Corporate Methodology* (Nov. 19, 2013) at 6, 33.

In its June and July 2020 reports, S&P notes that PG&E's business risk profile is at the lower end of the range for the "satisfactory" business risk

47 *See also* Stress Test Methodology at 8.

profile category.[48] By comparison, the other two California utility holding companies have a “strong” business risk profile. Therefore, using Figure 5-2 above, PG&E’s “satisfactory” business risk profile would require a financial risk profile no worse than “significant” to achieve an investment-grade issuer credit rating. Note that with a “satisfactory” business risk profile and “significant” financial risk profile, however, PG&E could achieve a credit rating of BBB- or BB+. Although “BBB-” is the lowest investment-grade credit rating, “BB+” is sub-investment-grade.

Additionally, the Stress Test Methodology recognizes that the rating agencies “may also make certain additional modifications that can impact the final rating assigned to an issuer.”[49] Here, S&P continued to include two negative modifiers in PG&E’s credit profile in its June and July 2020 credit reports: (a) management and governance; and (b) comparable rating analysis, based on challenging business environment due to catastrophic wildfire risk as well as negative public sentiment and regulators’ willingness to protect the company’s credit quality.[50]

While S&P assigned PG&E’s senior secured debt an investment-grade credit rating of BBB-, S&P assigned PG&E a sub-investment-grade issuer credit rating of BB-.[51] This issuer credit rating was based on a “satisfactory” business risk profile and a “significant” financial risk profile—which together yield a bb+ anchor rating—and two negative modifiers.[52]

The July 2020 report also states that an upgrade for PG&E from BB- to BB would require PG&E Corporation (PG&E Corporation or the parent) to have a **consolidated** FFO / Debt that is consistently greater than 18 percent. Based upon the current forecast with securitization, PG&E Corporation is expected to have an FFO / Debt of 13 to 15 percent in the next two years[53] and the Utility is expected to have an FFO / Debt of

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48 Exhibit 5.6 at 5-Exh5.6-1, 5-Exh5.6-13.

49 *Id.* at 7.

50 Exhibit 5.6 at 5-Exh5.6-1, 5-Exh5.6-2 to Exhibit 5-Exh5.6-3, 5-Exh5.6-20, 5-Exh5.6-23.

51 Exhibit 5.6 at 5-Exh5.6-1, 5-Exh5.6-13.

52 *Id.*

53 Exhibit 5.6 at 5-Exh5.6-1.

15 to 18 percent in 2020 and 2021.[54] Given this delta between the FFO / Debt of the Utility and PG&E Corporation, the Utility's metrics will be 2 to 3 percent higher than PG&E Corporation's consolidated metrics, which reflects the additional debt at PG&E Corporation. This means that for the Utility to receive a one-notch upgrade from BB- to BB (consolidated FFO / Debt greater than 18 percent), it likely would need an FFO / Debt ratio of at least 20 percent.[55]

S&P also specifically discusses the effect of PG&E's two negative modifiers. S&P notes that PG&E receives a negative comparable ratings analysis modifier and "[t]he negative comparable rating analysis modifier lowers the issuer credit rating by one notch."[56] Furthermore, PG&E receives a weak management and governance modifier and "[t]he assessment of management and governance as weak also lowers the issuer credit ratings by one notch."[57] In order to achieve an upgrade from BB- to investment-grade, PG&E would need to improve its credit rating by three notches, without any changes to its business risk or two negative modifiers.[58]

In order for PG&E to achieve the necessary three-notch upgrade to reach an investment-grade issuer credit rating, its FFO / Debt metrics would need to improve significantly to around 23 percent at the Utility, assuming no changes to its business risk or two negative modifiers. With a satisfactory business position, the 23 percent threshold would place PG&E at the low end of the intermediate financial risk profile, and imply an anchor rating of bbb+ with a negative two-notch modifier resulting in an issuer credit rating of BBB-. Accordingly, PG&E uses this FFO / Debt threshold of 23 percent as the Financial Target metric in applying the Methodology below. *See* Section G.1.

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54 Exhibit 5.6 at 5-Exh5.6-15.

55 Improving the credit ratings of the Utility also would improve the ratings of the parent and provide it with better access to capital which strengthens the financial condition of the Utility as well by improving its access to capital.

56 Exhibit 5.6 at 5-Exh5.6-3, 5-Exh5.6-20.

57 Exhibit 5.6 at 5-Exh5.6-3, 5-Exh5.6-20.

58 Exhibit 5.6 at 5-Exh5.6-4, 5-Exh5.6-14.

However, if the proposed securitization is approved, it is likely that either the business position would improve (from “satisfactory” to “strong”) and/or S&P could remove one or both of the negative modifiers. That would allow the Utility to target an FFO / Debt ratio that is within the “significant” financial risk profile range, consistent with that of other California utilities (i.e., approximately 20 percent) to achieve an investment-grade credit rating. PG&E’s proposal to use the Financial Target metric and the California Peer metric is driven by S&P’s latest commentary and is consistent with the Methodology, which allows the Commission to “use its discretion to select financial ratios within the ranges that achieve investment-grade credit ratings.”[59]

Moody’s Methodology and Assessment

Moody’s uses lettered codes to score a company’s “Regulatory Framework,” “Ability to Recover Costs and Earn Returns,” “Diversification” and “Financial Strength.” Moody’s weights the assigned scores for those subcategories based on a set scorecard. “Regulatory Framework” (25 percent) evaluates the legislative and judicial underpinnings of the regulatory framework and consistency and predictability of regulation. “Ability to Recover Costs and Earn Returns” (25 percent) evaluates timeliness of recovery of operating and capital costs and sufficiency of rates and returns. “Diversification” (10 percent) evaluates a company’s market position and generation and fuel diversity. “Financial Strength” (40 percent), equivalent to S&P’s financial risk, assigns lettered ratings based on credit metrics which Moody’s assesses as CFO Pre-WC / Debt, CFO Pre-WC – Dividends / Debt, CFO Pre-WC + Interest / Interest and Debt / Capitalization. Using both the qualitative and financial factors, Moody’s assigns the company a rating based on a matrix of potential lettered scores. Assuming “Regulatory Framework,” “Ability to Recover Costs and Earn Returns” and “Diversification” subcategories are scored at the Baa level, a “Financial Strength” score with underlying credit metrics that are in the Baa range, as shown in Figure 5-3 below, should support an

59 D.19-06-027 at 28.

overall investment-grade credit rating. (Again, the orange shaded cells are investment-grade credit ratings.)

FIGURE 5-3
MOODY'S CREDIT RATINGS FRAMEWORKS

		Standard Grid					
Credit Metric	Sub-Factor Weighting	Aaa	Aa	A	Baa	Ba	B
CFO Pre-WC / Debt	15.0%	≥ 40%	30% - 40%	22% - 30%	13% - 22%	5% - 13%	1% - 5%
CFO Pre-WC – Dividends / Debt	10.0%	≥ 35%	25% - 35%	17% - 25%	9% - 17%	0% - 9%	(5%) - 0%
CFO Pre-WC + Interest / Interest	7.5%	≥ 8.0x	6.0x - 8.0x	4.5x - 6.0x	3.0x - 4.5x	2.0x - 3.0x	1.0x - 2.0x
Debt / Capitalization	7.5%	< 25%	25% - 35%	35% - 45%	45% - 55%	55% - 65%	65% - 75%

		Low Business Risk Grid					
Credit Metric	Sub-Factor Weighting	Aaa	Aa	A	Baa	Ba	B
CFO Pre-WC / Debt	15.0%	≥ 38%	27% - 38%	19% - 27%	11% - 19%	5% - 11%	1% - 5%
CFO Pre-WC – Dividends / Debt	10.0%	≥ 34%	23% - 34%	15% - 23%	7% - 15%	0% - 7%	(5%) - 0%
CFO Pre-WC + Interest / Interest	7.5%	≥ 8.0x	6.0x - 8.0x	4.5x - 6.0x	3.0x - 4.5x	2.0x - 3.0x	1.0x - 2.0x
Debt / Capitalization	7.5%	< 29%	29% - 40%	40% - 50%	50% - 59%	59% - 67%	67% - 75%

Note: Moody's, *Regulated Electric and Gas Utilities* (June 23, 2017) at 22.

Similar to S&P, Moody's June 2020 report assigned PG&E's senior secured debt an investment-grade credit rating of Baa3 and assigned PG&E a sub-investment-grade issuer credit rating of Ba2.[60] This issuer credit rating was based on Moody's assessment of the "Regulatory Framework," "Ability to Recover Costs and Earn Returns," "Diversification" and "Financial Strength."[61]

Moody's also states that "positive rating momentum could occur if PG&E is successful in its wildfire mitigation investments and is able to reduce both wildfire risk and potential liabilities." An improvement in credit ratings would also require "material strengthening" in PG&E's financial metrics especially at the parent.

60 Exhibit 5.7 at 5-Exh5.7-1, 5-Exh5.7-9.

61 *Id.* at 5-Exh5.7-18, 5-Exh5.7-20.

> Based upon the current forecast with securitization, which Moody's treats as on-credit debt, PG&E Corporation is expected to have a CFO Pre-WC / Debt of 12 to 15 percent in the next three years and the Utility is expected to have a CFO Pre-WC / Debt of 14 to 16 percent in the next three years. While Moody's report does not articulate an explicit target level for financial metrics, Citi believes that PG&E's CFO Pre-WC / Debt metrics would need to improve significantly up to around the midpoint of the upper end of the Moody's Baa range. Accordingly, PG&E uses this CFO Pre-WC / Debt threshold of 19.75 percent as the Financial Target metric in applying the Methodology below. PG&E also uses the California Peer metric for Moody's, which, like for S&P, is based on the average of CFO Pre-WC / Debt of Southern California Edison Company (SCE) and San Diego Gas & Electric Company (SDG&E)—20.25 percent. *See* Section G.1.

F. Path to Investment-Grade Issuer Credit Ratings (*J. Sauvage*)

Under the Stress Test Methodology, "[i]f a utility is already at the minimum credit rating that is investment grade, or if it has fallen below investment grade," the Commission requires that a Stress Test application "demonstrate a path back to investment grade."[62] In particular, a "demonstrated ability to achieve a minimum investment grade credit rating could include, for example, the allowance of wildfire related liabilities for recoveries in rates, equity issuances, asset sales, or other forms of capital infusions" and "[s]uch a pathway should mitigate ratepayer harm relative to other options available to the utility."[63] The proposed Securitization is a cost-efficient, rate-neutral, and customer-protective mechanism for financing PG&E's 2017 wildfire claims costs that, if approved, will support PG&E's path to an investment-grade issuer credit rating and investment-grade unsecured debt ratings and will benefit PG&E and its customers.

However, it is important to note that this assessment of PG&E's path back to an investment-grade issuer credit rating, in particular the benefits of the Securitization for improving credit quality, as well as the application of the Stress

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62 Stress Test Methodology at 13.

63 *Id.*

Test Methodology described in Section G below, do not account for the effects of a potential Regulatory Adjustment by the Commission. While a Regulatory Adjustment allows the Commission to exercise discretion in ultimately determining the appropriate CHT for a utility, the rating agencies will carefully review any potential adjustment as evidence of PG&E's relationship with the Commission and as a result the Commission's decision on that issue could affect or influence PG&E's credit ratings.

1. Overview (*J. Sauvage*)

PG&E currently does not have investment-grade issuer credit ratings or investment-grade unsecured debt credit ratings. After the catastrophic wildfires that occurred in Northern California in 2017 and 2018, PG&E faced uncertain, but mounting liabilities and PG&E and PG&E Corporation ultimately sought Chapter 11 protection in late January 2019. Before the Chapter 11 filings, PG&E experienced an uninterrupted string of credit rating downgrades beginning in December 2017 and was downgraded to sub-investment-grade by early January 2019 before the Chapter 11 filings.[64] The other California large investor-owned utilities (IOUs) likewise suffered ratings downgrades during this same period due to wildfire risk, inverse condemnation, and other exogenous considerations.[65]

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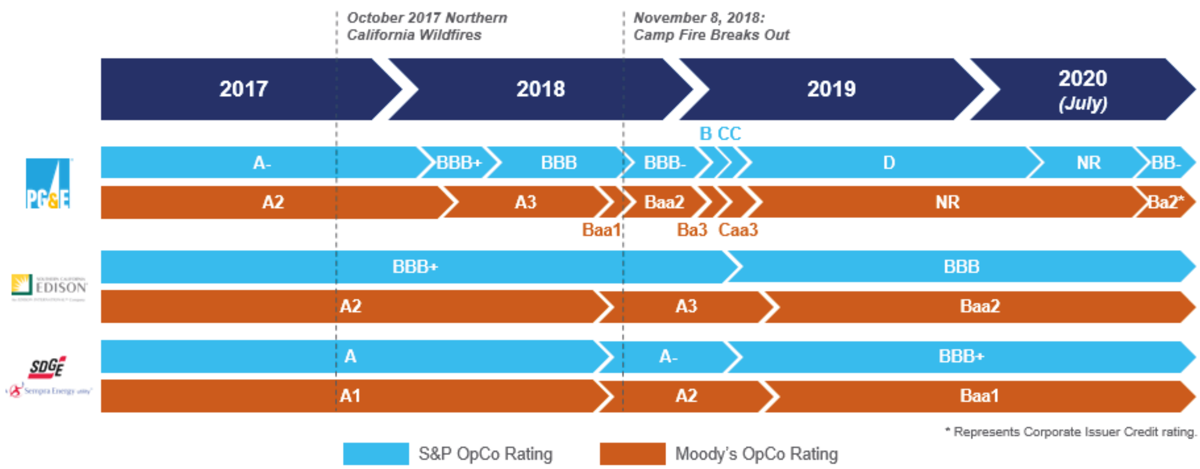
64 *E.g.*, S&P Global Ratings, *PG&E Corp. And Subsidiary Placed On CreditWatch Negative On Suspended Dividends Due to Liability Exposure* (Dec. 22, 2017); S&P Global Ratings, *PG&E Corp. And Subsidiary Ratings Affirmed, Off Watch; Outlook Negative* (Sept. 5, 2018); S&P Global Ratings, *PG&E Corp. And Subsidiary Downgraded To 'B' On Announced Board Review; Ratings Remain On Credit Watch Negative* (Jan. 7, 2019); Moody's, *Moody's downgrades PG&E to A3 and PG&E Corp to Baa1, outlooks are negative* (Mar. 19, 2018); Moody's, *Moody's downgrades PG&E to Baa3 and Pacific Gas & Electric to Baa2; ratings on review for downgrade* (Nov. 15, 2018); Moody's, *Credit Opinion: Pacific Gas & Electric Company, Update following rating downgrade* (Jan. 12, 2019).

65 *E.g.*, Moody's, *Negative Outlook for SCE and SDG&E* (Apr. 11, 2018) at 1 ("SCE's credit profile is weighed down by…increasing inverse condemnation risk exposure" which "has caused us to reassess our view of the credit supportiveness of the regulatory environment in California"); *id.* at 2 ("The rising risk associated with the wildfires and other severe weather events have translated into higher regulatory risk for investor-owned utilities in California due to inverse condemnation exposure and the uncertainty that they will be able to recover related costs from ratepayers, as evidenced by the SDG&E's disallowance in its 2007 wildfire case.").

FIGURE 5-4
CREDIT RATINGS OF CALIFORNIA UTILITIES



Note: S&P Global Ratings Credit Reports; Moody's Credit Reports.

PG&E has taken a number of steps to improve its financial position and to restore an investment-grade issuer credit rating. PG&E's actions are in line with the possible efforts to return to an investment-grade issuer credit rating that are identified in the Stress Test Decision. Most critically, PG&E sought Chapter 11 relief and emerged from bankruptcy on July 1, 2020, in a manner that resolved its substantial prepetition liabilities with a Plan that was funded by a historic capital raise with a significant amount of new equity, both at exit and over time after emergence from bankruptcy. While the Chapter 11 process was essential to restore PG&E to financial health, and PG&E emerged with investment-grade secured debt, PG&E did not receive investment-grade issuer credit ratings or investment-grade unsecured debt credit ratings at exit. Instead, PG&E received a BB- issuer credit rating from S&P, which is three notches below investment-grade, and a Ba2 issuer credit rating from Moody's, which is two notches below investment-grade. PG&E also "demonstrate[s] a path back to investment grade" through the Securitization itself because the Securitization will provide significant benefits—both qualitative and quantitative—with respect to PG&E's credit rating as described in more detail below.

The Commission also has stated that, in implementing the Stress Test:

> [T]he Commission is mindful of both the finite resources of California ratepayers, and the importance of…not saddl[ing] ratepayers with costs

associated with utilities that have difficulty accessing the financial markets.[66]

There is little danger here that ratepayers will fund costs for a utility that will not be able to access the markets. First, ratepayers will be compensated through the proposed Customer Credit, which is designed to make the Stress Test rate-neutral. Second, consistent with PG&E's expectations in I.19-09-016, PG&E continues to have access to the capital markets after emergence and, in particular, PG&E was able to issue investment-grade secured debt to fund its Plan.[67] Commission approval of the Securitization would further facilitate PG&E's access to the capital markets by supporting its credit metrics and path back to an investment-grade issuer credit rating.

2. PG&E's Bankruptcy (*D. Thomason*)

The bankruptcy process enabled PG&E to significantly improve its financial condition, which included a sub-investment-grade issuer credit rating before its Chapter 11 filing, and to do so while also continuing to deliver safe, reliable, affordable and clean energy to its 16 million customers. PG&E's Plan resolved PG&E's substantial prepetition liabilities, provided for a historic capital raise that included a substantial amount of new equity, and yielded significant savings by refinancing PG&E's prepetition, high-coupon debt. As a result, PG&E experienced an improvement in quantitative financial metrics that sets it on a path to be in line with industry peers and to achieve an investment-grade issuer credit rating over time, although PG&E has not yet received such a rating.

PG&E's actions to improve its financial position through resolution of the Chapter 11 proceeding support and demonstrate a path back to an investment-grade issuer credit rating. First, through the bankruptcy process and PG&E's Plan, PG&E resolved its substantial prepetition wildfire

66 D.19-06-027 at 6.

67 I.19-09-016, Jan. 31. 2020 Opening Testimony, Chapter 2, Description of PG&E's Plan and Plan Funding (Jason P. Wells) and Chapter 3, Ability to Raise Capital Post-Emergence (John Plaster); S&P Global Ratings, *PG&E Corp. and Subsidiary Assigned 'BB-' Ratings, Outlook Stable* (June 15, 2020); Moody's Investors Service, *Moody's assigns Baa3 rating to Pacific Gas & Electric's first mortgage bonds and B1 rating to PG&E Corp's senior secured debt; outlooks stable* (June 15, 2020).

liabilities, and the 2017 wildfire claims liabilities in particular, in a reasonable manner that provided fair and expeditious compensation to wildfire victims. PG&E's Plan required payment of approximately $25.5 billion at Plan Value in settlement of Fire Claims. That amount is the result of arms-length negotiations and settlements and was split among three different classes of Fire Claims.[68] This expeditious compensation to wildfire victims and other wildfire claimants avoided a lengthy, costly and adversarial trial process on individual claims. This resolution also enabled the Bankruptcy Court to make its determination under AB 1054 that the Plan:

> …provides funding or establishes reserves for, provides for assumption of, or otherwise provides for satisfying any prepetition wildfire claims asserted against the electrical corporation in the insolvency proceeding in the amounts agreed upon in any pre-insolvency proceeding settlement agreements or any post-insolvency settlement agreements, authorized by the court through an estimation process or otherwise allowed by the court.[69]

Second, PG&E consummated a historic capital raise, with significant amounts of new equity and debt, to fund its Plan and to exit Chapter 11. The capital raise in connection with PG&E's emergence was the largest capital raise in the utility industry and one of the largest in all of corporate history. In particular, for the Plan funding, PG&E Corporation issued $9 billion of new equity and contributed to the Fire Victim Trust 477 million shares of PG&E Corporation common stock (representing 22.19 percent of the outstanding common stock of the PG&E Corporation as of the Effective Date (subject to potential adjustments)). PG&E also contemplates additional future equity contributions over time in order to delever after it emerges from Chapter 11. This includes PG&E's commitment to use cash flows generated by future application of shareholder deductions and substantial net operating losses (NOLs) resulting from payment of wildfire claims costs under the Plan to fund the Customer Credit and, if this Securitization is not approved or consummated, to amortize the $6 billion in

68 *See* PG&E's Plan §§ 1.78, 1.79, 1.174, 1.201 (June 19, 2020) (defining classes as (1) Fire Victim Claims; (2) Public Entities Wildfire Claims; and (3) Subrogation Wildfire Claims).

69 § 3292(b)(1)(B); *see* Confirmation Order at 9-10.

Temporary Utility Debt used to pay wildfire claims costs at exit. The significant amounts of new equity and shareholder funded contributions already consummated and anticipated in the future provide a critical source of funding for the wildfire liabilities and the Customer Credit.[70]

Third, the Bankruptcy Code also provided PG&E the unique opportunity to elect whether to repay or reinstate its prepetition debt.[71] This allowed PG&E to negotiate the Noteholder Restructuring Support Agreement (RSA) and achieve substantial interest cost savings by refinancing certain high-coupon, long-dated prepetition senior notes at significantly lower interest rates. This ultimately benefits customers. All else equal, PG&E's Plan and the Noteholder RSA have significantly reduced PG&E's cost of debt for years to come; and thereby, help to further improve PG&E's financial position.[72]

3. Securitization (*J. Sauvage*)

While PG&E's Plan went a long way towards restoring PG&E to a position of financial strength, the Securitization will further support and accelerate achieving an investment-grade issuer credit rating after emergence. Specifically, the Securitization will support a pathway to an investment-grade issuer credit rating by providing both qualitative and quantitative benefits to PG&E's credit rating, which will ultimately inure to the benefit of both PG&E and its customers.

After emerging from Chapter 11, PG&E will focus on improving its business risk rating and strengthening its financial position in order to achieve investment-grade issuer credit ratings, for both PG&E and PG&E Corporation. This will involve three primary components under the S&P and Moody's methodologies:

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70 *See* Disclosure Statement for Debtors' and Shareholder Proponents' Joint Chapter 11 Plan of Reorganization at 173, 175, *In re PG&E Corporation,* No. 19-30088 (Bankr. N.D. Cal. Mar. 17, 2020), ECF No. 6353 (Disclosure Statement for PG&E's Plan). As discussed in more detail in Section G.3., it also is not practical, reasonable, or necessary for PG&E to raise additional equity to fund wildfire claims costs.

71 *See* 11 U.S.C. § 1124; *see also* 11 U.S.C. §§ 101(5), 1123, 1141.

72 *See* Advice Letter 4275-G/5887-E (July 22, 2020) (calculating PG&E's post-emergence cost of debt as 4.17 percent, a significant reduction from the 5.16 percent previously authorized in D.19-12-056).

1) Improved coordination/relationships with key stakeholders such as the Governor, state legislators and the Commission;
2) Improved financial and business metrics; and
3) Improved operations, safety and governance metrics.

Securitization is a strong initial step post-emergence and, if successful, will demonstrate important improvements in the first two components. PG&E also is committed to significantly improving its operations, safety and governance, as described in other proceedings such as I.19-09-016, which likewise will help support the pathway to an investment-grade issuer credit rating.

First, approval of the Securitization will demonstrate effective cooperation between PG&E and its key stakeholders and regulator, which in turn would support the rating agency views of PG&E's business risk. In their June and July 2020 ratings reports for PG&E, both Moody's and S&P highlighted negative public sentiment of regulators, policymakers and customers towards PG&E as risk factors which could make it more difficult for the Commission to implement measures to protect PG&E's credit quality.[73] Approval of the Securitization would be an important first step towards alleviating some of the rating agencies' concerns on this point. In the same vein, the Governor has already stated that he:

> …believes that a rate neutral securitization pursuant to SB 901 (Dodd, Chapter 626, Statutes of 2018) that meets all legal requirements as determined by the CPUC would, in his judgment, be in the public interest, as it would strengthen the going-forward business and support the reorganized Utility's ability to provide safe, reliable, affordable and clean energy to its customers.[74]

Similarly, approval of PG&E's application would further evidence a constructive regulatory environment after PG&E's emergence from bankruptcy. AB 1054 has brought much needed stability to California

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[73] *See* Exhibit 5.6 at 5-Exh5.6-2 to 5-Exh5.6-3, 5-Exh5.6-13 to 5-Exh5.6-14; Exhibit 5.7 at 5-Exh5.7-2 to 5-Exh5.7-3, 5-Exh5.7-9, 5-Exh5.7-11, 5-Exh5.7-13 to 5-Exh5.7-14.

[74] Governor Gavin Newsom's Statement in Support of Debtors' Motion Pursuant to 11 U.S.C. §§ 105 and 363 and Fed. R. Bankr. P. 9019 for Entry of an Order (I) Approving Case Resolution Contingency Process and (II) Granting Related Relief at 4, *In re PG&E Corporation*, No. 19-30088 (Bankr. N.D. Cal. Mar. 20, 2020), ECF No. 6402.

utilities' financial outlook, though the credit outlook remains contingent on a constructive regulatory implementation of the legislation and a constructive regulatory environment more broadly, as has been true historically in California.[75] Approval of the Securitization will be assessed positively, sending a strong signal to financial markets, and has the potential to help improve PG&E's business risk profile from the perspective of the rating agencies. Approving the Securitization will also have a positive impact more broadly on rating agency and investor views of California regulation. SCE and SDG&E are maintaining credit metrics akin to an A- rating, and are rated BBB and BBB+, respectively. Additionally, SCE and SDG&E credit spreads are wider than similarly rated utilities, which results in additional costs for California ratepayers. Importantly, PG&E is the only major California IOU with a "Satisfactory" business risk under S&P's methodology: SCE and SDG&E both have "Strong" business risk ratings, one level higher than PG&E, even though they are subject to the same regulatory regime. Therefore, there is potential for improving the qualitative assessment of PG&E's credit ratings through approval of the Securitization.

Second, the Securitization will strengthen PG&E's financial metrics; and thereby, support the rating agency views of PG&E's financial profile, accelerating the overall improvement of PG&E's credit ratings and achievement of an investment-grade issuer credit rating. PG&E has made a number of assumptions in the calculation of the impact of securitization on the Utility's financial credit metrics. The first assumption is that PG&E will commit to the rating agencies that the initial shareholder funded contribution of $1.8 billion will be funded in a credit accretive manner, and that the Customer Credit mechanism will function as described in David Thomason's testimony in Section H below and in Chapter 6, Customer Credit Mechanism and Investment Returns (D. Thomason; G. Allen). For the avoidance of doubt, there will be no further financial commitments to true-up mechanisms provided by PG&E to the Customer Credit.

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75 *E.g.*, Exhibit 5.6 at 5-Exh5.6-2 to 5-Exh5.6-3, 5-Exh5.6-13 to 5-Exh5.6-14; S&P Global Ratings, *Southern California Edison Co.* (Dec. 26, 2019) at 4-5.

The second assumption is that securitization is treated as on-credit for Moody's, but off-credit for S&P. Moody's confirmed this on-credit treatment in its June 2020 ratings report.[76] In its June and July 2020 reports, S&P noted its base case modeling assumes a securitization issuance in 2021 is used to retire the Temporary Utility Debt and subsequent discussions with S&P confirmed off credit treatment for the securitization and the Customer Credit mechanism.[77] In the event that PG&E were to guarantee the Customer Credit mechanism, S&P would likely treat it as an enforceable contractual commitment and, therefore, the securitization would be on-credit and the forecasted improvement in financial metrics would not occur.

As compared to a scenario without securitization in which PG&E continues to finance the wildfire claims costs with the Temporary Utility Debt, securitization will enable PG&E to improve its credit metrics faster, particularly under S&P's methodology, assuming off-credit treatment for the securitization.[78] On balance, stronger credit metrics will decrease relative financial risk and thereby strengthen the overall credit assessment.

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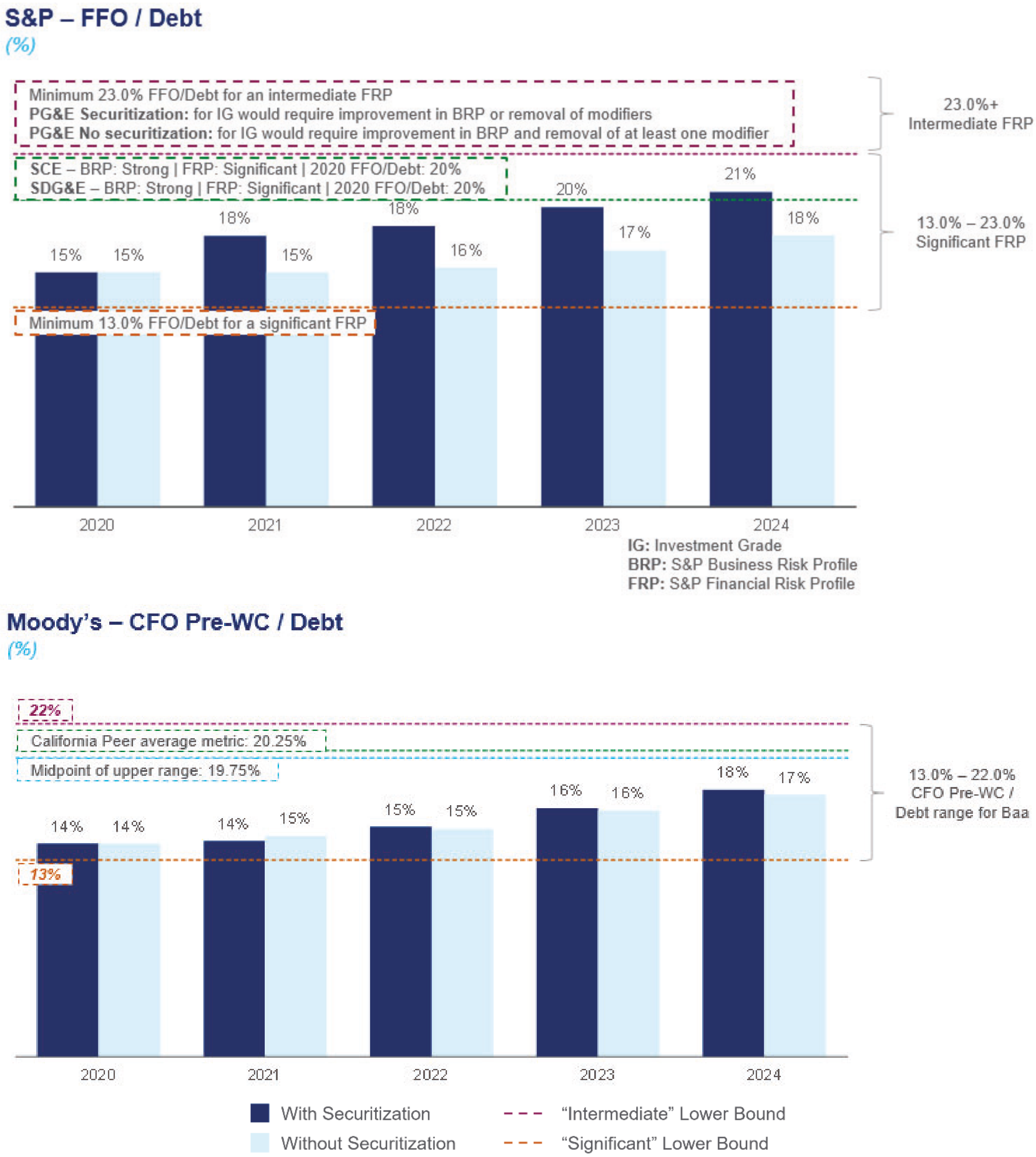
76 Exhibit 5.7 at 5-Exh5.7-2, 5-Exh5.7-9.

77 Exhibit 5.6 at 5-Exh5.6-4, 5-Exh5.6-15.

78 To the extent securitization does not positively affect PG&E's quantitative metrics under Moody's methodology, the Commission can exercise its discretion to rely on S&P's methodology and assessment for purposes of PG&E's path to an investment-grade issuer credit rating.

FIGURE 5-5
EXPECTED IMPACT OF SECURITIZATION ON CREDIT METRICS



Note: *See* Exhibits 5.4, 5.5.

The proposed Securitization would significantly increase the ratio of FFO / Debt over the period through 2024 and will have the added benefit of demonstrating an improved working relationship among PG&E, the CPUC and the state. Indeed, securitization would provide PG&E the opportunity to achieve an investment-grade issuer credit rating under S&P's methodology by as early as 2023 if S&P recognizes an improvement in business position or removes both negative modifiers. Approval of securitization would make this considerably more likely. By contrast, absent securitization, PG&E would not be expected to achieve an FFO / Debt ratio consistent with investment-grade metrics during the 2020-2024 forecast period,[79] assuming no change to its business risk and negative modifiers. And, in that scenario, achieving investment-grade credit ratings likely would require both an improvement in business position and the elimination of both negative modifiers.[80] However, given the importance of securitization to PG&E's reorganization and the statement of support by the Governor, failing to approve securitization could itself negatively affect the rating agencies' qualitative assessment of PG&E's relationship with the CPUC.

This strengthening, combined with an improved qualitative assessment of the California regulatory environment and ongoing operational improvements by PG&E, are critical steps towards an investment-grade issuer credit rating. The Securitization also affords a path to an investment-grade issuer credit rating that mitigates ratepayer harm relative to any other available alternative. The Securitization is a cost-efficient, rate-neutral, and customer-protective mechanism to finance wildfire claims costs. In particular, as described in more detail in Section G.3 below, it is not reasonable, practicable or necessary for PG&E to issue additional equity to fund these costs. Instead, the Securitization and accompanying Customer Credit will mitigate any economic harm to ratepayers while also supporting an efficient path back to an investment-grade issuer credit rating.

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79 The Stress Test Methodology states that the Maximum Incremental Debt Capacity value will "use[] the utility's 3-year financial forecast including the current fiscal year. . . to see how much additional debt the company can add." Stress Test Methodology at 9. Accordingly, PG&E has included debt capacity calculations over a 3-year period. *See* Exhibit 5.1. Figure 5-5 uses projections through 2024 in order to provide greater clarity about PG&E's path over time back to an investment-grade issuer credit rating. *See also* Exhibits 5.4 and 5.5.

80 *See* Section G.1.b for further discussion of these matters.

The acceleration in the improvement of PG&E's credit rating has important benefits for PG&E and its customers. The Commission has recognized that investment-grade issuer credit ratings are important:

> …to ensuring on an ongoing basis that PG&E can reliably and efficiently raise capital to finance construction of new infrastructure, accommodate seasonal fluctuations in cash collections and disbursements, and meet its obligations to serve customers.[81]

The Commission also has explained that the "longer-term benefits" of investment-grade issuer credit ratings include "a lower cost of debt," "lower transaction costs," and "lower working capital requirements."[82] For these reasons, the Commission has affirmed:

> [A]dopting a long-term goal of maintaining and improving PG&E's credit ratings is good public policy and indeed it is the Commission's 'duty and authority to guarantee that the electric utilities would have the capacity and financial viability to provide power to California consumers.'[83]

That is consistent with the premise of the Stress Test—that:

> …an investment grade credit rating…is a predictable indicator of a utility's ability to access capital markets on reasonable, acceptable terms, which is critical to avoid materially impacting its ability to provide adequate and safe service.[84]

Generally speaking, the higher a company's credit rating, the lower its cost of debt financing, as evidenced by the difference in yield relative to a U.S. Treasury security with the same maturity. The analysis of the Bloomberg 10-year indexes below indicates that the "value" of the BBB- to BBB ratings notch is on average 44 basis points (bps) and the "value" of the BBB to BBB+ ratings notch is on average 16 bps. This trend is also evident in the average performance differential (shown below in Figure 5-7) between PG&E's 2.5 percent 2031 bond (Baa3/BBB-) relative to the SCE 2.25 percent 2030 bond (A3/A-).

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[81] D.03-12-035 at 42.

[82] *Id.* at 42-43.

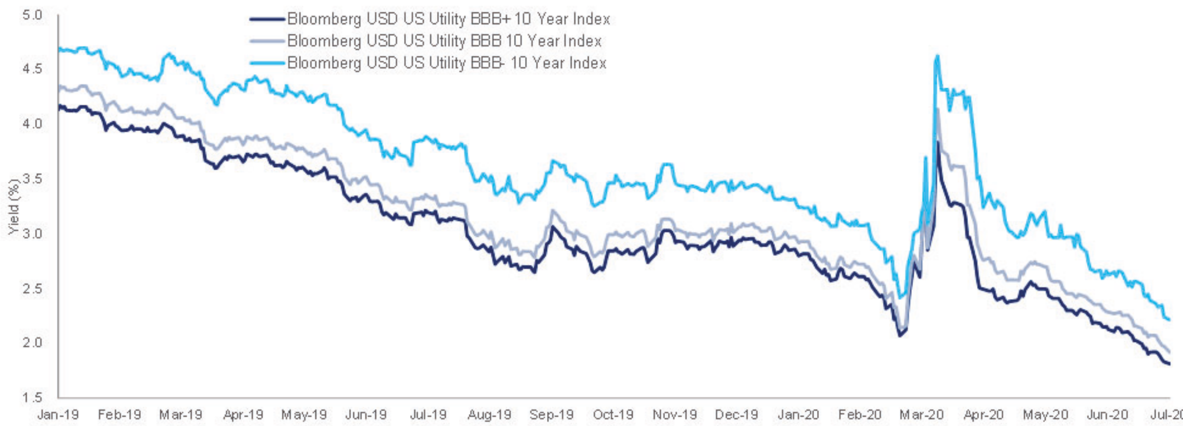
[83] *Id.* at 44 (quoting *S. Cal. Edison Co. v. Peevey*, 31 Cal. 4th 781, 793 (2003)).

[84] Stress Test Methodology at 4.

FIGURE 5-6
BOND TRADING PERFORMANCE BY RATING CATEGORY

Bond Trading Performance by Rating Category

Trading Performance by Yield

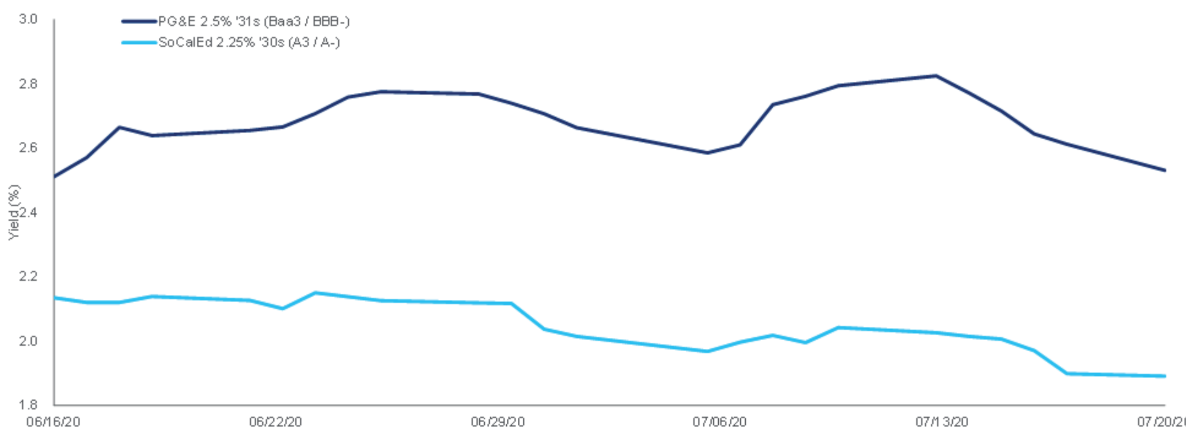


Summary Stats (01/01/19-07/20/20)	Bloomberg USD US Utility BBB+ 10 Year Index	Bloomberg USD US Utility BBB 10 Year Index	Bloomberg USD US Utility BBB- 10 Year Index	BBB Less BBB+ Differential	BBB- Less BBB Differential
Min	1.81%	1.92%	2.21%	2 bp	3 bp
Max	4.17%	4.35%	4.70%	39 bp	98 bp
Average	3.03%	3.18%	3.62%	16 bp	44 bp
Current	1.81%	1.92%	2.21%	11 bp	29 bp

FIGURE 5-7
BOND TRADING PERFORMANCE—PG&E VS. SCE

Bond Trading Performance – PG&E vs. SCE

Trading Performance by Yield



Summary Stats (06/17/19-07/20/20)	PG&E 2.5% '31s	SoCalEd 2.25% '30s
Ratings	Baa3 / BBB-	A3 / A-
Min	2.51%	1.89%
Max	2.82%	2.15%
Average	2.68%	2.05%
Current	2.53%	1.89%

Summary Stats (06/17/19-07/20/20)	PG&E Less SoCalEd Yield Differential
Min	38 bp
Max	80 bp
Average	63 bp
Current	64 bp

The three-notch difference in credit rating translates into an average yield differential of 63 bps. The yield differential depends heavily on where in the ratings spectrum the credit is rated as evidenced by the spreads between the Bloomberg 10-year indexes. A notch from BBB- to BBB has a significantly higher yield differential than a notch from BBB to BBB+. Yield differentials experience compression as credits become more favorably rated.

Therefore, as PG&E regains investment-grade issuer credit ratings of Baa3 (Moody's) and BBB- (S&P)—an increase of two notches from its current Ba2 rating from Moody's and an increase of three notches from its current BB- rating from S&P—its rating on its secured first mortgage bonds would also improve by two notches. That will result in a savings to customers of approximately 60 bps across all of PG&E's debt based upon average market conditions. Since PG&E's unsecured credit rating is below investment-grade, the improvement in yields is likely to be wider than

60 bps. Therefore, to determine the potential benefits a conservative assumption of 60 bps has been used.

Putting these savings into perspective, there are multiple avenues by which PG&E would be able to pass on interest rate savings to customers, associated with both long-term debt and short-term debt. For long-term debt, PG&E currently plans to make an average of $8.37 billion of capital investments per year into its system from 2021-2024, which will increase projected rate base from approximately $44.6 billion in 2020 to approximately $60.9 billion in 2024. This increase in rate base of approximately $16.3 billion will be funded with 48 percent long-term debt, in line with PG&E's authorized capital structure,[85] representing a required issuance of at least $7.83 billion of long-term debt over the four-year period, or $1.96 billion annually, excluding any potential issuances for refinancing debt. Accordingly, a savings of approximately 60 bps of interest expense on $1.96 billion of long-term debt translates to a pre-tax annual savings of $11.74 million. Accelerating PG&E's improvement in its issuer credit ratings and path back to an investment-grade issuer credit rating by two years, would allow it to capture the savings from issuing $1.96 billion annually of debt to fund capital expenditures in 2023 and 2024. Accordingly, estimated savings would be approximately $11.74 million in 2023 and approximately $23 million in 2024 and thereafter, since savings of approximately 60 bps on $3.92 billion of long-term debt translates to pre-tax annual savings of $23 million. Over an average 18-year life of the bonds[86] PG&E would be able to save a total of approximately $423 million for the benefit of its customers. Moreover, while difficult to quantify at this time, PG&E and its customers would continue to reap additional benefits associated with any future long-term debt issuances after 2024 to the extent that PG&E's issuer

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85 While D.19-12-056 adopted an authorized capital structure for PG&E of 47.5 percent long-term debt, 0.5 percent preferred equity, and 52 percent common equity, PG&E does not plan to issue additional preferred equity to fund increases in rate base. Accordingly, such increases would be funded using 48 percent long-term debt and 52 percent common equity.

86 In the normal course to fund rate base, PG&E typically issues a mix of 10-year and 30-year bonds and assumes a weighted average life of 18 years for new debt issuances.

credit ratings remain higher than they otherwise would be absent securitization.

For short-term debt, certain costs associated with PG&E's collateral posting obligations are recovered in rates. Moreover, achieving an investment-grade issuer credit rating will significantly decrease PG&E's collateral posting obligations, which increased when PG&E's ratings fell below investment-grade in January 2019. Since securitization likely would accelerate PG&E's path to achieve an investment-grade issuer credit rating by approximately two years as compared to a scenario without securitization, that yields customer benefits of approximately $9 million per year for two years, or $18 million in total.

As stated above, the estimated nominal long-term debt savings are $423 million and the short-term debt savings are $18 million in total. Combining the savings of long-term and short-term debt, the resulting estimated nominal interest savings are $441 million.

G. Applying the Stress Test Methodology (*J. Sauvage*)

The goal of the Stress Test Methodology is to determine a utility's ability to pay for disallowed wildfire costs without harming ratepayers or materially impacting service based on the utility's ability to retain a minimum investment-grade issuer credit rating. Amounts above that threshold—i.e., amounts that would threaten a utility's investment-grade credit rating—are recoverable from customers. The Stress Test Methodology also recognizes that a utility may already have a sub-investment-grade issuer credit rating at the time of applying for administration of the Stress Test, in which case (as described above) the Commission requires the utility to "demonstrate a path back to investment grade."[87] Applying the Commission's Stress Test Methodology to PG&E results in STC of no less than the $7.5 billion that PG&E proposes to securitize.

PG&E's approach to applying the Methodology and calculating STC is consistent with the Commission's Decision,[88] but PG&E applies the methodology in a simplified mathematical manner because PG&E's debt

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87 *Id.* at 13.

88 *See id.*

forecast includes the 2017 wildfire costs to be securitized.[89] Because PG&E's Plan was a comprehensive resolution of its Chapter 11 proceeding, including claims related to all prepetition wildfires, not just 2017, and PG&E raised both debt and equity to fund its Plan, including the payment of these claims, it is not feasible to present a hypothetical, post-emergence capital structure and forecast for PG&E that "exclude[s] the impact of any disallowed wildfire costs for which the utility is seeking recovery"[90]—e.g., $7.5 billion of 2017 wildfire claims costs. Accordingly, PG&E applies the Methodology in a mathematically equivalent manner using its July 24, 2020 financial forecast.

Under the Stress Test Methodology, the CHT is determined by adding a utility's *MIDC* + Excess Cash (*Excess Cash*) ± Regulatory Adjustment (*Reg. Adj.*). In turn, *STC* are calculated by subtracting a utility's CHT from the total disallowed 2017 wildfire costs a utility is seeking to recover.

In other words:

$$CHT = MIDC + Excess\ Cash\ \pm Reg.Adj.$$
$$STC = Disallowed\ 2017\ Wildfire\ Costs - CHT$$

Putting these together:

$$STC = Disallowed\ 2017\ Costs - MIDC - Excess\ Cash \pm Reg.Adj.$$

MIDC is calculated by determining a utility's Maximum Overall Debt Capacity (MODC) that is consistent with a minimum investment-grade issuer credit rating (based on the non-financial factor scores from the credit agencies and minimum financial strength metrics) and then subtracting a utility's three-year forecast of existing debt (*Existing Debt*), where the forecast excludes disallowed 2017 wildfire costs.[91]

$$MIDC = MODC - Existing\ Debt$$

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89 *See* Exhibit 5.4.

90 Stress Test Methodology at 9.

91 *See id.* at 10 (describing how "implied debt capacity" of $16.1 billion would permit utility with $10 billion of pre-existing debt to take on $6.1B of incremental debt); *id.* at 9 ("The financial forecast should exclude the impact of any disallowed wildfire costs for which the utility is seeking recovery.").

Combining these formulas yields:

$$STC = Disallowed\ 2017\ Costs - MODC + Existing\ Debt - Excess\ Cash \pm Reg.Adj.$$

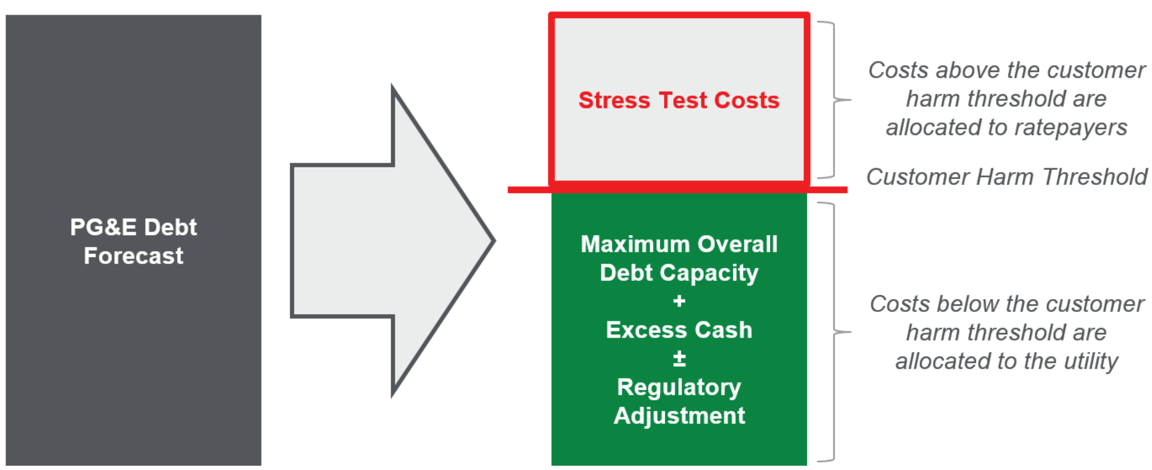
The formula also can be represented as:

$$STC = (Disallowed\ 2017\ Costs + Existing\ Debt) - MODC - Excess\ Cash \pm Reg.Adj.$$

As described above, the PG&E Debt Forecast incorporates Disallowed 2017 Costs. Thus, the PG&E Debt Forecast is equal to Disallowed 2017 Costs, plus Existing Debt. Accordingly, STC for PG&E can be calculated and illustrated graphically as follows:

$$STC = PG\&E\ Debt\ Forecast - MODC - Excess\ Cash \pm Reg.Adj.$$

FIGURE 5-8
STRESS TEST COSTS



As described below, PG&E does not have any Excess Cash for purposes of this calculation, and PG&E proposes that the Commission exercise its discretion to apply a Regulatory Adjustment of zero. Accordingly, the critical elements of the Stress Test Methodology are PG&E's Debt Forecast and the MODC that PG&E can bear consistent with a minimum investment-grade issuer credit rating. The STC are the difference between these two figures, which here are at least $7.5 billion, which is the amount that PG&E proposes to recover through securitization.

1. Maximum Incremental Debt Capacity (*J. Sauvage*)

The first component of the Stress Test Methodology is the MIDC: "the implied maximum additional debt that a utility can take on and maintain a minimum investment grade issuer-level credit rating."[92] The process to determine the MIDC comprises three steps:[93]

1) Provide the non-financial factor scores given by Moody's and S&P analytical credit models at the time the Stress Test is performed;[94]
2) Using the non-financial factor scores, determine the minimum financial strength metrics necessary to obtain an investment-grade credit score; and
3) Determine the amount of debt (MODC) the Company can bear while maintaining the minimum financial strength to achieve the target rating of minimum investment-grade.[95]

Here, the analysis based on S&P and Moody's methodologies demonstrates that PG&E currently exceeds the maximum amount of debt that is consistent with a minimum investment-grade issuer credit rating in the context of PG&E's non-financial factor scores. As described above, subject to adjustment for Excess Cash and the Regulatory Adjustment, STC then can be calculated based on the difference between PG&E's Debt Forecast (which includes disallowed 2017 wildfire costs) and the MODC. PG&E's Debt Forecast exceeds the MODC by at least $7.5 billion.

a. Step 1: Non-Financial Factor Scores (*J. Sauvage*)

As described above, Moody's and S&P base their credit analyses on two key factors: business risk and financial leverage. The first step of the MIDC focuses on the business risk factor.

As noted above, S&P notes in its June and July 2020 reports that PG&E's business risk profile is at the lower end of the range for the "satisfactory" business risk profile category.[96] Figure 5-9 illustrates this

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92 *Id.* at 4.

93 *Id.* at 8–9.

94 *Id.* at 4.

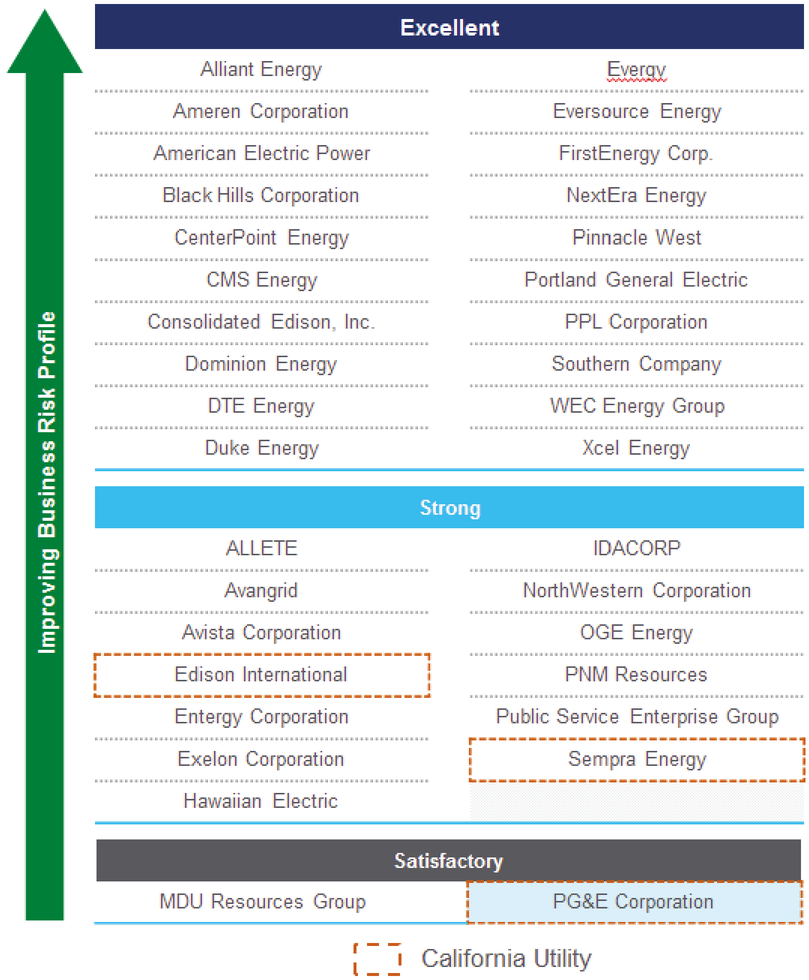
95 *Id.* at 8–9.

96 Exhibit 5.6 at 5-Exh5.6-1, 5-Exh5.6-13.

business risk profile in comparison to peer firms in the industry. The two other California utility holding companies have a "strong" business risk profile and are outlined in orange. Other than PG&E, only MDU Resources Group has a "satisfactory" business risk profile, because of its higher risk, unregulated construction materials and construction services business. In 2019, MDU Resources Group's regulated energy segment constituted only 37 percent of its earnings, while its unregulated business constituted 63 percent of its earnings.[97] Therefore, MDU's larger unregulated segment drags down the overall business risk profile of the Company. While PG&E received a "satisfactory" business risk rating, the Governor's statement of support for Securitization together with ultimate approval of the transaction by the Commission stand to improve PG&E's business risk profile and credit quality.

97 March 4, 2020 MDU Resources Investor Presentation.

FIGURE 5-9
S&P UTILITY BUSINESS RISK RATINGS



Note: S&P Global Ratings Credit Reports.

b. Step 2: Minimum Financial Strength (*J. Sauvage*)

As described above, rating agencies determine a utility's issuer credit rating based on analysis of the foregoing business risk factor, as well as the utility's financial risk. Together, these components fit into the above-pictured matrices, which are used to assign credit ratings. The financial risk assessment is based on key credit ratios, namely FFO / Debt (S&P) and CFO Pre-WC / Debt (Moody's).

Importantly, Figures 5-10 and 5-11 illustrate that the other California utilities (SCE and SDG&E) have stronger FFO / Debt and CFO Pre-WC / Debt metrics than other utilities at the same credit ratings. Both utilities have credit metrics significantly in excess of the midpoint of the applicable credit rating ranges on FFO / Debt and CFO Pre-WC / Debt.

FIGURE 5-10
UTILITIES WITH COMPARABLE RISK PROFILES (S&P)

Utilities with Comparable Risk Profiles

		S&P						
		Parent Risk Profile Rating				FFO / Debt		
	OpCo / Entity	Business Risk	Financial Risk	OpCo Rating	2020E	Upgrade Threshold	Downgrade Threshold	Positive / Negative Modifiers
Operating Company with BBB+ / BBB / BBB- Rating								
ALLETE	ALLETE, Inc.*	Strong	Significant	BBB+*	~20.0%	20.0%	20.0%	+ 1 Notch (Positive)
Avista	Avista Corp.*	Strong	Significant	BBB*	14.0 - 16.0%	20.0%	14.0%	None
Edison International	Southern California Edison Co.	Strong	Significant	BBB	18.0 - 22.0%	N/A	15.0%	None
Entergy	Entergy New Orleans LLC Entergy Texas Inc	Strong	Significant	BBB+ BBB+	20.0 - 21.0% 9.0 - 11.0%	17.0%[1]	14.0%[1]	+ 1 Notch (Positive) + 3 Notches (Positive)
Exelon	PECO Energy Co.	Strong	Significant	BBB+	~19.0%[1]	24.0%[1]	19.0%[1]	+ 3 Notches (Negative)
HEI	Hawaii Electric Light Co. Maui Electric Co.	Strong	Significant	BBB- BBB-	~18.0%[1]	18.0%[1]	18.0%[1]	+ 1 Notch (Negative)[1]
IDACORP	Idaho Power Co.	Strong	Significant	BBB	15.0 - 17.0%	20.0%	14.0%	None
NorthWestern Energy	NorthWestern Corporation*	Strong	Significant	BBB*	15.0 - 16.0%	23.0%	14.0%	None
PNM Resources	Public Service Co. of New Mexico Texas-New Mexico Power Co.	Strong	Significant	BBB BBB+	~17.0% 18.0 - 20.0%	17.0%[1]	14.0%[1]	None +1 Notch (Negative)
Sempra Energy	San Diego Gas & Electric Co.	Strong	Significant	BBB+	~20.0%	25.0%	15.0%	+ 1 Notch (Positive)
Operating Company with A / A- Rating								
Avangrid	Connecticut Natural Gas Corp New York State Electric & Gas Corp Southern Connecticut Gas Co. Central Maine Power Co.	Strong	Significant	A- A- A- A	22.0 - 24.0% 17.0 - 19.0% 21.0 - 22.0% ~20.0%	20.0%[2] 25.0%	18.0%[2] 20.0%	None None None +1 Notch (Positive)
Entergy	Entergy Arkansas LLC Entergy Louisiana LLC Entergy Mississippi LLC	Strong	Significant	A- A- A-	18.0 - 19.0% 14.0 - 18.0% 20.5 - 21.5%	17.0%[1]	14.0%[1]	None None None
Exelon	Commonwealth Edison Co.	Strong	Significant	A-	18.0 - 21.0%	21.0%	16.0%	None
OG&E	Oklahoma Gas & Electric Co.	Strong	Significant	A-	19.0 - 20.0%	23.0%	15.0%	None
PSEG	Public Service Electric & Gas Co.	Strong	Significant	A-	18.0 - 20.0%	N/A	11.0%	+2 Notches (Negative)
Sempra Energy	Oncor Electric Delivery Co.	Strong	Significant	A	13.0 - 15.0%	16.0%	12.0%	+1 Notch (Negative)

Source: S&P's RatingsDirect, Moody's.
Note: * Indicates the utility has no rated operating company.
1. Evaluated based on HoldCo credit metrics.
2. Connecticut Natural Gas Corp, New York State Electric & Gas Corp and Southern Connecticut Gas Co. evaluated based on ultimate parent Iberdrola's FFO / Debt, while Central Maine Power Co. ("CMA") also evaluated based on its own FFO / Debt.
3. Moody's reports FFO / Debt for Central Maine Power Co. instead of CFO Pre-WC / Debt.

Note: S&P Global Ratings Credit Reports.

FIGURE 5-11
UTILITIES WITH COMPARABLE RISK PROFILES (MOODY'S)

Utilities with Comparable Risk Profiles

			Moody's		
			CFO Pre-WC / Debt		
	OpCo / Entity	OpCo Rating	2020E - 2021E Forecast	Upgrade Threshold	Downgrade Threshold
Operating Company with Baa / Ba Rating					
ALLETE	ALLETE, Inc.*	Baa1*	19.0 - 22.0%	22.0%	19.0%
AVISTA	Avista Corp.*	Baa2*	15.0 - 17.0%	19.0%	14.0%
EDISON INTERNATIONAL	Southern California Edison Co.	Baa2	16.0 - 18.0%	18.0 - 19.0%	15.0%
Entergy	Entergy Arkansas LLC	Baa1	10.0 - 15.0%	25.0%	15.0%
	Entergy Louisiana LLC	Baa1	16.0 - 18.0%	21.0%	17.0%
	Entergy Mississippi LLC	Baa1	17.0 - 20.0%	20.0%	16.0%
	Entergy New Orleans LLC	Ba1	18.0 - 20.0%	N/A	15.0%
	Entergy Texas Inc	Baa3	14.0 - 16.0%	15.0%	13.0%
NorthWestern Energy	NorthWestern Corporation*	Baa2*	12.0 - 15.0%	18.0%	14.0%
PNM Resources	Public Service Co. of New Mexico	Baa2	16.0 - 19.0%	20.0%[1]	18.0%[1]
Sempra Energy	San Diego Gas & Electric Co.	Baa1	22.0 - 25.0%	22.0%	18.0%
Operating Company with A Rating					
AVANGRID	Connecticut Natural Gas Corp	A3	23.0 - 26.0%	23.0%	18.0%
	New York State Electric & Gas Corp	A3	18.0 - 22.0%	22.0%	19.0%
	Southern Connecticut Gas Co.	A3	20.0 - 24.0%	23.0%	17.0%
	Central Maine Power Co.	A2	18.0 - 20.0%[3]	25.0%[3]	18.0%[3]
Exelon	Commonwealth Edison Co.	A3	13.0 - 15.0%	20.0%	13.0%
	PECO Energy Co.	A2	21.0 - 24.0%	25.0%	20.0%
IDACORP	Idaho Power Co.	A3	14.0 - 16.0%	20.0%	15.0%
OG&E	Oklahoma Gas & Electric Co.	A3	19.0 - 21.0%	24.0%	19.0%
PNM Resources	Texas-New Mexico Power Co.	A3	16.0 - 19.0%	22.0%	18.0%
PSEG	Public Service Electric & Gas Co.	A2	18.0 - 20.0%	24.0%	19.0%
Sempra Energy	Oncor Electric Delivery Co.	A2	15.0 - 17.0%	19.0%	15.0%

Source: S&P's RatingsDirect, Moody's.
Note: * Indicates the utility has no rated operating company.
1. Evaluated based on HoldCo credit metrics.
2. Connecticut Natural Gas Corp, New York State Electric & Gas Corp and Southern Connecticut Gas Co. evaluated based on ultimate parent Iberdrola's FFO / Debt, while Central Main Power Co. ("CMA") also evaluated based on its own FFO / Debt.
3. Moody's reports FFO / Debt for Central Maine Power Co. instead of CFO Pre-WC / Debt.

Note: Moody's Credit Reports.

c. Step 3: Maximum Incremental Debt Capacity (*J. Sauvage*)

Based on the analysis at Step 2, this section describes the specific financial leverage ratios that PG&E will need to meet in order to achieve an investment-grade issuer credit rating.

FIGURE 5-12
TARGET FINANCIAL METRICS

Line No.	Rating Agency	Financial Metrics	Ranges and Targets
1	**S&P**	FFO / Debt	13.0% – 23.0% → Financial Target[a] of 23.0% California Peer (SCE and SDG&E average) of 20.0%
		Debt / EBITDA	4.5x – 3.5x → high point of 3.5x
2	**Moody's**	CFO Pre-WC / Debt	13.0% – 22.0% → Financial Target of 19.75% California Peer (SCE and SDG&E average) of 20.25%
		CFO Pre-WC + Interest / Interest	3.0x – 4.5x → 4.125x midpoint of upper range
		CFO Pre-WC – Dividends / Debt	9.0% – 17.0% → 15.0% midpoint of upper range
		Debt / Capitalization	55.0% – 45.0% → 47.5% midpoint of upper range

(a) Utilizing the high end of the range for S&P credit metrics could enable PG&E to achieve a one- or two-notch upgrade based upon its financial metrics, which when combined with either a business risk improvement and/or elimination of one or both of the negative modifiers could lead to an investment-grade issuer credit rating at the Utility.

The standard credit rating metric ranges do not account for modifiers that might be applied to a company's rating. As noted above, PG&E has a two-notch negative modifier from S&P, which further demonstrates that PG&E will need an FFO / Debt significantly above both the minimum and the midpoint of the range to achieve an investment-grade credit rating for the Company. In fact, clear indications from S&P show that targeting the midpoint metric (18 percent FFO / Debt) would be woefully inadequate for enabling PG&E to achieve an investment-grade issuer credit rating. At most, FFO / Debt of 18 percent could lead to a single-notch upgrade for PG&E from BB- to BB, well short of the three-notch upgrade that PG&E needs to achieve an investment-grade issuer credit rating. Accordingly, the Financial Target and the California Peer credit ratios are the minimum level that PG&E should target in order to obtain an investment-grade issuer credit rating. SCE and SDG&E are the closest available comparators to PG&E (as the other two large IOUs in California), but in reality, as described above, given that PG&E's business risk is higher than its California utility peers, PG&E would be assigned a lower issuer credit rating than SCE and SDG&E even if PG&E achieved a comparable financial risk profile.[98]

For S&P, the Financial Target metric for FFO / Debt is 23 percent, which would place PG&E at the low end of the intermediate financial risk profile. With no change to PG&E's business risk ("significant"), that would imply an anchor rating of bbb+ with a negative two-notch modifier resulting in an issuer credit rating of BBB- (the lowest investment-grade credit rating). If the Securitization is approved, it is likely that either business risk would improve (to "strong") and/or S&P could remove one or both of the negative modifiers, which would allow PG&E to target a lower FFO / Debt threshold—based on the SCE and SDG&E average, and which we call the California Peer metric, of 20 percent.

For Moody's, the Financial Target metric for CFO Pre-WC / Debt is 19.75 percent, which is the midpoint of the upper half of the Moody's Baa range for the standard business risk grid. The alternative is the California Peer metric, based on the SCE and SDG&E average of CFO Pre-WC / Debt, which is 20.25 percent.

Using the Financial Target (i.e., a 23.0 percent FFO / Debt for S&P and a 19.75 percent CFO Pre-WC / Debt for Moody's) and using the SCE and SDG&E average or California Peer metric (i.e., a 20.0-percent FFO / Debt for S&P and a 20.25 percent CFO Pre-WC / Debt for Moody's) yields an average STC in excess of the $7.5 billion that PG&E seeks to securitize.

In order to more accurately represent PG&E's credit profile, the analysis here should target these higher metrics based on the estimate of what it would take for the Utility to achieve an investment-grade credit rating and the average of SCE and SDG&E FFO / Debt and CFO Pre-WC / Debt. Indeed, the Decision explicitly recognizes that while the Methodology "target[s] the midpoint of the desired financial ratios of investment grade credit ratings, … in applying the methodology, the Commission may, in the exercise of its regulatory expertise, use its

98 *See also* I.19-09-016, Jan. 31, 2020 Opening Testimony, Chapter 3, Ability to Raise Capital Post-Emergence (John Plaster), at 3-7:11-22.

discretion to select financial ratios within the ranges that achieve investment grade ratings, including S&P's partial investment grade ratings, in order to minimize rate impacts."[99] PG&E's rate-neutral structure already is specifically designed not just to minimize but to avoid any customer rate impacts. Thus, PG&E's ability to achieve an investment-grade issuer credit rating through the designation of STC and the proposed Securitization should be the primary guide for the Commission in selecting the appropriate target financial ratios to use. Relatedly, the Methodology states:

> The implied Maximum Incremental Debt Capacity value from the different financial metrics will likely not match; therefore, a utility should seek to maximize its Maximum Incremental Debt Capacity within the rating agencies' frameworks for purposes of determining the Customer Harm Threshold.

Stress Test Methodology at 11 n.11. As reflected in Exhibit 5.1, the analysis at the midpoint for certain credit metrics (including FFO / Debt) yields a value less than $7.5 billion in STC. But that figure should not be used to limit the amount of eligible STC to less than $7.5 billion. First, as described above, PG&E will likely need credit metrics well above the midpoint of the range in order to achieve an investment-grade issuer credit rating; the Financial Target and the California Peer metrics, which using both methodologies yield STC well in excess of $7.5 billion, are a more appropriate targets. Second, the Commission should exercise its discretion to find that there are at least $7.5 billion of eligible STC. It also is appropriate to find at least $7.5 billion of eligible STC in light of the customer benefits and rate-neutral design of the proposed Securitization. *See* Section G.3 (Regulatory Adjustment).

The application of the Financial Target and California Peer metrics to PG&E's financial projections[100] is shown below in Figures 5-13 (S&P) and 5-14 (Moody's).[101]

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[99] D.19-06-027 at 28.

[100] Financial projections were provided by PG&E and prepared by Lazard.

[101] The ratios in the analysis reflect customary adjustments made by S&P and Moody's to account for items such as Pension Liability Recorded and Purchase Power Debt Equivalent.

FIGURE 5-13
S&P MIDPOINT AND PEER CREDIT METRICS

Financial Target FFO / Debt - 23.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo FFO	$6,617	$7,209	$7,657
FFO/Debt	23.0%	23.0%	23.0%
S&P Maximum Overall Debt Capacity	$28,768	$31,343	$33,290
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$12,089**	**$13,158**	**$13,188**
3 Year Average Stress Test Costs		***$12,812***	

CA Peer FFO / Debt - 20.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo FFO	$6,501	$7,083	$7,523
FFO/Debt	20.0%	20.0%	20.0%
S&P Maximum Overall Debt Capacity	$32,505	$35,414	$37,614
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$8,353**	**$9,086**	**$8,864**
3 Year Average Stress Test Costs		***$8,768***	

FIGURE 5-14
MOODY'S MIDPOINT AND PEER CREDIT METRICS

Financial Target CFO Pre-WC / Debt - 19.75%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,800	$6,526	$7,012
CFO Pre-W/C / Debt	19.75%	19.75%	19.75%
Moody's Maximum Overall Debt Capacity	$29,366	$33,041	$35,505
Moody's Adjusted Debt (Forecast Without Securitization)	39,015	42,658	44,635
Stress Test Costs	**$9,649**	**$9,617**	**$9,130**
3 Year Average Stress Test Costs		***$9,465***	

CA Peer CFO Pre-WC / Debt - 20.25%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,819	$6,548	$7,036
CFO Pre-W/C / Debt	20.25%	20.25%	20.25%
Moody's Maximum Overall Debt Capacity	$28,737	$32,334	$34,745
Moody's Adjusted Debt (Forecast Without Securitization)	39,015	42,658	44,635
Stress Test Costs	**$10,278**	**$10,324**	**$9,891**
3 Year Average Stress Test Costs		***$10,164***	

Figures 5-13 and 5-14 use the Utility's three-year financial forecast, including the current fiscal year 2020 (the year of PG&E's emergence from bankruptcy).[102] For reference, further calculations corresponding

[102] *See* Stress Test Methodology at 9 ("The [MIDC] value uses the utility's 3-year financial forecast including the current fiscal year (with the standard Moody's and S&P adjustments to financials)[.]"); Exhibit 5.4.

to the high, midpoint, and low ends of the S&P and Moody's metric ranges are included in Exhibit 5.1.

The numbers in Figures 5-13 and 5-14 include certain adjustments based on how the rating agencies are expected to apply their methodologies, as reflected in Exhibit 5.4. For the S&P-based analysis, (1) PG&E's projected FFO without the benefit of the securitization is adjusted for interest;[103] and (2) the interest-adjusted FFO is then divided by the target FFO / Debt ratio (here, 20.0 percent or 23.0 percent) to yield the S&P MODC. Typically, the next step would be to calculate PG&E's MIDC by subtracting PG&E's S&P adjusted forecast of existing debt (excluding the disallowed 2017 wildfire costs) from the MODC. As described above, PG&E here uses a mathematically equivalent approach that compares the MODC to PG&E's Debt Forecast (including the disallowed 2017 wildfire costs). Given PG&E's current sub-investment-grade issuer credit rating, Figure 5-13 shows that PG&E's Debt Forecast is higher than the S&P MODC by an average of $12.812 billion at the Financial Target (i.e., 23.0 percent) and an average of $8.768 billion at the California Peer metric (i.e., 20.0 percent). Because PG&E recommends that Excess Cash and Regulatory Adjustment should each be zero, PG&E's STC (based on the S&P analysis) are $12.812 and $8.768 billion, using the Financial Target and the California Peer metric, respectively.[104]

Similarly, using Moody's metrics, (1) PG&E's CFO Pre-WC without the benefit of the securitization is adjusted for interest; and (2) the interest adjusted CFO Pre-WC is divided by the target CFO Pre-WC / Debt ratio (here, 19.75 percent and 20.25 percent) to yield the Moody's MODC. Figure 5-14 reflects that PG&E's Debt

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[103] Interest adjustment is used to reflect the post-tax interest expense change in OpCo FFO based on the increase/decrease of MODC relative to the debt from the PG&E forecast. The relationship is circular given a change in debt changes the FFO / Debt ratio, which requires an adjustment in FFO to rebalance the ratio.

[104] Put another way, because PG&E's Debt Forecast already exceeds the MODC, PG&E's MIDC—the additional debt that PG&E can take on and maintain an investment-grade issuer credit rating—is effectively zero. Upon emergence, PG&E will not have capacity to take on any amount of incremental debt while also achieving an investment-grade credit rating.

Forecast is higher than the Moody's MODC at the Financial Target metric (i.e., 19.75 percent) by an average of $9.465 billion and an average of $10.164 billion at the California peer metric (i.e., 20.25 percent). PG&E's STC (based on the Moody's analysis) are $9.465 billion and $10.164 billion, for the Financial Target and the California Peer metric, respectively.

d. Conclusion (*J. Sauvage*)

As discussed previously, PG&E has a two-notch negative modifier from S&P and S&P's July 2020 credit report indicates that an upgrade from BB- to BB would require material improvements in PG&E Corporation's consolidated financial metrics, such as FFO / Debt consistently greater than the midpoint of the range at 18 percent, and PG&E Corporation's metrics are projected to be slightly lower than the Utility's in the near future. An upgrade to investment-grade, therefore, would require the Utility FFO / Debt to be higher than 23 percent for an additional two-notch upgrade, from BB, and require PG&E to improve its business risk profile or reverse one of the two negative modifiers it received for the comparable ratings analysis modifier and the management and governance modifier.

FIGURE 5-15
S&P AND MOODY'S AVERAGE STRESS TEST COSTS

	Average Stress Test Costs	
($ in millions)	Financial Target	CA Peer
FFO / Debt	$12,812	$8,768
CFO Pre-WC / Debt	$9,465	$10,164
Both Metrics	$11,138	$9,466

The foregoing analysis demonstrates that PG&E's Debt Forecast will exceed its MODC by $11.138 billion on average, for both rating agencies, at the Financial Target. Similarly, using the California Peer metric, PG&E's Debt Forecast will exceed its Maximum Overall Debt Capacity by $9.466 billion on average, for both rating agencies. These results are well in excess of the $7.5 billion of costs that PG&E seeks to securitize as STC.

2. **Excess Cash (*J. Sauvage*)**

Excess Cash under the Stress Test Methodology is designed to account for cash and cash equivalents not captured by the MIDC calculation.[105] This inquiry determines the minimum amount of cash reasonably necessary to operate the business in the ordinary course, relative to existing cash balances; and therefore, estimates the amount of cash available above the utility's cash necessary for operations.[106]

Utilities traditionally keep limited amounts of cash on their balance sheets and instead rely on their credit facilities for liquidity needs. Consistent with that norm, PG&E does not maintain excess cash. The Company, instead, maintains sufficient liquidity from daily customer receipts—about $80 million per day—and revolving credit facilities. The reason for this arrangement is that CPUC regulations incentivize PG&E not to hold unnecessary cash by virtue of its working capital allowance in rate base. Standard Practice U-16 states that:

> …[c]ash held for construction, for purchases of stock, for payment of dividends and interest on funded debt, and like purposes does not qualify for inclusion in cash working capital.

In other words, cash held in excess of minimum bank requirements or other specific operational requirements cannot earn a return as the cash cannot be included in rate base. Thus, prior to the time that PG&E entered Chapter 11 bankruptcy, the Company maintained an average of about $62 million in cash.[107] PG&E's practice is consistent with other utility operating companies' cash balances (median of approximately $50 million).[108] This practice is evidenced by the low ratio of operating cash as compared to a utility's credit facility size.

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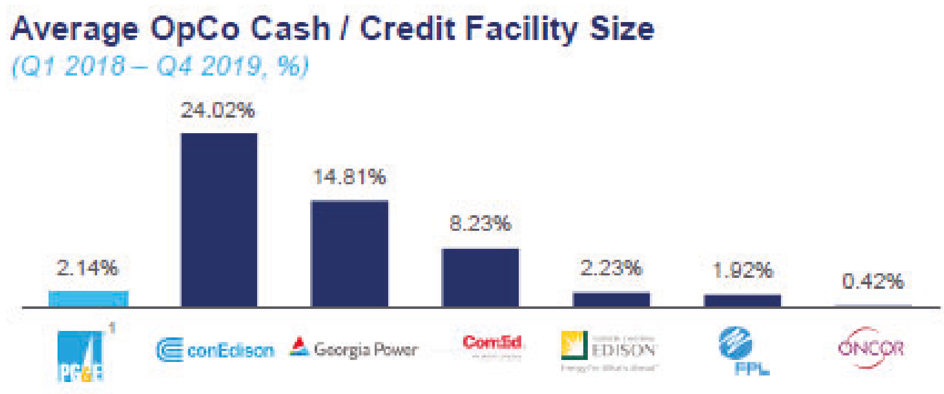
[105] Stress Test Methodology at 5.

[106] *Id.* at 11.

[107] *See* Figure 5-18.

[108] S&P Global Market Intelligence; Company 10-K and 10-Q Filings.

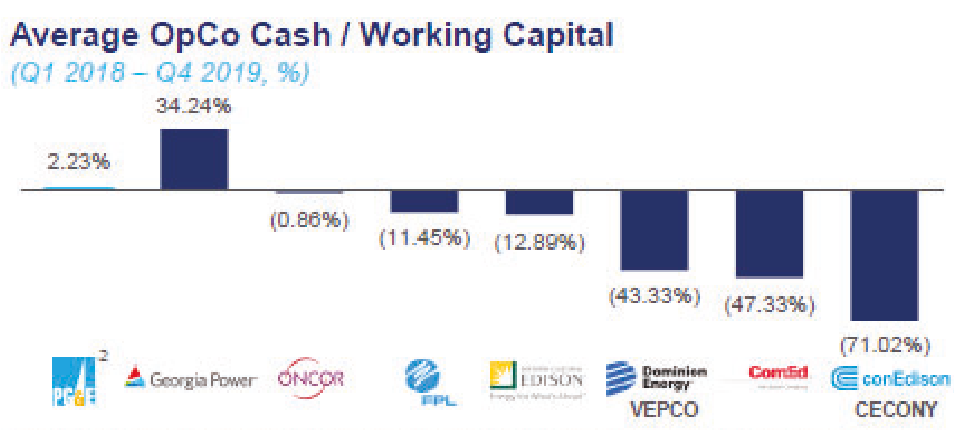
FIGURE 5-16
RATIO OF OPERATING CASH TO CREDIT FACILITY SIZE



Note: S&P Global Market Intelligence; Company 10-K and 10-Q Filings.

Additionally, Figure 5-17 illustrates the consistently low level of liquidity across the industry normalized for working capital.

FIGURE 5-17
RATIO OF OPERATING CASH TO WORKING CAPITAL



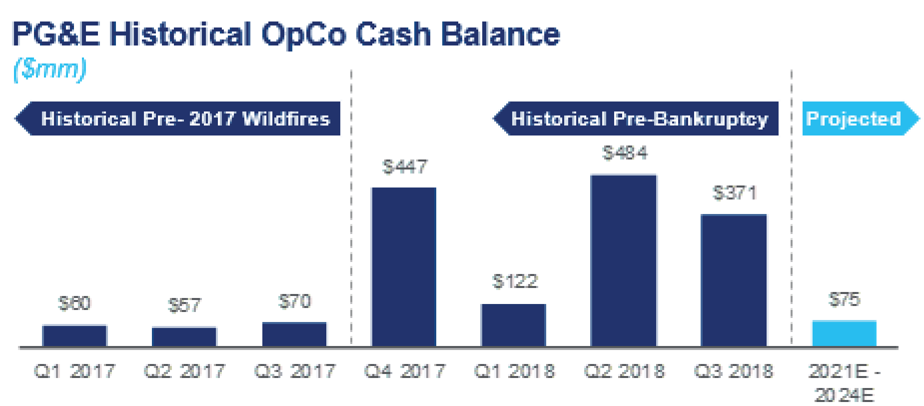
Note: S&P Global Market Intelligence; Company 10-K and 10-Q Filings.

Figures 5-16 and 5-17 also demonstrate that, as compared to other utilities in the sector, PG&E's projected cash balances are in line with, or slightly below, its peers based on its cash balances normalized for either credit facility size or working capital.

Figure 5-18 below shows PG&E's operating company cash balance. During the pendency of PG&E's Chapter 11 cases (which period is excluded from Figure 5-18), the Utility accrued large cash balances from suspending its common and preferred dividends, suspending interest payments on its prepetition debt, and suspending payments to certain vendors. Additionally, PG&E expects to hold a significant amount of cash at year-end 2020 (approximately $400 million), which will be used in early 2021 to pay claims PG&E owes to creditors and in connection with obligations under PG&E's Plan. This is not "excess" cash as contemplated by the Stress Test Decision and, accordingly, 2020 also is excluded from Figure 5-18 below, which otherwise reflects PG&E's average cash balance through 2024.[109]

For that period, PG&E does not anticipate holding large cash balances other than as needed to pre-fund certain large payments. Other than these times in which PG&E will carry higher cash balances on a temporary basis, the Utility is projected to hold cash balances of approximately $75 million, consistent with its pre-Chapter 11 practice.

FIGURE 5-18
PG&E OPERATING COMPANY CASH BALANCE



Note: PG&E's 10-K and 10-Q Filings.

Under the Stress Test Decision, Excess Cash also is adjusted to reflect the aggregate value of dividends paid by the Utility within one year prior to the Utility's filing of a Stress Test application. Here, PG&E suspended its

109 That is consistent with the period covered by the Financial Forecasts appended to this testimony. *See* Exhibit 5.4.

common and preferred dividends in December 2017 and therefore the value of applicable dividend payments is zero.

Also under the Stress Test Decision, the Excess Cash inquiry may consider prudent alternatives available to monetize non-core assets.[110] This factor considers utility assets that, if sold, would have no impact on the utility's ability to provide safe and reliable service, and would increase the utility's ability to fund claims resulting in a net financial benefit to customers. A "non-core" asset is one that is not necessary to the provision of utility service and may also be referred to as a "non-utility" asset. Such assets include things that the utility uses in a non-regulated business, such as tax equity investments in affordable housing. PG&E, however, does not currently have any material investments in non-utility operations and does not expect to have any for the foreseeable future. Moreover, any asset sales in PG&E's five-year financial forecast are already accounted for in this analysis and should not be considered to yield Excess Cash.[111]

As discussed above, PG&E's projected cash balance of approximately $75 million from 2021 through 2024 is in line with its pre-Chapter 11 historical cash balance and is consistent with peer firms within industry. That limited cash on hand is appropriate to operate the business in the normal course and should not be counted toward the Excess Cash component. PG&E also does not presently possess any non-core assets that could be monetized to increase Excess Cash, and any asset sales are already accounted for in PG&E's forecast and this analysis. The Excess Cash component, therefore, should be zero.

3. Regulatory Adjustment (*D. Thomason*)

The third step of the Stress Test enables the Commission to exercise its unique expertise in ratemaking for California utilities to apply a discretionary adjustment, called the Regulatory Adjustment. The Stress Test Decision

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[110] Stress Test Methodology at 11.

[111] David Thomason is sponsoring testimony addressing asset sales. In order to streamline, the issue therefore is addressed in more detail in the next section (Regulatory Adjustment). Nonetheless PG&E recognizes that "[t]he primary consideration of asset sales will be completed as part of the excess cash calculation." D.19-06-027 at 54 (FOF ¶ 8).

contemplates that the Commission typically can adjust the CHT up or down by a maximum of 20 percent of the subtotal of the first two components (MIDC + Excess Cash). The Stress Test Decision also recognizes that if a utility is already below investment-grade, the first two components of the Stress Test may yield a result that is “very low or even zero,” in which case the Regulatory Adjustment instead may be up to 5 percent of the disallowed 2017 wildfire liability.[112]

Here, the output of the first two components is zero, because the MIDC is effectively zero and the utility does not have applicable Excess Cash. Thus, the available Regulatory Adjustment is 5 percent of the disallowed 2017 wildfire liability. The disallowed wildfire liability has been quantified at no less than $7.5 billion. Accordingly, the available Regulatory Adjustment is up or down in an amount up to $375 million.[113]

PG&E’s position is that a Regulatory Adjustment is not warranted under the circumstances of PG&E’s application. The Stress Test Methodology states:

> The Commission’s aim in applying the Regulatory Adjustment is to ensure the applicant utility can maintain or reach an investment grade credit rating while minimizing rate impacts as much as possible.[114]

For the reasons described above, the Securitization will support PG&E’s return to an investment-grade issuer credit rating because it will bolster rating agencies’ views of PG&E’s business risk and strengthen PG&E’s financial metrics. The Securitization structure already will minimize rate impacts, because PG&E will fund a Customer Credit to offset the costs of the FRCs to customers. PG&E forecasts that the Customer Credit Trust will distribute credits that will offset the FRCs in full, such that the net cost to

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[112] Stress Test Methodology at 13.

[113] The analysis in Chapter 4, Allocation of Settlements to 2017 Wildfires (D. Fischel) states that approximately $11.2 billion of the PG&E wildfire settlements can reasonably be attributed to the 2017 North Bay wildfires, and PG&E has stipulated to the disallowance of all such costs. The corresponding Regulatory Adjustment therefore could be up or down in an amount up to $560 million. PG&E believes that the maximum available adjustment is not relevant because the Regulatory Adjustment should not be applied here, and further submits that the $375 million figure is appropriate in any event because PG&E seeks to securitize only $7.5 billion in costs.

[114] Stress Test Methodology at 12; *see also* D.19-06-027 at 54 (FOF ¶ 11).

customers each year and over the life of the securitization bonds will be zero.[115] Accordingly, PG&E's proposal already satisfies the underlying objective of the Regulatory Adjustment because the Securitization is designed such that ratepayers do not bear the net economic burden of the disallowed costs. PG&E submits that if the Regulatory Adjustment were to be applied at all, it should be used to increase the amount of costs eligible for securitization given the rate-neutral design of PG&E's proposal.

Similarly, the Commission requires a utility to demonstrate that it has exhausted "reasonable opportunit[ies] … to satisfy disallowed wildfire costs, or to otherwise access capital on reasonable terms."[116] PG&E will satisfy all 2017 wildfire claims costs through its Plan, and expects to bear the net economic burden of disallowed wildfire costs through the Securitization, so this showing has limited relevance here. Specifically, even to the extent that PG&E could use other opportunities to raise capital to fund disallowed wildfire costs, that is irrelevant because PG&E already is devoting capital contributions to the Customer Credit Trust that are anticipated to compensate customers for the costs associated with the Securitization. Nonetheless, it also is true that PG&E cannot reasonably avail itself of other opportunities to fund disallowed wildfire costs that would eliminate or mitigate the basis for the proposed Securitization (which is to provide a customer-protective, rate-neutral financing mechanism that will support PG&E's path back to an investment-grade issuer credit rating).

The Stress Test Decision and Methodology suggest that the Utility should describe analysis of the potential for asset sales, financial policy enhancements, adjustments to dividend policies, assessment of equity flows to or from the parent corporation, reducing or deferring discretionary spending, and whether the Utility could feasibly raise additional equity in the market.[117]

As described in the Excess Cash section above, PG&E does not anticipate future asset sale proceeds that should be used to raise capital to

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[115] *See* Chapter 6, Customer Credit Mechanism and Investment Returns (D. Thomason; G. Allen).

[116] Stress Test Methodology at 12.

[117] *Id.*; D.19-06-027 at 38-39.

fund disallowed wildfire costs. The utility does own assets that are currently used in the provision of utility service that could be sold for cash and are not directly used to produce or deliver energy. These assets include, for example, office buildings, service centers, and other support facilities. When these assets are sold, the proceeds of the sale typically are credited to rate base, thereby reducing future rates. Thus if the sale proceeds were instead used to increase the CHT, then STC would be lower, but customers would not receive the credit to the rate base. Under those circumstances, there would be no net benefit to customers from such sales because any realized gain would either flow back to customers in rates, or be added to the CHT, but would not do both.

PG&E has considered some sale of assets, including real estate assets. For instance, PG&E's five-year financial forecast includes approximately $1.3 billion in savings associated with asset sales in 2020, including a potential disposition of surplus properties and redesign of PG&E's headquarters.[118] However, those savings are already accounted for in PG&E's forecast and the above analysis. Moreover, a sale of assets that are necessary or useful to PG&E's duties to the public would be subject to Commission review in a separate proceeding pursuant to Section 851, and the sale of surplus properties is also separately being addressed in I.15-08-019. In those separate proceedings, the Commission can review those potential sales and also determine the appropriate treatment of the gain on any such sale.

The Commission also should not consider future dividend payments by PG&E in connection with the Regulatory Adjustment as contemplated in PG&E's financial forecast. PG&E suspended the payment of dividends in 2017, and the goal of reinstating a dividend is critical for PG&E after emerging from Chapter 11. Additionally, PG&E Corporation has committed that it will not pay dividends to its shareholders until it has recognized

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[118] *See* PG&E Corporation and Pacific Gas and Electric Company, Current Report (Form 8-K) (Feb. 18, 2020), Ex. 99.3 at 35 (PG&E Business Outlook slide presentation dated February 18, 2020); *see also* Disclosure Statement for PG&E's Plan at 176.

$6.2 billion in Non-GAAP Core Earnings following PG&E's exit from bankruptcy.[119]

PG&E executed a historically large capital raise to fund its Plan, and wildfire liabilities in particular. Indeed, a total of $20.5 billion in new equity was invested at exit, including equity infusions from PG&E Corporation and the payment of PG&E Corporation stock to the Fire Victim Trust. The vast majority of this equity was used to pay wildfire liabilities. Moreover, shareholders normally would stand to benefit in the future from the use of the NOLs associated with payment of wildfire claims. Yet PG&E has committed this unique and valuable shareholder asset to the Customer Credit Trust to fund the Customer Credit, or to delever and pay down the Temporary Utility Debt if Securitization is not approved. These equity investors expect a future return on their investment, including through dividend payments that align with general practice in the utility industry and PG&E's dividend policy.[120] PG&E's financial projections recognize this by slowly reinstating a modest utility dividend that is well below the yield and payout ratio that are typical in the industry and of PG&E's California utility peers. Similarly, projected equity flows between PG&E and PG&E Corporation should not form the basis for an upward Regulatory Adjustment to the CHT for the same reason. PG&E is not aware of any other financial policy adjustments that would be an appropriate means to raise capital to fund disallowed wildfire costs.

As for other spending reductions, PG&E has identified approximately $1 billion on average per year in operational cost savings and efficiency initiatives through 2024.[121] Those savings already are being directed to customers, to moderate the expected increase on customer bills to support

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[119] *See* Resolution Motion at 18; *see also* Order Pursuant to 11 U.S.C. §§ 105 and 363 and Fed. R. Bankr. P. 9019 (I) Approving Case Resolution Contingency Process and (II) Granting Related Relief (Approval Order), *In re PG&E Corporation*, No. 19-30088 (Bankr. N.D. Cal. Apr. 9, 2020), ECF No. 6721 (granting case resolution contingency process motion).

[120] *See* D.96-11-017, 69 CPUC 2d 167, 1996 WL 752962 ("The dividend policy of PG&E shall continue to be established by PG&E's Board of Directors as though PG&E were a comparable stand-alone utility company." (Ordering Paragraph 15)).

[121] *See* Disclosure Statement for PG&E's Plan at 169.

infrastructure investment.[122] Similarly, debt refinanced through PG&E's Plan resulted in substantial interest rate savings that PG&E is passing on to customers through an update in the Cost of Capital proceeding.[123] The Commission should not incorporate those cost reductions through the Regulatory Adjustment because the savings will already be directed to customers in the form of lower revenue requirements.[124]

Executive compensation is being addressed in other proceedings.[125] PG&E's priority is to design executive compensation that complies with AB 1054 and incentivizes public safety and customer welfare.[126] That said, the executive compensation structure is not designed to generate additional capital that could be used to fund disallowed wildfire costs. In any event, executive compensation is funded by shareholders,[127] and PG&E already is proposing that shareholders will fund the Customer Credit Trust that will generate Customer Credits equal to the Securitization charges on customer bills.

PG&E also should not raise additional equity capital to fund disallowed wildfire costs, beyond that contemplated by PG&E's Plan.[128] PG&E raised a historic amount of capital under the Plan, which resulted in shareholders ultimately funding the payment of all wildfire claims. PG&E is requesting the securitization of only $7.5 billion of costs, even though the Stress Test analysis above could support a securitization of approximately $11 billion. Moreover, PG&E's proposal minimizes any impact of the Stress Test on customers, because PG&E also is proposing a customer credit mechanism designed to ensure rate neutrality (and that includes further potential upside

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[122] *See also* PG&E Corporation and Pacific Gas and Electric Company, Current Report (Form 8-K) (Feb. 18, 2020), Ex. 99.3 at 35 (PG&E Business Outlook slide presentation dated February 18, 2020).

[123] *See* D.20-05-053 at 122; Advice Letter 4275-G/5887-E (July 22, 2020).

[124] In any event, cost savings from reduced spending will not flow to customers between rate cases unless the savings are recorded in a balancing account.

[125] *See* D.20-05-053 at 99-102.

[126] *Id.*

[127] *See* § 706.

[128] *See* Disclosure Statement for PG&E's Plan; *see also id.* at 173 (noting planned additional equity raise in 2021).

for customers through the 25 percent sharing of any surplus in the Customer Credit Trust). In this context, it is not reasonable, practical, or necessary for PG&E to issue additional equity to finance the disallowed wildfire costs.

PG&E's position is consistent with the Commission's statements in the Stress Test Decision. While additional equity issuance is part of the Regulatory Adjustment analysis, the Commission has also stated that it "believes looking to equity causes more ratepayer harm than benefit" because:

> [A]dding incremental equity financing introduces more speculation about the value shareholders will pay to acquire new shares and dilutes the utility's ownership, which in turn can impact credit ratings and returns on equity.[129]

This is particularly true "when a utility is already in a stressed situation" and "the cost of equity is more costly given the uncertainty of economic and ownership dilution."[130] Moreover, the COVID-19 pandemic has caused increased instability in financial markets. While the duration of those effects remains unknown, current market conditions create increased pressures on any future capital raise. In these circumstances, it would not be appropriate to use the Regulatory Adjustment to effectively require PG&E to raise even more equity, beyond that already raised to implement its Plan, to fund disallowed wildfire costs.

The Commission should not employ the Regulatory Adjustment to limit available STC to less than $7.5 billion. That would run counter to PG&E's showing in its application and testimony that determining that $7.5 billion of costs exceed the CHT will support a customer-protective, rate-neutral financing mechanism, in which shareholders are expected to retain the net economic burden of the securitized claims costs. That also would risk tension with the Governor's statement that he believes that a rate-neutral securitization pursuant to SB 901 that meets all legal requirements as determined by the CPUC would, in his judgment, be in the public interest. If the Commission used the Regulatory Adjustment to limit STC to less than $7.5 billion, capital markets participants and rating agencies would likely

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129 D.19-06-027 at 40.

130 *Id.*

interpret that action as reflecting a lack of support in the regulatory environment. That result would undermine the very effort to return to an investment-grade issuer credit rating that is the focus of this proceeding. Additionally, that result would be particularly detrimental in the current context, as PG&E just embarked on a historically large capital raise and will need additional capital post-emergence to fund wildfire safety and critical infrastructure investments.[131]

To the extent the Commission does not accept PG&E's recommendation to use the Financial Target and California Peer metrics and calculate STC of at least $7.5 billion, in the alternative the Commission should use the Regulatory Adjustment to increase the amount of STC to be securitized. The Regulatory Adjustment "allows the Commission to apply its unique expertise in ratemaking for California utilities based on the record."[132] Moreover, the goal of the Regulatory Adjustment "is to ensure the applicant utility can maintain or reach an investment grade credit rating while minimizing rate impacts as much as possible."[133] Here, the record shows unambiguous statements from S&P that PG&E Corporation would need to reach the midpoint metric (18 percent FFO / Debt) for, at most, a single-notch upgrade for PG&E from BB- to BB, well short of the three-notch upgrade that PG&E needs to achieve an investment-grade issuer credit rating.[134] In this context, the Commission can recognize that, given the rating agencies' distinct assessments of PG&E, it is appropriate to permit PG&E to securitize an amount that is consistent with the Financial Target metric or the California Peer metric. The Commission can further recognize that SCE and SDG&E are the closest comparators for PG&E, and under the circumstances, the credit metric benchmarks of its California peers (rather than the generic midpoints) are appropriate financial metric targets, as that approach will best support PG&E's achievement of an investment-grade issuer credit rating. Additionally, as described above, Securitization of

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131 *See also* I.19-09-016, PG&E's Post-Hearing Opening Brief, Appendix C (Declaration of Jason P. Wells) (Mar. 13, 2020), ¶¶ 14-20.

132 Stress Test Methodology at 12.

133 *Id.* at 12; D.19-06-027 at 54 (FOF ¶ 11).

134 Exhibit 5.6 at 5-Exh5.6-4, 5-Exh5.6-14.

> $7.5 billion strikes the appropriate balance: The Securitization will accelerate PG&E's path to an investment-grade issuer credit rating, producing valuable and concrete benefits to ratepayers, and will simultaneously minimize rate impacts, because PG&E has committed to securitize $7.5 billion of costs in a rate-neutral manner.

H. Tax Benefits (*D. Thomason*)

The Stress Test Decision states that the Commission will:

> …address and preserve for ratepayers (without duplication) such tax benefits associated with losses from events that give rise to the Stress Test application.[135]

PG&E's application satisfies that element of the CHT methodology because it proposes to devote tax benefits arising from payment of the 2017 wildfire claims costs to customers. Furthermore, PG&E will devote the tax benefits arising from the 2015 and 2018 wildfire claims costs as well as certain contributions to the AB 1054 Wildfire Fund.

The Plan provides for PG&E to pay approximately $25.5 billion at Plan Value in settlement of Fire Claims. That payment creates significant NOLs, which are tax benefits that arise because wildfire claims costs are deductible business expenses. NOLs are generated when a business's tax deductions are more than its taxable income in a given year. The NOLs then can be used in future years to reduce PG&E's tax liabilities, resulting in cash flows that are associated with the use of the NOLs. Shareholders ordinarily retain the benefit of NOLs that are generated by shareholder-paid costs.[136] Here, because the costs of the wildfire claims will be borne by PG&E's shareholders, the NOLs arising from payment of wildfire claims costs will make available cash flows to

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[135] D.19-06-027 at 33-34.

[136] *See* I.19-09-016, Jan. 31, 2020 Opening Testimony, Chapter 2, Description of PG&E's Plan and Plan Funding (Jason P. Wells), at 2-17; *see, e.g.*, D.84-05-036 at 17 ("Tax losses are assets that belong to the shareholders who are responsible for the expenses which created the tax loss, and thus are entitled to the related tax benefit"); D.14-08-032 at 715 ("[W]hen deductions are not part of utility cost of service but derive from shareholder funds, the deductions are the property of shareholders[.]").

shareholders that would have otherwise been used to pay federal income taxes and State of California franchise taxes.[137]

As described in Chapter 6, PG&E will provide a Customer Credit that is projected to equal the FRCs associated with the Recovery Bonds. PG&E will fund the Customer Credit with distributions from the Customer Credit Trust that would be established upon approval of the Securitization by the Commission. PG&E proposes to fund the Customer Credit Trust starting in 2021 with an initial contribution of $1.8 billion (the Initial Shareholder Contribution). In later years, PG&E would fund additional contributions (the Additional Shareholder Contributions) to the Customer Credit Trust of up to $7.59 billion based on a formula to calculate the incremental cash generated from reducing taxes through applying shareholder-owned tax deductions or NOLs (Shareholder Tax Benefits). The Shareholder Tax Benefits primarily arise from payments made by PG&E's shareholders related to wildfire claim settlements and contributions to the Go-Forward Wildfire Fund described in Chapter 6. PG&E forecasts and expects that the Initial Shareholder Contribution, the Additional Shareholder Contributions, and investment returns on the Customer Credit Trust's assets (Customer Credit Trust Returns) will be sufficient for the Customer Credit Trust to fund Customer Credits that equal the FRCs, such that the net cost to customers each year and over the life of the Recovery Bonds will be zero.

Through that proposal, PG&E satisfies—indeed, goes beyond—the "require[ment] that a Stress Test application consider and adjust for any tax consequences of the relief sought under the Stress Test."[138] Here, the relief PG&E seeks is the ability to recover $7.5 billion of 2017 wildfire claims costs through a rate-neutral Securitization. The Securitization is anticipated to be rate-neutral because customers will receive a credit funded in part by tax benefits arising from wildfire claims payment that would otherwise belong to shareholders.

The Decision states:

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137 I.19-09-016, Jan. 31, 2020 Opening Testimony, Chapter 2, Description of PG&E's Plan and Plan Funding (Jason P. Wells), at 2-17.

138 D.19-06-027 at 34.

> Our intent is that a utility should not capture any tax benefits and those should be applied against the relief the utility is requesting from ratepayers.[139]

Here, the value of the tax benefits that will be directed to ratepayers will exceed the value of the tax benefits arising solely from the payment of $7.5 billion of 2017 wildfire claims costs for which PG&E seeks securitization. PG&E will fund Additional Shareholder Contributions to the Customer Credit Trust up to $7.59 billion, which is based on the value of tax benefits created by *all* PG&E shareholder payments of wildfire claims settlements (not just 2017), as well as certain shareholder-funded contributions by PG&E to the Go-Forward Wildfire Fund. Accordingly, PG&E's proposal ensures that ratepayers will receive a value that is greater than the value of the benefit of NOLs generated from the $7.5 billion of 2017 costs to be securitized.

I. Ratepayer Protection Measures (*D. Thomason*)

The Stress Test Decision states:

> [A]s part of a Stress Test application, a utility must include ratepayer protection measures aimed at mitigating harm to ratepayers.[140]

By proposing a Securitization that is anticipated to be rate-neutral to customers, PG&E is proposing a robust ratepayer protection measure. PG&E will provide customers with a credit so that the anticipated net cost to customers of the Stress Test application and resulting Securitization will be zero.

PG&E's proposal goes beyond the Stress Test Decision in the support that it provides to customers. The Stress Test Decision contemplates that ratepayer protection measures will:

> …provide ratepayers with an opportunity to participate in a utility's financial upside as the utility's long-term financial health improves, which is expected over the long term as well as immediately upon the Commission's authorization of Stress Test Cost recovery.[141]

But PG&E proposes to provide a Customer Credit to be funded by an Initial Shareholder Contribution and further through Shareholder Tax Benefits.

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139 *Id.*

140 *Id.* at 47.

141 *Id.* at 47-48. For example, the Stress Test Decision and Methodology propose the option that a utility provide ratepayers with equity warrants.

The existence and value of the Customer Credits are not contingent on the existence or degree of improvements to PG&E's long-term financial health in the sense contemplated by the Stress Test Decision. Instead, PG&E will commit to fund the Customer Credit Trust to facilitate Customer Credits over the life of the securitization bonds (as described in more detail in Chapter 6), regardless of the stock price over that period.[142] Additionally, PG&E will provide a further benefit to ratepayers by sharing 25 percent of any amount remaining in the Customer Credit Trust at the end of the life of the Trust.

The Stress Test Decision also states that ratepayer protection measures are:

> …intended as a safeguard to encourage utilities to maximize the share of disallowed costs they absorb and ensure utilities view the Stress Test as a financing mechanism of last resort.[143]

Through the Customer Credit, PG&E is maximizing the share of disallowed costs that will be borne by shareholders. PG&E already has accepted the disallowance of amounts paid in respect of Fire Victim Claims under PG&E's Plan, and PG&E funded the satisfaction of those amounts through equity, insurance proceeds, and proceeds of Temporary Utility Debt. PG&E will not recover the amounts paid in respect of Fire Victim Claims otherwise than through the Securitization of only $7.5 billion of the costs. Even for the Securitization, PG&E has designed the Customer Credit so that the Securitization cost to customers will be rate-neutral.

Additionally, PG&E is approaching the Stress Test as a financing mechanism that is appropriate only under certain circumstances.

The Securitization will cover only 2017 wildfire cost claims, and the $7.5 billion amount is a minority of the combined 2015, 2017 and 2018 wildfire claims costs. Moreover, the Securitization that PG&E is pursuing through the Stress Test will provide critical benefits to customers. As described above, customers will benefit from PG&E's accelerated path back to an investment-grade issuer credit rating. Additionally, customers will receive additional benefits through the Securitization transaction, as described in more detail in Chapter 6, Section B.7,

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[142] Even if PG&E's financial condition were to decline so as to force a future Chapter 11 filing, the Customer Credit could be maintained. *See* Application, Section III.B.6.

[143] D.19-06-027 at 48.

including the aforementioned sharing of any surplus of funds in the Customer Credit Trust.

PG&E's voluntary ratepayer protection measure is substantially the same as the proposals that were put forth by TURN and Energy Producers and Users Coalition (EPUC) in the CHT proceeding. TURN and EPUC requested mandatory repayment to ratepayers, which proposals the Commission rejected "despite their equitable appeal."[144] In fact, TURN sought to protect ratepayer interests by requiring the Utility to track customer costs of securitization, and to repay ratepayers the full amount of such costs, in part through cash flows from tax benefits in the form of NOLs.[145] In substance, that is what PG&E proposes to do here: PG&E will track the securitization costs to ratepayers (the FRCs) and has designed the Customer Credit so that these costs are rate-neutral. Consistent with TURN's proposal, moreover, PG&E will utilize the NOLs created by wildfire payments to fund the Customer Credit.

J. Conclusion (*D. Thomason*)

PG&E respectfully submits that the Commission should apply the Stress Test and determine that $7.5 billion of disallowed 2017 wildfire costs are eligible for securitization. PG&E has stipulated that all 2017 wildfire costs are "disallowed" because PG&E will not seek to recover them as just and reasonable; therefore, it is appropriate for the Commission to apply the Stress Test to the disallowed costs. PG&E can access the Stress Test despite its prior filing for Chapter 11 protection because the Commission can evaluate PG&E's financial status and because PG&E has now exited bankruptcy and updated this testimony to reflect emergence. Finally, PG&E has a path back to an investment-grade issuer credit rating through its Plan and the proposed rate-neutral Securitization.

PG&E has STC of at least $7.5 billion because in the context of PG&E's non-financial factor scores, PG&E could not add $7.5 billion of debt and obtain an investment-grade issuer credit rating. Additionally, PG&E does not have Excess Cash that would be relevant to the Stress Test. And the Commission should not employ the Regulatory Adjustment to limit PG&E's ability to recover

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[144] *Id.* at 48 & n.87.

[145] Rulemaking 19-01-006, TURN Comments on Staff Proposal (Apr. 24, 2019).

$7.5 billion through the proposed Securitization, in which shareholders—not customers—already retain the net economic burden of the securitized claims costs.

PG&E's Stress Test application also fulfills the Stress Test requirements because it devotes tax benefits arising from payment of 2017 wildfire claims costs to customers through the Customer Credit. And PG&E has ensured ratepayer protection through the Customer Credit, including the proposal to share any surplus in the Customer Credit Trust with customers.

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.1

MAXIMUM OVERALL DEBT ANALYSIS

EXHIBIT 5.1

Maximum Overall Debt Analysis (*J. Sauvage*)

The following figures show various calculations of Pacific Gas and Electric Company's (PG&E) Maximum Overall Debt Capacity and Stress Test Costs using Standard & Poor's, Inc. (S&P) and Moody's Investor Service (Moody's) methodologies and PGE's Financial Forecast Without Securitization, described in Exhibit 5.4. Additional details and the assumptions used for these calculations are described in Part G.1. of Chapter 5. Consistent with the Stress Test Methodology, this Exhibit includes "maximum debt capacity based on the low and high end of the rating agencies' financial criteria" as well as "the midpoint of such ranges."[1] For S&P's Funds From Operations (FFO) / Debt and Moody's Cash Flow from Operations Before Changes in Working Capital (CFO Pre-WC) / Debt, PG&E also includes the California Peer average metric.

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[1] D.19-06-027, Attachment A, Stress Test Methodology at 16.

FUNDS FROM OPERATIONS / DEBT

S&P Analysis - FFO / Debt

FFO / Debt Low - 13.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo FFO	$6,063	$6,606	$7,016
FFO/Debt	13.0%	13.0%	13.0%
S&P Maximum Overall Debt Capacity	$46,640	$50,815	$53,971
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**($5,783)**	**($6,314)**	**($7,493)**
3 Year Average Stress Test Costs		***($6,530)***	

FFO / Debt Midpoint - 18.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo FFO	$6,406	$6,979	$7,412
FFO/Debt	18.0%	18.0%	18.0%
S&P Maximum Overall Debt Capacity	$35,586	$38,771	$41,180
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$5,271**	**$5,729**	**$5,298**
3 Year Average Stress Test Costs		***$5,433***	

Financial Target FFO / Debt - 23.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo FFO	$6,617	$7,209	$7,657
FFO/Debt	23.0%	23.0%	23.0%
S&P Maximum Overall Debt Capacity	$28,768	$31,343	$33,290
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$12,089**	**$13,158**	**$13,188**
3 Year Average Stress Test Costs		***$12,812***	

CA Peer FFO / Debt - 20.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo FFO	$6,501	$7,083	$7,523
FFO/Debt	20.0%	20.0%	20.0%
S&P Maximum Overall Debt Capacity	$32,505	$35,414	$37,614
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$8,353**	**$9,086**	**$8,864**
3 Year Average Stress Test Costs		***$8,768***	

DEBT / EARNINGS BEFORE INTEREST, TAX, DEPRECIATION AND AMORTIZATION

S&P Analysis - Debt / EBITDA

Debt / EBITDA Low - 4.5x			
($ in millions)	**2020**	**2021**	**2022**
S&P Adjusted OpCo EBITDA	$7,655	$8,542	$9,206
Debt/EBITDA	4.5x	4.5x	4.5x
S&P Maximum Overall Debt Capacity	$34,449	$38,438	$41,428
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$6,409**	**$6,062**	**$5,050**
3 Year Average Stress Test Costs		***$5,840***	

Debt / EBITDA Midpoint - 4.0x			
($ in millions)	**2020**	**2021**	**2022**
S&P Adjusted OpCo EBITDA	$7,655	$8,542	$9,206
Debt/EBITDA	4.0x	4.0x	4.0x
S&P Maximum Overall Debt Capacity	$30,621	$34,167	$36,825
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$10,236**	**$10,333**	**$9,653**
3 Year Average Stress Test Costs		***$10,074***	

Debt / EBITDA High - 3.5x			
($ in millions)	**2020**	**2021**	**2022**
S&P Adjusted OpCo EBITDA	$7,655	$8,542	$9,206
Debt/EBITDA	3.5x	3.5x	3.5x
S&P Maximum Overall Debt Capacity	$26,794	$29,896	$32,222
S&P Adjusted Debt (Forecast Without Securitization)	$40,858	$44,501	$46,478
Stress Test Costs	**$14,064**	**$14,604**	**$14,256**
3 Year Average Stress Test Costs		***$14,308***	

CASH FLOW FROM OPERATIONS PRE-WORKING CAPITAL / DEBT

Moody's Analysis - CFO Pre-W/C / Debt

CFO Pre-W/C / Debt Low - 13.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,418	$6,097	$6,551
CFO Pre-W/C / Debt	13.0%	13.0%	13.0%
Moody's Maximum Overall Debt Capacity	$41,680	$46,897	$50,394
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**($2,665)**	**($4,239)**	**($5,759)**
3 Year Average Stress Test Costs		***($4,221)***	

CFO Pre-WC / Debt Midpoint - 17.5%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,700	$6,414	$6,892
CFO Pre-W/C / Debt	17.5%	17.5%	17.5%
Moody's Maximum Overall Debt Capacity	$32,574	$36,651	$39,384
Moody's Adjusted Debt (Forecast Without Securitization)	39,015	42,658	44,635
Stress Test Costs	**$6,441**	**$6,007**	**$5,252**
3 Year Average Stress Test Costs		***$5,900***	

Financial Target CFO Pre-WC / Debt - 19.75%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,800	$6,526	$7,012
CFO Pre-W/C / Debt	19.75%	19.75%	19.75%
Moody's Maximum Overall Debt Capacity	$29,366	$33,041	$35,505
Moody's Adjusted Debt (Forecast Without Securitization)	39,015	42,658	44,635
Stress Test Costs	**$9,649**	**$9,617**	**$9,130**
3 Year Average Stress Test Costs		***$9,465***	

CA Peer CFO Pre-WC / Debt - 20.25%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,819	$6,548	$7,036
CFO Pre-W/C / Debt	20.25%	20.25%	20.25%
Moody's Maximum Overall Debt Capacity	$28,737	$32,334	$34,745
Moody's Adjusted Debt (Forecast Without Securitization)	39,015	42,658	44,635
Stress Test Costs	**$10,278**	**$10,324**	**$9,891**
3 Year Average Stress Test Costs		***$10,164***	

CFO Pre-W/C / Debt High - 22.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,881	$6,617	$7,111
CFO Pre-W/C / Debt	22.0%	22.0%	22.0%
Moody's Maximum Overall Debt Capacity	$26,733	$30,079	$32,322
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**$12,282**	**$12,579**	**$12,313**
3 Year Average Stress Test Costs		***$12,391***	

CASH FLOW FROM OPERATIONS PRE-WORKING CAPITAL + INTEREST / INTEREST[2]

Moody's Analysis - CFO Pre-W/C + Interest / Interest			
CFO Pre-W/C + Interest / Interest Low - 3.0x			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$4,314	$5,113	$5,637
CFO Pre-W/C + Interest / Interest	3.00x	3.00x	3.00x
Implied Interest	$2,157	$2,556	$2,818
Moody's Adjusted Interest Rate	2.79%	3.25%	3.53%
Moody's Maximum Overall Debt Capacity	$77,343	$78,659	$79,926
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**($38,328)**	**($36,002)**	**($35,291)**
3 Year Average Stress Test Costs		***($36,540)***	
CFO Pre-WC + Interest / Interest Midpoint - 3.75x			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$4,779	$5,606	$6,148
CFO Pre-W/C + Interest / Interest	3.75x	3.75x	3.75x
Implied Interest	$1,738	$2,039	$2,236
Moody's Adjusted Interest Rate	2.79%	3.25%	3.53%
Moody's Maximum Overall Debt Capacity	$62,317	$62,727	$63,404
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**($23,302)**	**($20,069)**	**($18,769)**
3 Year Average Stress Test Costs		***($20,713)***	
CFO Pre-WC + Interest / Interest Upper Midpoint - 4.125x			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$4,950	$5,785	$6,332
CFO Pre-W/C + Interest / Interest	4.125x	4.125x	4.125x
Implied Interest	$1,584	$1,851	$2,026
Moody's Adjusted Interest Rate	2.79%	3.25%	3.53%
Moody's Maximum Overall Debt Capacity	$56,799	$56,959	$57,465
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**($17,784)**	**($14,301)**	**($12,830)**
3 Year Average Stress Test Costs		***($14,972)***	
CFO Pre-W/C + Interest / Interest High - 4.5x			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C	$5,093	$5,934	$6,485
CFO Pre-W/C + Interest / Interest	4.5x	4.5x	4.5x
Implied Interest	$1,455	$1,695	$1,853
Moody's Adjusted Interest Rate	2.79%	3.25%	3.53%
Moody's Maximum Overall Debt Capacity	$52,179	$52,162	$52,543
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**($13,164)**	**($9,504)**	**($7,908)**
3 Year Average Stress Test Costs		***($10,192)***	

2 To calculate the implied debt from the CFO Pre-W/C + Interest / Interest credit metrics, the implied Moody's Adjusted Interest Rate is calculated based on the OpCo interest expense and the Moody's Adjusted Debt (*see* Exhibit 5.4 (Forecast Without Securitization)).

CASH FLOW FROM OPERATIONS PRE-WORKING CAPITAL – DIVIDENDS / DEBT

Moody's Analysis - CFO Pre-W/C - Dividends / Debt

CFO Pre-W/C - Dividends / Debt Low - 9.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C - Dividends	$4,961	$5,013	$5,620
CFO Pre-W/C - Dividends / Debt	9.0%	9.0%	9.0%
Moody's Maximum Overall Debt Capacity	$55,117	$55,698	$62,445
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**($16,103)**	**($13,040)**	**($17,809)**
3 Year Average Stress Test Costs		***($15,651)***	

CFO Pre-WC - Dividends / Debt Midpoint - 13.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C - Dividends	$5,385	$5,441	$6,101
CFO Pre-W/C - Dividends / Debt	13.0%	13.0%	13.0%
Moody's Maximum Overall Debt Capacity	$41,421	$41,857	$46,927
Moody's Adjusted Debt (Forecast Without Securitization)	39,015	42,658	44,635
Stress Test Costs	**($2,406)**	**$801**	**($2,292)**
3 Year Average Stress Test Costs		***($1,299)***	

CFO Pre-WC - Dividends / Debt Upper Midpoint - 15.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C - Dividends	$5,526	$5,585	$6,261
CFO Pre-W/C - Dividends / Debt	15.0%	15.0%	15.0%
Moody's Maximum Overall Debt Capacity	$36,843	$37,231	$41,741
Moody's Adjusted Debt (Forecast Without Securitization)	39,015	42,658	44,635
Stress Test Costs	**$2,172**	**$5,427**	**$2,894**
3 Year Average Stress Test Costs		***$3,498***	

CFO Pre-W/C - Dividends / Debt High - 17.0%			
($ in millions)	**2020**	**2021**	**2022**
Interest-Adjusted OpCo CFO Pre-W/C - Dividends	$5,640	$5,699	$6,390
CFO Pre-W/C - Dividends / Debt	17.0%	17.0%	17.0%
Moody's Maximum Overall Debt Capacity	$33,177	$33,526	$37,587
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**$5,838**	**$9,132**	**$7,048**
3 Year Average Stress Test Costs		***$7,340***	

DEBT / TOTAL CAPITALIZATION

Moody's Analysis - Debt / Cap			
Debt / Capitalization Low - 55.0%			
($ in millions)	**2020**	**2021**	**2022**
Equity	$26,395	$27,209	$28,439
Deferred Income Taxes - Non-Current	(20)	(205)	(355)
Moody's Adjusted Equity	$26,375	$27,004	$28,084
Debt / Capitalization	55.0%	55.0%	55.0%
Moody's Maximum Overall Debt Capacity	$32,236	$33,005	$34,325
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**$6,779**	**$9,653**	**$10,310**
3 Year Average Stress Test Costs		***$8,914***	

Debt / Capitalization Midpoint - 50.0%			
($ in millions)	**2020**	**2021**	**2022**
Equity	$26,395	$27,209	$28,439
Deferred Income Taxes - Non-Current	(20)	(205)	(355)
Moody's Adjusted Equity	$26,375	$27,004	$28,084
Debt / Capitalization	50.0%	50.0%	50.0%
Moody's Maximum Overall Debt Capacity	$26,375	$27,004	$28,084
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**$12,640**	**$15,654**	**$16,551**
3 Year Average Stress Test Costs		***$14,948***	

Debt / Capitalization Upper Midpoint - 47.5%			
($ in millions)	**2020**	**2021**	**2022**
Equity	$26,395	$27,209	$28,439
Deferred Income Taxes - Non-Current	(20)	(205)	(355)
Moody's Adjusted Equity	$26,375	$27,004	$28,084
Debt / Capitalization	47.5%	47.5%	47.5%
Moody's Maximum Overall Debt Capacity	$23,863	$24,432	$25,409
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**$15,152**	**$18,225**	**$19,226**
3 Year Average Stress Test Costs		***$17,534***	

Debt / Capitalization High - 45.0%			
($ in millions)	**2020**	**2021**	**2022**
Equity	$26,395	$27,209	$28,439
Deferred Income Taxes - Non-Current	(20)	(205)	(355)
Moody's Adjusted Equity	$26,375	$27,004	$28,084
Debt / Capitalization	45.0%	45.0%	45.0%
Moody's Maximum Overall Debt Capacity	$21,579	$22,094	$22,978
Moody's Adjusted Debt (Forecast Without Securitization)	$39,015	$42,658	$44,635
Stress Test Costs	**$17,435**	**$20,563**	**$21,657**
3 Year Average Stress Test Costs		***$19,885***	

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.2

HISTORICAL FINANCIALS: 2018 AND 2019

EXHIBIT 5.2

Historical Financials: 2018 and 2019 (*D. Thomason*)

Consistent with the Stress Test Methodology, this Exhibit includes the financial information as reflected in Pacific Gas and Electric Company's (PG&E) Form 10-K (Feb. 18, 2020) for PGE's "Financial metrics for the two prior fiscal years."[1]

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1 D.19-06-027, Attachment A, Stress Test Methodology at 16.

PACIFIC GAS AND ELECTRIC COMPANY
(DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF INCOME
(in millions)

	Year ended December 31,		
	2019	**2018**	**2017**
Operating Revenues			
Electric	$ 12,740	$ 12,713	$ 13,127
Natural gas	4,389	4,047	4,011
Total operating revenues	**17,129**	**16,760**	**17,138**
Operating Expenses			
Cost of electricity	3,095	3,828	4,309
Cost of natural gas	734	671	746
Operating and maintenance	8,750	7,153	6,383
Wildfire-related claims, net of insurance recoveries	11,435	11,771	—
Depreciation, amortization, and decommissioning	3,233	3,036	2,854
Total operating expenses	**27,247**	**26,459**	**14,292**
Operating Income (Loss)	(10,118)	(9,699)	2,846
Interest income	82	74	30
Interest expense	(912)	(914)	(877)
Other income, net	239	426	119
Reorganization items, net	(320)	—	—
Income (Loss) Before Income Taxes	**(11,029)**	**(10,113)**	**2,118**
Income tax provision (benefit)	(3,407)	(3,295)	427
Net Income (Loss)	**(7,622)**	**(6,818)**	**1,691**
Preferred stock dividend requirement	14	14	14
Income (Loss) Available for Common Stock	**$ (7,636)**	**$ (6,832)**	**$ 1,677**

See accompanying Notes to the Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
(DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
(in millions)

	Year ended December 31,		
	2019	**2018**	**2017**
Net Income (Loss)	**$ (7,622)**	**$ (6,818)**	**$ 1,691**
Other Comprehensive Income			
Pension and other postretirement benefit plans obligations (net of taxes of $1, $2, and $3, at respective dates)	2	(5)	4
Total other comprehensive income (loss)	**2**	**(5)**	**4**
Comprehensive Income (Loss)	**$ (7,620)**	**$ (6,823)**	**$ 1,695**

See accompanying Notes to the Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
(DEBTOR-IN-POSSESSION)
CONSOLIDATED BALANCE SHEETS
(in millions)

	Balance at December 31,	
	2019	**2018**
ASSETS		
Current Assets		
Cash and cash equivalents	$ 1,122	$ 1,295
Accounts receivable		
Customers (net of allowance for doubtful accounts of $43 and $56 at respective dates)	1,287	1,148
Accrued unbilled revenue	969	1,000
Regulatory balancing accounts	2,114	1,435
Other	2,647	2,688
Regulatory assets	315	233
Inventories		
Gas stored underground and fuel oil	97	111
Materials and supplies	550	443
Income taxes receivable	—	5
Other	635	448
Total current assets	**9,736**	**8,806**
Property, Plant, and Equipment		
Electric	62,707	59,150
Gas	22,688	21,556
Construction work in progress	2,675	2,564
Other	18	—
Total property, plant, and equipment	**88,088**	**83,270**
Accumulated depreciation	(26,453)	(24,713)
Net property, plant, and equipment	**61,635**	**58,557**
Other Noncurrent Assets		
Regulatory assets	6,066	4,964
Nuclear decommissioning trusts	3,173	2,730
Operating lease right of use asset	2,279	—
Income taxes receivable	66	66
Other	1,659	1,348
Total other noncurrent assets	**13,243**	**9,108**
TOTAL ASSETS	**$ 84,614**	**$ 76,471**

See accompanying Notes to the Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
(DEBTOR-IN-POSSESSION)
CONSOLIDATED BALANCE SHEETS
(in millions, except share amounts)

	Balance at December 31,	
	2019	**2018**
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Short-term borrowings	$ —	$ 3,135
Long-term debt, classified as current	—	18,209
Debtor-in-possession financing, classified as current	1,500	—
Accounts payable		
Trade creditors	1,949	1,972
Regulatory balancing accounts	1,797	1,076
Other	675	498
Operating lease liabilities	553	—
Disputed claims and customer refunds	—	220
Interest payable	4	227
Wildfire-related claims	—	14,226
Other	1,263	1,497
Total current liabilities	**7,741**	**41,060**
Noncurrent Liabilities		
Regulatory liabilities	9,270	8,539
Pension and other postretirement benefits	1,884	2,026
Asset retirement obligations	5,854	5,994
Deferred income taxes	442	3,405
Operating lease liabilities	1,726	—
Other	2,626	2,492
Total noncurrent liabilities	**21,802**	**22,456**
Liabilities Subject to Compromise	**49,736**	—
Contingencies and Commitments (Notes 14 and 15)		
Shareholders' Equity		
Preferred stock	258	258
Common stock, $5 par value, authorized 800,000,000 shares; 264,374,809 shares outstanding at respective dates	1,322	1,322
Additional paid-in capital	8,550	8,550
Reinvested earnings	(4,796)	2,826
Accumulated other comprehensive income (loss)	1	(1)
Total shareholders' equity	**5,335**	**12,955**
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	**$ 84,614**	**$ 76,471**

See accompanying Notes to the Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY
(DEBTOR-IN-POSSESSION)
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in millions)

	Year ended December 31,		
	2019	**2018**	**2017**
Cash Flows from Operating Activities			
Net income (loss)	$ (7,622)	$ (6,818)	$ 1,691
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation, amortization, and decommissioning	3,233	3,036	2,854
Allowance for equity funds used during construction	(79)	(129)	(89)
Deferred income taxes and tax credits, net	(2,952)	(2,548)	1,103
Reorganization items, net (Note 2)	97	—	—
Disallowed capital expenditures	581	(45)	47
Other	167	258	283
Effect of changes in operating assets and liabilities:			
Accounts receivable	(132)	(122)	66
Wildfire-related insurance receivable	35	(1,698)	(21)
Inventories	(80)	(73)	(18)
Accounts payable	579	421	173
Wildfire-related claims	(114)	13,665	(129)
Income taxes receivable/payable	5	(5)	159
Other current assets and liabilities	101	(301)	59
Regulatory assets, liabilities, and balancing accounts, net	(1,417)	(800)	(390)
Liabilities subject to compromise	12,194	—	—
Other noncurrent assets and liabilities	214	(137)	128
Net cash provided by operating activities	**4,810**	**4,704**	**5,916**
Cash Flows from Investing Activities			
Capital expenditures	(6,313)	(6,514)	(5,641)
Proceeds from sales and maturities of nuclear decommissioning trust investments	956	1,412	1,291
Purchases of nuclear decommissioning trust investments	(1,032)	(1,485)	(1,323)
Other	11	23	23
Net cash used in investing activities	**(6,378)**	**(6,564)**	**(5,650)**
Cash Flows from Financing Activities			
Proceeds from debtor-in-possession credit facility	1,850	—	—
Repayments of debtor-in-possession credit facility	(350)	—	—
Debtor-in-possession credit facility debt issuance costs	(97)	—	—
Borrowings under revolving credit facilities	—	3,535	—
Repayments under revolving credit facilities	—	(650)	—
Net repayments of commercial paper, net of discount of $0, $0, and $5 at respective dates	—	(50)	(972)
Short-term debt financing	—	250	750
Short-term debt matured	—	(750)	(500)
Proceeds from issuance of long-term debt, net of premium, discount and issuance costs of $0, $7, and $32 at respective dates	—	793	2,713
Long-term debt matured or repurchased	—	(445)	(1,445)
Preferred stock dividends paid	—	—	(14)
Common stock dividends paid	—	—	(784)
Equity contribution from PG&E Corporation	—	45	455
Other	(8)	(20)	(93)
Net cash provided by financing activities	**1,395**	**2,708**	**110**
Net change in cash, cash equivalents, and restricted cash	**(173)**	**848**	**376**
Cash, cash equivalents, and restricted cash at January 1	**1,302**	**454**	**78**
Cash, cash equivalents, and restricted cash at December 31	**$ 1,129**	**$ 1,302**	**$ 454**
Less: Restricted cash and restricted cash equivalents	(7)	(7)	(7)
Cash and cash equivalents at December 31	**$ 1,122**	**$ 1,295**	**$ 447**

Supplemental disclosures of cash flow information						
Cash received (paid) for:						
Interest, net of amounts capitalized	$	(7)	$	(773)	$	(781)
Income taxes, net		—		(59)		162
Supplemental disclosures of noncash investing and financing activities						
Capital expenditures financed through accounts payable	$	826	$	368	$	501
Operating lease liabilities arising from obtaining ROU assets		2,807		—		—

See accompanying Notes to the Consolidated Financial Statements.

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.3

HISTORICAL FINANCIAL METRICS: 2018 AND 2019

EXHIBIT 5.3

Historical Financial Metrics: 2018 and 2019 (*J. Sauvage*)

Consistent with the Stress Test Methodology, this exhibit includes “financial and credit metrics as adjusted by both Moody’s and Standard & Poor’s, Inc.” for 2018 and 2019, “the two prior fiscal years.”[1]

2019 AND 2019 S&P AND MOODY’S CREDT METRICS[a]

S&P Credit Metrics	2018	2019
FFO / Debt	17.3%	10.8%
Debt / EBITDA	4.7x	8.7x

Moody's Credit Metrics	2018	2019
CFO Pre-WC / Debt	23.1%	105.1%
CFO Pre-WC + Interest / Interest	6.2x	6.3x
CFO Pre-WC - Dividends / Debt	23.1%	105.1%
Debt / Cap	60.1%	51.8%

(a) See S&P Capital IQ, *Pacific Gas and Electric Company – CreditStats Direct® – Select stats & ratios* (Mar. 2020); Moody’s, *Pacific Gas & Electric Company Annual Key Indicator Report – Credit Opinion Ratios* (2018); Moody’s, *Pacific Gas & Electric Company Annual Key Indicator Report – Credit Opinion Ratios* (2019).

1 Decision 19-06-027, Attachment A, Stress Test Methodology at 16.

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.4

FINANCIAL FORECASTS: 2020-2024

EXHIBIT 5.4

Financial Forecasts: 2020-2024 (*D. Thomason*)

In this exhibit, PG&E presents two financial forecasts for the 2020-2024 period for purposes of this application. The Financial Forecast with Securitization is Pacific Gas & Electric Company's (PG&E) preferred forecast. A prior version of this forecast for PG&E and PG&E Corporation was initially presented in connection with PG&E's disclosure statement in the Bankruptcy Court and in Investigation 19-09-016. The forecast has been updated, including to reflect PG&E's reorganization under its Plan. PG&E presents the updated (current as of July 24, 2020) Utility-only version here for purposes of this application. Given the requirements of the Commission's Stress Test Methodology and showing how the proposed Securitization supports PG&E's pathway to an issuer investment-grade credit rating, PG&E also presents the Financial Forecast Without Securitization for purposes of this application. PG&E's Financial Forecast Without Securitization is based on slightly different financial assumptions from the Financial Forecast With Securitization in connection with the Securitization. In particular, the Financial Forecast Without Securitization assumes the proposed Securitization transaction is not consummated and makes assumptions regarding repayment of the Temporary Utility Debt. For both financial forecasts, PG&E is continuing to review associated accounting assumptions.

PG&E's financial forecasts are consistent with the Stress Test Decision's reference to "the utility's forecasted financials"[1] and the Stress Test Methodology's requirement of "[f]inancial metrics for the … current fiscal year and two additional fiscal years, including financial and credit metrics as adjusted by both Moody's and Standard & Poor's, Inc."[2] However, PG&E also includes two additional years—2023 and 2024. And, as described in Part G. of Chapter 5, PG&E does not "exclud[e] the impact of disallowed wildfire liabilities for which the utility is applying for cost recovery under the Stress Test,"[3] because PG&E applies the Stress Test Methodology in a mathematically equivalent manner using forecasts of its actual

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1 Decision (D.) 19-06-027 at 28.

2 D.19-06-027, Attachment A, Stress Test Methodology at 16.

3 *Id.*

post-emergence capital structure, i.e., including the $7.5 billion of 2017 wildfire claims costs that are the subject of PG&E's application.

Also consistent with the Stress Test Decision, PG&E submits both of its financial forecasts "under seal pursuant to General Order 66-D."[4]

Financial Forecast With Securitization

PROJECTED FINANCIAL STATEMENTS

PG&E Utility
CONDENSED UTILITY PROJECTED INCOME STATEMENTS
(in millions)

[redacted]

4 D.19-06-027 at 28 n.19.

PG&E Utility

CONDENSED UTILITY PROJECTED BALANCE SHEETS

(in millions)

[redacted]

PG&E Utility

CONDENSED UTILITY PROJECTED STATEMENTS OF CASH FLOWS

(in millions)

[redacted]

PROJECTED FINANCIAL METRICS (S&P)[(a)]

[redacted]

PROJECTED FINANCIAL METRICS (MOODY'S)[(a)]

[redacted]

FINANCIAL FORECAST WITHOUT SECURITIZATION
PROJECTED FINANCIAL STATEMENTS

PG&E Utility
CONDENSED UTILITY PROJECTED INCOME STATEMENTS
(in millions)

[redacted]

PG&E Utility

CONDENSED UTILITY PROJECTED BALANCE SHEETS

(in millions)

[redacted]

PG&E Utility

CONDENSED UTILITY PROJECTED STATEMENTS OF CASH FLOWS

(in millions)

[redacted]

PROJECTED FINANCIAL METRICS (S&P)[a]

[redacted]

PROJECTED FINANCIAL METRICS (MOODY'S)[a]

[redacted]

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.5

PROJECTED FINANCIAL METRICS

EXHIBIT 5.5

Projected Financial Metrics: 2020-2024 (*J. Sauvage*)

This exhibit presents PG&E's projected financial metrics under both S&P and Moody's methodologies for the 2020-2024 period. These metrics also are included in Exhibit 5.4 but are presented here in consolidated form for convenience.

PROJECTED FINANCIAL METRICS

S&P Credit Metrics					
FFO / Debt	**2020**	**2021**	**2022**	**2023**	**2024**
With Securitization	15%	18%	18%	20%	21%
Without Securitization	15%	15%	16%	17%	18%
Debt / EBITDA	**2020**	**2021**	**2022**	**2023**	**2024**
With Securitization	5.3x	4.5x	4.3x	4.1x	3.8x
Without Securitization	5.3	5.2	5.0	4.7	4.5

Moody's Credit Metrics					
CFO Pre-WC / Debt	**2020**	**2021**	**2022**	**2023**	**2024**
With Securitization	14%	14%	15%	16%	18%
Without Securitization	14%	15%	15%	16%	17%
CFO Pre-WC + Interest / Interest	**2020**	**2021**	**2022**	**2023**	**2024**
With Securitization	6.1x	5.8x	5.7x	5.9x	6.1x
Without Securitization	6.1	5.5	5.3	5.5	5.6
CFO Pre-WC - Dividends / Debt	**2020**	**2021**	**2022**	**2023**	**2024**
With Securitization	14%	11%	14%	15%	15%
Without Securitization	14%	13%	14%	16%	15%
Debt / Cap	**2020**	**2021**	**2022**	**2023**	**2024**
With Securitization	60%	64%	64%	63%	62%
Without Securitization	60%	61%	61%	61%	60%

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.6

S&P RATINGS ACTION AND REPORT

Research Update:

PG&E Corp. And Subsidiary Assigned 'BB-' Ratings, Outlook Stable; Debt Ratings Assigned

June 15, 2020

PRIMARY CREDIT ANALYST

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Rating Action Overview

- We are assigning a 'BB-' issuer credit rating to California utility holding company PG&E Corp. and its subsidiary, Pacific Gas & Electric Co. (Pac Gas).
- We are also assigning a 'BB-' issue rating to PG&E's senior notes. The recovery rating is '3', reflecting our expectation for meaningful (estimated at about 65%) recovery under a hypothetical default scenario.
- In addition, we are assigning a 'BBB-' issue rating to Pac Gas' senior secured debt. The recovery rating is '1+', reflecting our expectations for full recovery under a hypothetical default scenario.
- The stable outlook reflects our expectation that the investments that California investor-owned electric utilities, including Pac Gas, have made in system hardening, incorporating technology, wildfire mitigation efforts, operational enhancements, and improvements to the legal framework, will reduce the possibility of them being found to be the cause of a future catastrophic wildfire. Our base case assumes that over the next two years PG&E's funds from operations (FFO) to debt will be in the 13%-15% range.

Rating Action Rationale

Our issuer credit rating on both PG&E and Pac Gas is 'BB-'. This is predicated on our assessment of both business risk profiles as satisfactory and our assessment of the financial risk profiles as significant. We assess the management and governance modifier for both entities as weak, lowering the rating by a notch. We also assess the comparable rating analysis modifier for both entities as negative, lowering the rating by another notch.

We assess the business risk profile at the lower end of the range for the satisfactory business risk profile category. The business risk profile reflects the company's large regulated utility that mostly consists of transmission and distribution (T&D) assets but also incorporates the significant risks of catastrophic wildfires in its service territory. A large percentage (about two-thirds by land or about 50% by circuit miles) of the company's service territory operates within high fire-threat districts, which considerably increases the risks for PG&E compared to peers.

Furthermore, as a direct result of the catastrophic wildfires and other adverse incidents, the public sentiment toward PG&E is very negative, which we believe will make it more difficult for the company to effectively manage regulatory risk compared to its peers. We believe that, based on the lack of confidence that many stakeholders have toward the company, regulators' willingness and ability to consistently implement measures that protect the company's credit quality could be limited. Over the past decade, the company has faced many operational challenges including the San Bruno gas explosion and the more recent devastating Camp Fire. While PG&E has taken considerable steps to reduce the possibility of causing a catastrophic wildfire including hardening its system, increasing the number of weather stations and high definition cameras, and significantly enhancing it vegetation management, we believe that it will likely take significant time and a consistent longer-term track record of operational excellence, including safety and reliability, for the company to regain the trust of all of its stakeholders. Given these higher risks, which are further detailed below, we assess the company toward the lower end of the range for its business risk profile category, relative to peers. Additionally, to fully account for these higher risks, we assess the company's comparable rating analysis modifier as negative.

California wildfires were less devastating in 2019 than in prior wildfire seasons. The California Department of Forestry and Fire Protection (Cal Fire) reported that statewide 2019 wildfire damages consisted of about 700 structures and three fatalities. This compares favorably to Cal Fire's reported figures for 2018 (more than 24,000 structures with 100 fatalities) and 2017 (more than 11,600 structures with 44 fatalities). While PG&E proactively contributed to the considerably less destructive 2019 wildfire season by hardening its system, implementing technology, and de-energizing power lines, power shut offs of electricity to more than 1 million customers adds risk by further stressing the company's relationship with its customers.

The degree of rainfall is another potential environmental risk that S&P Global Ratings continues to assess and could affect the company's credit quality. The 2017 and 2018 rainfalls were below average but the 2019 rainfall improved to average, which had the effect of shortening the wildfire season. To date, the 2020 rainfall appears to be below average, potentially signaling a longer wildfire season, increasing the possibility of a catastrophic wildfire. COVID-19 is another risk that S&P Global Ratings is actively monitoring and could also present unique challenges for the 2020 wildfire season if emergency response time is affected.

While PG&E and Pac Gas will benefit from various credit-supportive measures under assembly bill (AB) 1054 longer-term, unaddressed credit risks remain. Under AB 1054, we expect that PG&E's (and Pac Gas') credit quality will significantly benefit from the use of the wildfire fund as a source of liquidity, a predetermined cap that limits PG&E's liability, and revised standards of a utility's reasonable conduct that we believe will increase the likelihood that PG&E will recover future wildfire costs from ratepayers. These measures should enhance the company's regulatory construct and reduce its credit risk exposure related to California's wildfires and California's interpretation of the legal doctrine of inverse condemnation.

While we view this legislation as evidence of California's support for its utilities' credit quality and we expect the measures within AB 1054 will protect credit quality over the medium term, longer-term risks exist. Such longer-term risks include the lack of an automatic replenishing mechanism and the possibility of depleting the wildfire fund whenever there is a catastrophic wildfire caused by a participating investor-owned electric utility. If the fund becomes fully depleted, PG&E loses the credit benefit of using the wildfire fund as a source of liquidity and more importantly loses the credit protection of the liability cap. Accordingly, AB 1054 directly associates PG&E's credit quality to the operations of its electric utility peers in California. Meaning even if PG&E significantly improves its operations and is not found to be the cause of a future catastrophic wildfire, its longer-term benefit of the credit-supportive liability cap is ultimately also dependent on the operations of California's other investor-owned electric utilities that contributed to the wildfire fund. Another longer-term risk is the uncertainty as to how the California Public Utility Commission (CPUC), which is responsible for implementing much of the new law, will interpret AB 1054. If the CPUC does not implement AB 1054 in a credit-supportive manner then much of the new law's credit-supportive elements related to the revised standards of a utility's reasonable conduct could potentially be negligible.

We assess wildfire victim settlements as potentially raising risk. We view the company's settling of its uncapped wildfire victims claims ($13.5 billion) at a multiple of the subrogation claims ($11 billion) as possibly increasing business risk. Our prior base case assumed that the wildfire victim claims would be settled at a fraction of the subrogation claims. Furthermore, the company's decision to settle claims with the Tubbs wildfire victims despite CAL FIRE determining that PG&E was not the cause of the wildfire, also may increase risk. This is because, in our view, these settlements may set a precedent, possibly increasing future payments to wildfire victims and depleting the wildfire fund at a faster rate than previously expected.

We assess PG&E's financial measures to be at the lower end of the range for the significant financial risk profile category. We expect PG&E's consolidated FFO to debt will be in the 13%-15% range for the next two years, which is consistent with the lower end of the financial risk profile category. We add about $2 billion of adjusted debt to incorporate AB 1054's tax-effected liability cap, which reflects 20% of the company's T&D equity rate base. This adjustment is similarly applied to California's other investor-owned electric utilities. We expect that PG&E will continue to have negative discretionary cash flow reflecting its large capital spending program. We assess the company's financial risk profile using our medial volatility table, consistent with its regulated utility business.

We assess the comparable ratings analysis modifier as negative. This reflects the company's challenging business environment due to the risks of California's catastrophic wildfires and our expectation that PG&E's financial measures will remain at the lower end of the range for its financial risk profile category. The negative comparable rating analysis modifier lowers the issuer credit rating by one notch.

We assess the management and governance modifier as weak. This reflects the company's history of, at times, a confrontational and contentious relationship with regulatory authorities in addition to the legal infractions that have occurred over the past two decades. In our view, this is beyond an isolated episode and outside industry norms and leads to an adverse impact on the company's reputation, representing significant risk to the company. While the company is actively looking to hire a permanent chief executive officer (CEO) and replaced the vast majority of its board of directors, we believe that it could take many years for the company to improve its culture and to consistently demonstrate improved oversight that is necessary to account for the company's unique enterprise risks. The assessment of management and governance as weak also lowers the issuer credit ratings by one notch.

Outlook

The stable outlooks on PG&E and Pac Gas reflect our expectation that the investments that California investor-owned electric utilities, including Pac Gas, have made in system hardening, incorporating technology, wildfire mitigation efforts, operational enhancements, and improvements to the legal framework, will reduce the possibility of them being found to be the cause of a future catastrophic wildfire. Our base case assumes that over the next two years PG&E's consolidated financial measures will reflect FFO to debt in the 13%-15% range.

Downside scenario

We could downgrade PG&E and Pac Gas over the next 12 months if risks increase, such as any of California's investor-owned electric utilities are found to be the cause of a catastrophic wildfire, thereby increasing the probability that the wildfire fund could deplete sooner than expected. We could also lower ratings if PG&E's consolidated FFO to debt weakens to below 13%.

Upside scenario

Although highly unlikely, we could upgrade PG&E and Pac Gas over the next 12 months if PG&E's consolidated financial measures materially improve, reflecting FFO to debt consistently greater than 18% and PG&E's risks significantly decrease, including California's investor-owned electric utilities not being found to be the cause of a catastrophic wildfire, and Pac Gas consistently demonstrates effective management of regulatory risk.

Company Description

PG&E Corp. is a San Francisco-based utility holding company. Its wholly owned utility subsidiary is Pac Gas, which operates in northern and central California. Pac Gas generates revenues through the sale and delivery of electricity and natural gas to 5.5 million electric and 4.5 million gas customers and has about 7,700 MW of generation capacity. The utility is regulated by the CPUC, the Federal Energy Regulatory Commission, and the Nuclear Regulatory Commission.

Our Base-Case Scenario

Our base-case scenario is driven by the following factors:

- New debt of about $16.7 billion ($4.75 billion long-term debt at PG&E, $5.9 billion of long-term debt at Pac Gas, and $6 billion of temporary debt at Pac Gas) will be held in escrow until the company emerges from bankruptcy.
- Equity issuance of about $9 billion that will be raised at the time the company's emerges from bankruptcy.
- The company issues securitized debt in 2021 that is used to retire Pac Gas' temporary debt.
- Wildfire settlements total about $25.5 billion of which about $1.4 billion is deferred and about $6.8 billion is funded with PG&E's equity.
- At emergence from bankruptcy the company funds its approximate $5 billion share of the wildfire fund.
- COVID-19 lost sales and associated costs are deferred for future recovery.
- Capital spending of about $8 billion annually over the next three years.
- Pac Gas and all of California's investor-owned electric utilities are not found to be the cause of a catastrophic wildfire.

- The company maintains, at all times, its safety certification, consistent with meeting the requirements under AB 1054.
- Dividends are only reinstated after the company achieves $6.2 billion of non-GAAP core earnings (estimated to be reinstated in 2023).

Liquidity

We assess PGE's liquidity as adequate to cover its needs over the next 12 months. We expect the company's liquidity sources will exceed its uses by 1.1x, and that the company will meet our other criteria for such a designation. PG&E benefits from the preponderance of regulated utility operations that provide for stable cash flow generation. Moreover, we expect liquidity should benefit from the company's well-established and solid relationships with banks, and its likely ability to absorb high-impact, low-probability events without the need for refinancing, as evidenced by the company's ability to access the wildfire fund.

Principal Liquidity Sources

- Available cash of about $2 billion;
- Credit facility availability of $4 billion;
- Equity backstop commitment of about $12 billion; and
- Committed term loans of about $6 billion.

Principal Liquidity Uses

- Debt maturities of about $4.5 billion over the next 12 months;
- Maintenance capital spending of about $4.6 billion over the next 12 months; and
- Negative cash FFO of about $12.4 billion.

Covenants

PG&E's revolver contains a debt to capital limit of 70% and Pac Gas' revolver has a debt to capital limit of 65%. We expect the companies to consistently be in compliance with these covenants and have at least 15% financial covenant headroom.

Environmental, Social, And Governance

We believe the company is significantly more exposed to environmental risks compared to its peers. Because climate change has intensified the severity and frequency of wildfires in California, environmental factors have become an integral part of our credit analysis on the state's electric utilities. Inverse condemnation exacerbates the operational and financial risks that climate change introduces for the company. Furthermore, the company's service territory has high exposure to catastrophic wildfires and has already faced catastrophic wildfires in both 2017 and 2018, demonstrating its susceptibility and exposure to wildfires and climate change.

In our view, the company's social risks are also high reflecting its communities' susceptibility to wildfires and the potential for higher customer bills in the future due to the need to invest in wildfire mitigation, system hardening, and technology.

We believe governance factors challenge the company more negatively than peers. Uncertainty remains, as the company is actively seeking to hire a permanent CEO and its board of directors is undergoing transformational changes, including the replacement of the vast majority of its board members. The company is the only North American regulated utility to file for bankruptcy protection twice over the past two decades, which is in stark contrast to the vast majority of utilities that have not filed for bankruptcy protection during the past century. The company has a history of confrontational and contentious relationships with regulatory authorities, which, in our view, is beyond an isolated episode and outside industry norms and leads to an adverse impact on the company's reputation, representing significant risks to the company.

Issue Ratings - Recovery Analysis

Capital structure

PG&E at emergence from bankruptcy will have about $38 billion of debt. About $4.75 billion will consist of senior notes at PG&E and approximately $33.3 billion of senior secured debt at Pac Gas that are backed by first-mortgage bonds (FMB). We expect that Pac Gas' $5.9 billion of new long-term debt issuance, $6 billion of temporary debt, and $21.4 billion of exchange and reinstated debt will all be pari passu. The secured notes will all be collateralized, backed by FMBs, and will be rated in-line with Pac Gas' senior secured issue rating.

Key analytical factors

- Our recovery rating on Pac Gas's first-mortgage bonds and its secured revolving credit facility reflects the substantial value of the company's regulated utility assets that is sufficiently larger than the company's secured debt, limited priority claims, and other liabilities at the utility at this time. For our recovery analysis we treat the accounts-receivable securitization as a priority claim due to its senior claim to the value of the company's account receivables and the structural protections of this financing structure.
- Pac Gas' secured debt has a '1+' recovery rating, indicating our highest expectation for a full recovery, and resulting in an issue rating three notches above the issuer credit rating. The recovery rating reflects collateral coverage in excess of 150%, consistent with our criteria for recovery ratings on debt issued by regulated utilities that is secured by the key utility assets.
- We view the secured debt at PG&E as effectively unsecured because it is unguaranteed by Pac Gas and is essentially the junior-most debt liability in PG&E's consolidated capital structure, behind unsecured liabilities and preferred equity interests at Pac Gas. As such, we cap the recovery rating on this debt at '3', consistent with our approach to rating unsecured debt issued by companies with an issuer credit rating of 'BB-' or higher.
- The '3' recovery rating cap recognizes that 'BB' category entities are more likely to significantly increase debt before default and that recovery prospects for unsecured debt are most likely to be impaired by additional debt. Further, claims of PG&E's debt would be structurally junior to potential non-debt liabilities at Pac Gas, including future potential wildfire liabilities. Notwithstanding the cap, based on PG&E's current capital structure, the recovery rate on PG&E's debt could be higher than the 50%-70% indicated by our '3' recovery rating.

- A default scenario could stem from sudden liquidity pressure from an unpredictable weather, cost, or market event outside of the company's control, consistent with past utility defaults. Further it could reflect significant future litigation exposure at Pac Gas, consistent with PG&E's prior default.
- We expect Pac Gas to continue to operate and reorganize after default given the essential nature of its services. We also assume the value of the utility's assets will be preserved and we use the net value of its regulated fixed assets as a proxy for the company's enterprise value. The company's regulated asset value is currently roughly $66 billion.

Simulated default assumptions

- Simulated year of default: 2024
- Gross enterprise value--discrete asset valuation (DAV) approach: $66 billion
- Valuation split—PG&E/Pac Gas: 0%/100%

Simplified waterfall

- Net recovery value after administrative costs (5%): $62 billion
- Pac Gas value: $62 billion
- Priority claims at Pac Gas (A/R securitization): $1 billion
- Secured debt claims at Pac Gas (FMBs and bank debt): $37 billion
- Recovery estimate: 100%
- Residual value available to Pac Gas equity: $24 billion
- Pac Gas Preferred Stock claims: $250 million
- Residual value available to Parent creditors: $24 billion
- Debt claims at Parent (effectively unsecured): $5.3 billion
- --Recovery range: Capped at 50%-70%; rounded estimate: 65%

Notes: Debt amounts include six months of accrued interest that we assume will be owed at default. We assume the cash flow revolvers at Pac Gas ($3.5 billion) and PG&E ($500 million) at 85% utilized at default and that the $1 billion accounts receivable securitization is fully utilized. We assume any debt maturing before default is refinanced on similar terms before maturity.

Ratings Score Snapshot

PG&E Corp. and Pacific Gas & Electric Co.

Issuer Credit Rating: BB-/Stable/--

Business risk: Satisfactory

- Country risk: Very low

- Industry risk: Very low
- Competitive position: Fair

Financial risk: Significant

- Cash flow/Leverage: Significant

Anchor: bb+

Modifiers

- Diversification/Portfolio effect: Neutral (no impact)
- Capital structure: Neutral (no impact)
- Financial policy: Neutral (no impact)
- Liquidity: Adequate (no impact)
- Management and governance: Weak (-1 notch)
- Comparable rating analysis: Negative (-1 notch)

Stand-alone credit profile: bb-

- Group credit profile: bb-

Related Criteria

- General Criteria: Group Rating Methodology, July 1, 2019
- General Criteria: Hybrid Capital: Methodology And Assumptions, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria | Corporates | General: Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- Criteria | Corporates | Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Ratings List

New Rating; CreditWatch/Outlook Action; Ratings Affirmed

	To
PG&E Corp.	
Pacific Gas & Electric Co.	
Issuer Credit Rating	BB-/Stable/NR
New Rating	
PG&E Corp.	
Senior Notes	
US$0 mil nts due 2025	BB-
Recovery Rating	3(65%)
US$0 mil nts due 2028	BB-
Recovery Rating	3(65%)
US$0 mil nts due 2030	BB-
Recovery Rating	3(65%)
Pacific Gas & Electric Co.	
Senior Secured	
US$0 mil 1st mtg bnd	BBB-
Recovery Rating	1+
US$0 mil 1st mtg bnd	BBB-
Recovery Rating	1+
US$0 mil 1st mtg bnd	BBB-
Recovery Rating	1+
US$0 mil fltg rate 1st mtg bnd	BBB-
Recovery Rating	1+

Certain terms used in this report, particularly certain adjectives used to express our view on rating relevant factors, have specific meanings ascribed to them in our criteria, and should therefore be read in conjunction with such criteria. Please see Ratings Criteria at www.standardandpoors.com for further information. Complete ratings information is available to subscribers of RatingsDirect at www.capitaliq.com. All ratings affected by this rating action can be found on S&P Global Ratings' public website at www.standardandpoors.com. Use the Ratings search box located in the left column.

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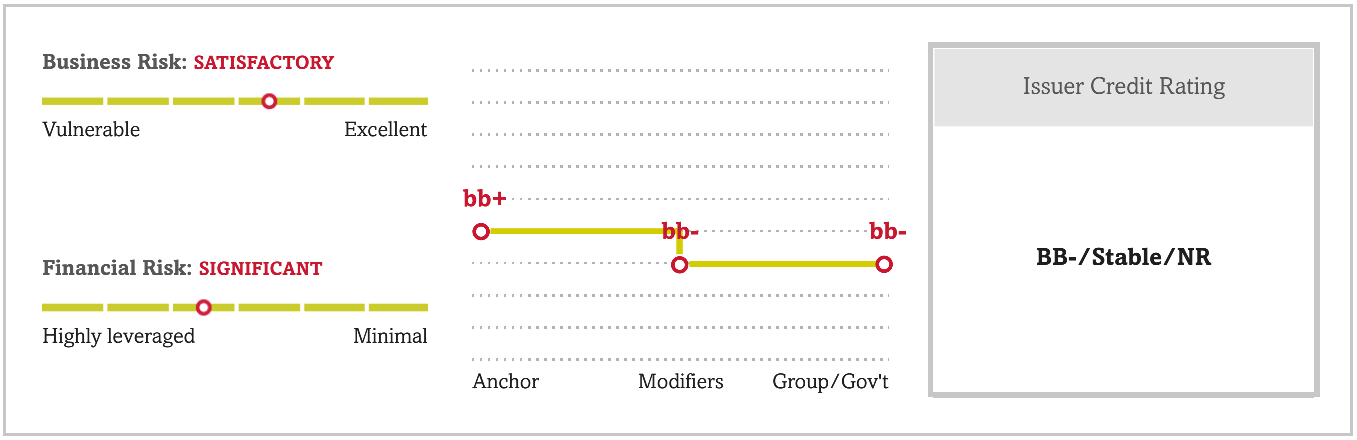
Pacific Gas & Electric Co.



Credit Highlights

Overview

Key strengths	Key risks
Large, fully rate-regulated utility operations serving about 10 million electric and gas customers.	Susceptibility to climate change and catastrophic wildfires and higher risks from California courts' interpretation of inverse condemnation.
Generally predictable regulatory construct that includes multiyear rate case filings with subsequent attrition rate increases.	Public sentiment toward Pacific Gas & Electric Co. (Pac Gas) remains very negative, which we believe will make it more difficult for the company to effectively manage regulatory risk compared with its peers.
Significant wildfire mitigation investments in technology and system hardening and operational reforms that should reduce the likelihood of the company causing a catastrophic wildfire.	A history of operational challenges, including the San Bruno gas explosion and the more recent devastating Camp Fire.
	Our view of a weak management and governance assessment that incorporates the company filing for bankruptcy twice over the past two decades. The company has a history of legal infractions and, at times, a contentious relationship with regulatory authorities.

Wildfires have already occurred in the western U.S. in 2020. Although the early 2020 wildfires in the western U.S. have not yet been catastrophic in terms of property damage or fatalities, they could be indicative of a longer wildfire season. In addition, rainfall this year in California appears to be below average, potentially signaling a longer wildfire season, which, in our view, could increase the possibility of a catastrophic wildfire. Although the 2017 and 2018 rainfalls were below the historical average, the 2019 rainfall was average, and we believe that effectively shortened the wildfire season. The COVID-19 pandemic presents an additional risk for the 2020 wildfire season because it could challenge emergency response time.

We assess wildfire victim settlements as potential raising risks. We view the company's settling of its uncapped wildfire victims claims ($13.5 billion) at a multiple of the subrogation claims ($11 billion) as possibly increasing business risk. Our previous base case assumed that the wildfire victim claims would be settled at a fraction of the subrogation claims. Furthermore, the company's decision to settle claims with the Tubbs wildfire victims despite California's Department of Forestry and Fire Protection determining that Pac Gas was not the cause of the wildfire, also might increase risk. This is because, in our view, these settlements might set a precedent, possibly increasing future payments to wildfire victims and depleting the wildfire fund at a faster rate than previously expected.

While Pac Gas will benefit from various credit-supportive measures under assembly bill (AB) 1054, longer-term unaddressed credit risks remain. Under AB 1054, we expect that Pac Gas' credit quality will significantly benefit from the use of the wildfire fund as a source of liquidity; a predetermined cap that limits Pac Gas' liability; and revised standards of a utility's reasonable conduct, which we believe will increase the likelihood that Pac Gas will recover future wildfire costs from ratepayers. These measures should enhance the company's regulatory construct and reduce its credit risk exposure related to California's wildfires and California courts' interpretation of the legal doctrine of inverse condemnation.

While we view this legislation as evidence of California's support for its utilities' credit quality, and while we expect the measures within AB 1054 will protect credit quality over the medium term, longer-term risks exist. Such longer-term risks include the lack of an automatic replenishing mechanism and the possibility of depleting the wildfire fund whenever there is a catastrophic wildfire caused by a participating investor-owned electric utility. If the fund becomes fully depleted, Pac Gas loses the credit benefit of using the wildfire fund as a source of liquidity and, more importantly, loses the credit protection of the liability cap. Accordingly, AB 1054 directly associates the company's credit quality to the operations of its electric utility peers in California. Therefore, even if Pac Gas significantly improves its operations and is not found to be the cause of a future catastrophic wildfire, the longevity of the wildfire fund is ultimately dependent on the operations of all of California's investor-owned electric utilities that contribute to the wildfire fund. Another risk related to AB 1054 is the uncertainty as to how the California Public Utility Commission (CPUC), which is responsible for implementing much of the new law, will interpret AB 1054. If the CPUC does not implement AB 1054 in a credit-supportive manner, then much of the new law's credit-supportive elements related to the revised standards of a utility's reasonable conduct could potentially be negligible.

Outlook: Stable

The stable outlook on Pac Gas reflects our expectation that the investments that California investor-owned electric utilities, including Pac Gas, have made in system hardening, incorporating technology, wildfire mitigation efforts, operational enhancements, and improvements to the legal framework, will reduce the possibility of them being found to be the cause of a future catastrophic wildfire. Our base case assumes that over the next two years parent PG&E's consolidated financial measures will reflect funds from operations (FFO) to debt in the 13%-15% range.

Downside scenario

We could downgrade Pac Gas over the next 12 months if risks increased, such as if California's investor-owned electric utilities participating in the insurance fund were found to be the cause of a catastrophic wildfire, thereby increasing the probability that the wildfire fund could deplete sooner than expected. We could also lower ratings if parent PG&E's consolidated FFO to debt weakened to below 13%.

Upside scenario

Although highly unlikely, we could upgrade Pac Gas over the next 12 months if parent PG&E's consolidated financial measures materially improved, reflecting FFO to debt consistently greater than 18%; PG&E's risks significantly decreased, including California's investor-owned electric utilities not being found to be the cause of a catastrophic wildfire; and Pac Gas consistently demonstrated effective management of regulatory risk.

Our Base-Case Scenario

Assumptions	Key Metrics
• The company issues securitized debt in 2021 that is used to retire Pac Gas' temporary debt; • Robust capital spending of about $8 billion annually over the next three years; • Pac Gas and all of California's investor-owned electric utilities are not found to be the cause of a catastrophic wildfire; and • Pac Gas maintains its safety certification, consistent with meeting the requirements under AB 1054.	see table below

	2019a	2020e	2021e
FFO to debt (%)	11.6	15-18	15-18
Debt to EBITDA (x)	8.3	5-5.5	4.5-5

All figures are S&P Global Ratings adjusted. a--Actual. e--Estimate. FFO--Funds from operations.

Company Description

Pac Gas is a utility company based in San Francisco and is a wholly owned subsidiary of PG&E Corp. It operates in northern and central California and generates revenue through the sale and delivery of electricity and natural gas. Pac Gas serves about 5.4 million electric customers and about 4.5 million natural gas customers and has about 7,700 MW of generation capacity. The utility is regulated by the CPUC, the Federal Energy Regulatory Commission (FERC), and the Nuclear Regulatory Commission.

Business Risk: Satisfactory

We assess the business risk profile at the lower end of the range for its business risk profile category. The business risk profile reflects the company's large regulated utility operations that mostly consist of transmission and distribution (T&D) assets but also incorporates the significant risks of catastrophic wildfires in its service territory. A large percentage (about two-thirds by land or about 50% by circuit miles) of the company's service territory operates within high fire-threat districts, which considerably increases the risks for Pac Gas compared with peers.

Furthermore, as a direct result of the catastrophic wildfires and other adverse incidents, the public sentiment toward Pac Gas is very negative, which we believe will make it more difficult for the company to effectively manage regulatory risk than its peers. We believe that, based on the lack of confidence that many stakeholders have toward the company, regulators' willingness and ability to consistently implement measures that protect the company's credit quality could be limited.

Over the past decade, the company has faced many operational challenges, including the San Bruno gas explosion and the more recent devastating Camp Fire. While the company has taken considerable steps to reduce the possibility of causing a catastrophic wildfire, including hardening its system, increasing the number of weather stations and high definition cameras, and significantly enhancing its vegetation management, we believe that it will likely take significant time and a consistent longer-term track record of operational excellence, including safety and reliability, for the company to regain the trust of all of its stakeholders. Given these higher risks, we assess the company toward the lower end of the range for its business risk profile category, relative to peers. In addition, to fully account for these higher risks, we assess the company's comparable rating analysis modifier as negative.

The company's generation and distribution assets are regulated by the CPUC and its transmission assets are regulated by the FERC. The CPUC generally allows its regulated utilities to earn close to their authorized return on equity with a forward-looking test year, attrition rates, decoupling, and various balancing accounts. The decoupling of electric rates protects the utility margins from declining sales volumes. In April 2020, the CPUC allowed the use of a memorandum account to track costs associated with COVID-19, which can be submitted for future recovery. In addition, in January 2020, the CPUC approved a four-year rate case filing cycle, up from the current three-year cycle. We believe that these decisions will support credit quality and improve cash flow predictability.

In December 2019, Pac Gas filed a settlement proposing an increase of $585 million in its electric and gas rates in 2020, followed by a $318 million increase in 2021, and a $367 million increase in 2022. However, the case is still pending and while the CPUC is expected to consider the proposed decision in 2020, the decision might be delayed because of the COVID-19 pandemic.

Peer comparison

Table 1

Pacific Gas & Electric Co.--Peer Comparison

Industry sector: combo

	Pacific Gas & Electric Co.	**Southern California Edison Co.**	**San Diego Gas & Electric Co.**	**Pinnacle West Capital Corp.**	**PacifiCorp**
Ratings as of July 8, 2020	BB-/Stable/--	BBB/Stable/A-2	BBB+/Stable/A-2	A-/Stable/A-2	A/Stable/A-1
	--Fiscal year ended Dec. 31, 2019--	--Fiscal year ended Dec. 31, 2019--	--Fiscal year ended Dec. 31, 2019--	--Fiscal year ended Dec. 31, 2019--	--Fiscal year ended Dec. 31, 2019--
(Mil. $)					
Revenue	17,129.0	12,306.0	4,925.0	3,471.2	5,068.0
EBITDA	5,715.0	4,477.7	2,224.8	1,428.9	2,079.7
Funds from operations (FFO)	5,478.6	3,843.6	1,575.2	1,174.4	1,511.9
Interest expense	1,318.4	1,088.1	499.5	279.8	430.7
Cash interest paid	236.4	798.1	458.5	242.0	396.7
Cash flow from operations	5,345.6	72.6	1,139.2	965.0	1,534.9
Capital expenditure	6,350.9	4,858.8	1,546.8	1,135.1	2,160.4
Free operating cash flow (FOCF)	(1,005.3)	(4,786.2)	(407.6)	(170.1)	(625.4)
Discretionary cash flow (DCF)	(998.3)	(5,246.7)	(407.6)	(522.4)	(800.4)
Cash and short-term investments	1,122.0	24.0	10.0	10.3	30.0

Table 1

Pacific Gas & Electric Co.--Peer Comparison (cont.)

Industry sector: combo

	Pacific Gas & Electric Co.	Southern California Edison Co.	San Diego Gas & Electric Co.	Pinnacle West Capital Corp.	PacifiCorp
Debt	47,296.2	22,436.5	6,816.1	6,027.5	8,621.2
Equity	5,206.0	16,704.5	7,100.0	5,553.2	8,436.0
Adjusted ratios					
EBITDA margin (%)	33.4	36.4	45.2	41.2	41.0
Return on capital (%)	3.3	7.3	10.8	6.9	7.4
EBITDA interest coverage (x)	4.3	4.1	4.5	5.1	4.8
FFO cash interest coverage (x)	24.2	5.8	4.4	5.9	4.8
Debt/EBITDA (x)	8.3	5.0	3.1	4.2	4.1
FFO/debt (%)	11.6	17.1	23.1	19.5	17.5
Cash flow from operations/debt (%)	11.3	0.3	16.7	16.0	17.8
FOCF/debt (%)	(2.1)	(21.3)	(6.0)	(2.8)	(7.3)
DCF/debt (%)	(2.1)	(23.4)	(6.0)	(8.7)	(9.3)

Sources: S&P Global Ratings, company data.

Financial Risk: Significant

We expect Pac Gas' FFO to debt to reflect about 15%-18% for the next two years. This incorporates an expected 2020 rate case increase of about $585 million, in line with the company's settlement filing that is partially offset by the company's robust annual capital spending of about $8 billion. We expect PG&E's consolidated FFO to debt will be in the 13%-15% range for the next two years, the weaker financial measures at the parent primarily reflect the incremental $4.75 billion of senior notes at the holding company.

We add about $2 billion of adjusted debt to incorporate AB 1054's tax-effected liability cap, which reflects 20% of the company's T&D equity rate base. This adjustment is similarly applied to California's other investor-owned electric utilities. We expect that Pac Gas will continue to have negative discretionary cash flow, reflecting its large capital spending program. We assess the company's financial risk profile using our medial volatility table, consistent with its regulated utility business.

Financial summary

Table 2

Pacific Gas & Electric Co.--Financial Summary					
Industry sector: combo					
	--Fiscal year ended Dec. 31--				
	2019	**2018**	**2017**	**2016**	**2015**
(Mil. $)					
Revenue	17,129.0	16,760.0	17,138.0	17,667.0	16,833.0
EBITDA	5,715.0	5,810.6	6,314.6	5,510.6	4,625.6
Funds from operations (FFO)	5,478.6	4,699.6	5,429.3	4,757.1	3,751.0
Interest expense	1,318.4	1,404.0	1,350.2	1,293.4	1,208.5
Cash interest paid	236.4	1,052.0	1,047.2	997.4	951.5
Cash flow from operations	5,345.6	4,754.6	6,020.3	4,407.1	3,720.0
Capital expenditure	6,350.9	6,616.0	5,758.0	5,813.0	5,280.0
Free operating cash flow (FOCF)	(1,005.3)	(1,861.4)	262.3	(1,405.9)	(1,560.0)
Discretionary cash flow (DCF)	(998.3)	(1,854.4)	(528.7)	(2,323.9)	(2,283.0)
Cash and short-term investments	1,122.0	1,295.0	447.0	71.0	59.0
Gross available cash	1,122.0	1,295.0	447.0	71.0	59.0
Debt	47,296.2	27,142.1	24,359.5	24,191.1	22,389.1
Equity	5,206.0	12,826.0	19,618.0	18,266.0	16,931.0
Adjusted ratios					
EBITDA margin (%)	33.4	34.7	36.8	31.2	27.5
Return on capital (%)	3.3	6.6	7.6	6.3	4.8
EBITDA interest coverage (x)	4.3	4.1	4.7	4.3	3.8
FFO cash interest coverage (x)	24.2	5.5	6.2	5.8	4.9
Debt/EBITDA (x)	8.3	4.7	3.9	4.4	4.8
FFO/debt (%)	11.6	17.3	22.3	19.7	16.8
Cash flow from operations/debt (%)	11.3	17.5	24.7	18.2	16.6
FOCF/debt (%)	(2.1)	(6.9)	1.1	(5.8)	(7.0)
DCF/debt (%)	(2.1)	(6.8)	(2.2)	(9.6)	(10.2)

Sources: S&P Global Ratings, company data.

Reconciliation

Table 3

Pacific Gas & Electric Co.--Reconciliation Of Reported Amounts With S&P Global Ratings' Adjusted Amounts									
	--Fiscal year ended Dec. 31, 2019--								
Pacific Gas & Electric Co. reported amounts (Mil. $)									
	Debt	**Shareholders' equity**	**EBITDA**	**Operating income**	**Interest expense**	**S&P Global Ratings' adjusted EBITDA**	**Cash flow from operations**	**Dividends**	**Capital expenditure**
	23,950.0	5,335.0	(6,885.0)	(10,118.0)	912.0	5,715.0	4,810.0	--	6,313.0
S&P Global Ratings' adjustments									
Cash interest paid	--	--	--	--	--	(104.0)	--	--	--

Table 3

Pacific Gas & Electric Co.--Reconciliation Of Reported Amounts With S&P Global Ratings' Adjusted Amounts (cont.)

Reported lease liabilities	143.0	--	--	--	--	--	--	--	--
Operating leases	--	--	686.0	8.3	8.3	(8.3)	677.7	--	--
Intermediate hybrids reported as equity	129.0	(129.0)	--	--	7.0	(7.0)	(7.0)	(7.0)	--
Postretirement benefit obligations/deferred compensation	894.3	--	--	--	--	--	--	--	--
Accessible cash and liquid investments	(1,122.0)	--	--	--	--	--	--	--	--
Capitalized interest	--	--	--	--	55.0	(55.0)	(55.0)	--	(55.0)
Share-based compensation expense	--	--	50.0	--	--	--	--	--	--
Power purchase agreements	1,001.0	--	155.0	62.1	62.1	(62.1)	92.9	--	92.9
Asset-retirement obligations	2,118.0	--	274.0	274.0	274.0	--	--	--	--
Nonoperating income (expense)	--	--	--	(144.0)	--	--	--	--	--
Reclassification of interest and dividend cash flows	--	--	--	--	--	--	(97.0)	--	--
U.S. decommissioning fund contributions	--	--	--	--	--	--	(76.0)	--	--
Debt: Other	20,182.9	--	--	--	--	--	--	--	--
EBITDA: Settlement (litigation/insurance) costs	--	--	11,435.0	11,435.0	--	--	--	--	--
Total adjustments	23,346.2	(129.0)	12,600.0	11,635.4	406.4	(236.4)	535.6	(7.0)	37.9
S&P Global Ratings' adjusted amounts									
	Debt	**Equity**	**EBITDA**	**EBIT**	**Interest expense**	**Funds from operations**	**Cash flow from operations**	**Dividends paid**	**Capital expenditure**
	47,296.2	5,206.0	5,715.0	1,517.4	1,318.4	5,478.6	5,345.6	(7.0)	6,350.9

Sources: S&P Global Ratings, company data.

Liquidity: Adequate

We assess Pac Gas' liquidity as adequate to cover its needs over the next 12 months. We expect the company's liquidity sources will exceed its uses by 1.1x and that the company will meet our other criteria for such a designation. Pac Gas benefits from the preponderance of regulated utility operations that provide for stable cash flow generation. Moreover, we expect liquidity should benefit from the company's well-established and solid relationships with banks and its likely ability to absorb high-impact, low-probability events without the need for refinancing, as evidenced by the company's access the wildfire fund.

Principal Liquidity Sources	Principal Liquidity Uses
• Available cash of about $400 million, • Credit facility availability of $3.5 billion, and • Cash FFO of about $2.5 billion.	• Debt maturities of about $1.5 billion over the next 12 months, and • Maintenance capital spending of about $4 billion over the next 12 months.

Covenant Analysis

Pac Gas' revolver has a debt to capital limit of 65%. We expect the company will consistently be in compliance with this covenant and have at least 15% financial covenant headroom.

Other Credit Considerations

We assess the comparable ratings analysis modifier as negative. This reflects the company's challenging business environment due to the risks of catastrophic wildfires. The negative comparable rating analysis modifier lowers the issuer credit rating by one notch.

We assess the management and governance modifier as weak. This reflects the company's history of, at times, a confrontational and contentious relationship with regulatory authorities in addition to the legal infractions that have occurred over the past two decades. In our view, this is beyond an isolated episode and outside industry norms and leads to an adverse impact on the company's reputation, representing significant risk to the company. While the company is actively looking to hire a permanent CEO and replaced the vast majority of its board of directors, we believe that it could take many years for the company to improve its culture and to consistently demonstrate the improved oversight that is necessary to account for the company's unique enterprise risks. The assessment of management and governance as weak also lowers the issuer credit ratings by one notch.

Environmental, Social, And Governance

We believe Pac Gas is significantly more exposed to environmental risks than its peers. Because climate change has intensified the severity and frequency of wildfires in California, environmental factors have become an integral part of our credit analysis on the state's electric utilities. Inverse condemnation exacerbates the operational and financial risks that climate change introduces to the company. Furthermore, the company's service territory has recently experienced catastrophic wildfires as seen in both 2017 and 2018, demonstrating its current susceptibility to wildfires.

In our view, the company's social risks are also high, reflecting its communities' susceptibility to wildfires and the potential for higher customer bills due to continued significant investments in wildfire mitigation, system hardening, and technology.

In addition, we believe governance factors challenge the company more negatively than peers. Uncertainty remains, as the company is actively seeking to hire a permanent CEO and its board of directors is undergoing transformational changes, including the recent replacement of the majority of its board members. The company is the only North American regulated utility to file for bankruptcy protection twice over the past two decades, which is in stark contrast to the vast majority of utilities that have not filed for bankruptcy protection during the past century. Furthermore, the company has a history of confrontational and contentious relationships with regulatory authorities, which, in our view, is beyond an isolated episode and outside industry norms and leads to an adverse impact on the company's reputation, representing significant risks to the company.

Group Influence

Under our group rating methodology, we assess Pac Gas as a wholly owned subsidiary of parent PG&E. The group credit profile (GCP) is 'bb-', and Pac Gas' stand-alone credit profile is 'bb-', leading to the 'BB-' issuer credit rating (ICR) on Pac Gas . We assess Pac Gas as a core business of PG&E because it represents almost the entire company, is highly unlikely to be sold, is closely linked to the parent's name and reputation, and possesses a strong long-term commitment from the parent's management team.

Issue Ratings - Recovery Analysis

Pac Gas has approximately $33 billion of senior secured debt that is collateralized and backed by first-mortgage bonds (FMB).

Key analytical factors

- Our recovery rating on Pac Gas' first-mortgage bonds and secured revolving credit facility reflects the substantial value of the company's regulated utility assets that is sufficiently larger than the company's secured debt, limited priority claims, and other liabilities at the utility at this time. For our recovery analysis, we treat the accounts-receivable securitization as a priority claim due to its senior claim to the value of the company's accounts

5-Exh5.6-21

receivable and the structural protections of this financing structure.

- Pac Gas' secured debt has a '1+' recovery rating, indicating our highest expectation for a full recovery and resulting in an issue rating three notches above the issuer credit rating. The recovery rating reflects collateral coverage in excess of 150%, consistent with our criteria for recovery ratings on debt issued by regulated utilities that is secured by the key utility assets.
- A default scenario could stem from sudden liquidity pressure from an unpredictable weather, cost, or market event outside of the company's control, consistent with past utility defaults. Further it could reflect significant future litigation exposure at Pac Gas, consistent with its previous default.
- We expect Pac Gas to continue to operate and reorganize after default given the essential nature of its services. We also assume the value of the utility's assets will be preserved, and we use the net value of its regulated fixed assets as a proxy for the company's enterprise value. The company's regulated asset value is currently roughly $66 billion.

Simulated default assumptions

- Simulated year of default: 2024
- Gross enterprise value--discrete asset valuation approach: $66 billion
- Valuation split—PG&E/Pac Gas: 0%/100%

Simplified waterfall

- Net recovery value after administrative costs (5%): $62 billion
- Pac Gas value: $62 billion
- Priority claims at Pac Gas (accounts receivable securitization): $1 billion
- Secured debt claims at Pac Gas (FMBs and bank debt): $37 billion
- Recovery estimate: 100%

Notes: Debt amounts include six months of accrued interest that we assume will be owed at default. We assume the cash flow revolvers at Pac Gas ($3.5 billion) and PG&E ($500 million) at 85% used at default and that the $1 billion accounts receivable securitization is fully used. We assume any debt maturing before default is refinanced on similar terms before maturity.

Ratings Score Snapshot

Issuer Credit Rating

BB-/Stable/NR

Business risk: Satisfactory

- **Country risk:** Very low
- **Industry risk:** Very low
- **Competitive position:** Fair

Financial risk: Significant

- **Cash flow/leverage:** Significant

Anchor: bb+

Modifiers

- **Diversification/portfolio effect:** Neutral (no impact)
- **Capital structure:** Neutral (no impact)
- **Financial policy:** Neutral (no impact)
- **Liquidity:** Adequate (no impact)
- **Management and governance:** Weak (-1 notch)
- **Comparable rating analysis:** Negative (-1 notch)

Stand-alone credit profile : bb-

- **Group credit profile:** bb-
- **Entity status within group:** Core (no impact)

Related Criteria

- General Criteria: Group Rating Methodology, July 1, 2019
- General Criteria: Hybrid Capital: Methodology And Assumptions, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- Criteria | Corporates | General: Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- Criteria | Corporates | Utilities: Collateral Coverage And Issue Notching Rules For '1+' And '1' Recovery Ratings On Senior Bonds Secured By Utility Real Property, Feb. 14, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

Business And Financial Risk Matrix

Business Risk Profile	Financial Risk Profile					
	Minimal	Modest	Intermediate	**Significant**	Aggressive	Highly leveraged
Excellent	aaa/aa+	aa	a+/a	a-	bbb	bbb-/bb+
Strong	aa/aa-	a+/a	a-/bbb+	bbb	bb+	bb
Satisfactory	a/a-	bbb+	bbb/bbb-	**bbb-/bb+**	bb	b+
Fair	bbb/bbb-	bbb-	bb+	bb	bb-	b
Weak	bb+	bb+	bb	bb-	b+	b/b-
Vulnerable	bb-	bb-	bb-/b+	b+	b	b-

Ratings Detail (As Of July 10, 2020)*

Pacific Gas & Electric Co.	
Issuer Credit Rating	BB-/Stable/NR
Senior Secured	BBB-
Issuer Credit Ratings History	
15-Jun-2020	BB-/Stable/NR
31-Mar-2020	NR/--/NR
16-Jan-2019	D/--/D
14-Jan-2019	CC/Watch Neg/C
07-Jan-2019	B/Watch Neg/B
15-Nov-2018	BBB-/Watch Neg/A-3
05-Sep-2018	BBB/Negative/A-2
13-Jun-2018	BBB/Watch Neg/A-2
22-Feb-2018	BBB+/Watch Neg/A-2
22-Dec-2017	A-/Watch Neg/A-2
12-May-2017	A-/Stable/A-2
15-Aug-2016	BBB+/Positive/A-2
29-Oct-2015	BBB/Positive/A-2
Related Entities	
PG&E Corp.	
Issuer Credit Rating	BB-/Stable/NR
Senior Secured	BB-

*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings' credit ratings on the global scale are comparable across countries. S&P Global Ratings' credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.7

MOODY'S RATINGS ACTION AND REPORTS

MOODY'S
INVESTORS SERVICE

Rating Action: Moody's assigns Baa3 rating to Pacific Gas & Electric's first mortgage bonds and B1 rating to PG&E Corp's senior secured debt; outlooks stable

15 Jun 2020

Over $32 billion of debt securities rated

New York, June 15, 2020 -- Moody's Investors Service (Moody's) assigned a Ba2 Corporate Family Rating (CFR), Ba3-PD Probability of Default Rating (PDR) and SGL-2 Speculative Grade Liquidity Rating to PG&E Corporation (PCG or parent). Moody's also assigned a B1 rating to PCG's approximately $4.75 billion senior secured (stock pledge only) debt.

At the same time, Moody's assigned a Baa3 rating to Pacific Gas & Electric Company's (PG&E or utility) senior secured debt. PG&E's secured debt includes approximately $9.6 billion of reinstated senior secured first mortgage bonds, approximately $11.9 billion of exchanged senior secured first mortgage bonds, and approximately $5.9 billion of new, incremental first mortgage bonds. Moody's also assigned a B1 rating to PG&E's $252 million of preferred stock. The rating outlooks for PCG and PG&E are stable.

As part of the plan of reorganization, PG&E's capital structure includes about $9.6 billion of reinstated pre-petition debt, approximately $11.9 billion of exchanged debt as amended in the restructuring support agreement, incremental new first mortgage bond debt of about $5.9 billion and a $6 billion of temporary secured term loan debt that is pari passu to the utility's first mortgage bonds. The reinstated and exchanged bonds were previously senior unsecured but are now senior secured first mortgage bonds upon emerging from bankruptcy. To the extent the temporary debt is in the form of short-dated bonds rather than a term loan, these bonds would also be pari passu to the first mortgage bonds, and therefore rated Baa3. PG&E expects to refinance this temporary debt with wildfire claim securitization bonds in the first half of 2021 if such bonds are approved by the California Public Utilities Commission (CPUC).

All of the debt in PG&E's capital structure is secured on a first lien basis by substantially all of the utility's real assets and certain tangible assets. The parent's $4.75 billion senior secured debt issuance could be in the form of either term loans or notes, secured in this case by a pledge of the stock of PG&E. All of the proceeds received as part of the debt issuances will be held in escrow until PCG and PG&E emerge from bankruptcy. The parent's term loan will be held at PG&E Corp Term Loan B Escrow temporarily until emergence. We note that PCG will be required to issue $9 billion of new equity as part of its emergence plan and, while an equity backstop commitment exists, challenges in executing this transaction remain. The successful execution of the equity issuance is assumed and incorporated in the organization's ratings. The ratings also incorporate our expectation that the company will receive plan confirmation from the bankruptcy court by June 30, 2020 and PG&E exits bankruptcy soon thereafter with full participation in the wildfire insurance fund established by AB 1054. Failure to receive plan confirmation will result in a redemption of the new debt.

Assignments:

..Issuer: PG&E Corporation

.Corporate Family Rating, Assigned Ba2

.Probability of Default Rating, Assigned Ba3-PD

.... Speculative Grade Liquidity Rating, Assigned SGL-2

.Senior Secured Debt, Assigned B1 (LGD5)

..Issuer: Pacific Gas & Electric Company

.Senior Secured Debt, Assigned Baa3 (LGD2)

.Preferred stock, Assigned B1 (LGD5)

Outlook Actions:

..Issuer: PG&E Corporation

....Outlook, Assigned Stable

..Issuer: Pacific Gas & Electric Company

....Outlook, Assigned Stable

RATINGS RATIONALE

"PG&E's ratings reflects several challenges that lie ahead for the company as it exits its second bankruptcy in the last two decades," said Jeff Cassella, VP-Senior Credit Officer. "These challenges include the substantial task of limiting wildfires in the face of rising wildfire risks largely due to climate change as well as building trust with key stakeholders including state regulators, policymakers and customers," added Cassella.

The Ba2 CFR assigned to PCG considers PG&E's position as a large, fully regulated utility operating solely within the state of California. We view the California political and regulatory environment to be unique and more complicated compared to other state regulatory jurisdictions, in large part due to the California utilities' continuing exposure to wildfire risk, an important ESG consideration and a key driver of the organization's credit quality. While the regulatory framework offers several supportive cost recovery mechanisms, like decoupling, a forward test year and above average rates of return, inverse condemnation risk is unique to California utilities.

The Baa3 rating on PG&E's first mortgage bonds and other secured debt reflects the strong security provided by the first lien on substantially all of the utility's real assets. Upon exit from bankruptcy, PG&E's secured debt will total approximately $33 billion, representing about 50% of the book value of the company's assets and about 75% of rate base. The investment grade rating on the utility's secured debt reflects not only its senior position in the organization's capital structure, but also the substantial security provided by the utility's essential electric and gas transmission, distribution and generation assets.

PCG's ratings incorporate this more onerous political and legislative environment, the continued high degree of exposure to wildfires and the potential for future wildfire costs to be incurred by the utility under inverse condemnation. The possibility for additional wildfire events remains high due to both climate change and population growth in high fire-threat areas. However, the financial impact of future wildfire events should be mitigated by PG&E's participation in California's recently established wildfire insurance fund as well as the new, but untested, regulatory cost recovery framework outlined by AB1054[1], the wildfire bill passed by the state legislature and approved by the Governor in 2019.

AB1054 did not eliminate or alter the application of inverse condemnation, so California utilities are still responsible for paying wildfire victims for wildfire damages, regardless of fault. However, the law improves utility liquidity and enhances their ability to recover wildfire costs from ratepayers by making the prudency standard more favorable and capping the cost disallowance related to wildfire claims to 20% of T&D equity rate base over any three-year period.

Over the next three years, we expect PCG's ratio of cash flow from operations pre-working capital changes (CFO pre-W/C) to debt to be in the 12-15% range and utility PG&E's ratio of CFO pre-W/C to debt to be in the 14-16% range, including planned wildfire claim securitization bonds as on-credit debt. We expect some improvement in the companies' financial profiles through increased cash flow generation and debt reduction, particularly at the parent level. Upon exit, holding company debt will represent about 12% of consolidated debt. However, we expect holdco debt to steadily decline as the company plans to pay down this debt meaningfully over the next five years.

We acknowledge that PCG's credit metrics generally reflect a financial profile that is typically commensurate with a low investment-grade rated utility holding company. However, financial metrics alone are not representative of PCG's overall credit risk profile because of the elevated political risk and legal challenges that continue to persist. These include the company being on probation because of the 2010 San Bruno pipeline explosion, that will continue after the bankruptcy exit, highlighting the company's history of safety and governance issues. In addition, the utility needs to continue to invest heavily in hardening its grid and bolstering its wildfire risk mitigation efforts within its service territory. This will be an ongoing process in the face of climate change and extreme weather events and largely offsets the relatively strong financial metrics.

ESG considerations are a key driver of both PCG and PG&E's ratings and primarily focus on the elevated environmental risk that arises from the organization's significant exposure to wildfires that ultimately lead to its bankruptcy filing last year. PG&E's equipment has been found to be the cause of several major fires over the last few years. The wildfires, which the state of California believes is partly driven by climate change, have added to the state's urgency to combat climate change. Although the state has added significant protection with the aforementioned wildfire insurance fund, the negative financial impact of wildfires could continue to undermine the utility's financial stability and make it more difficult to carry out its decarbonization mandates to combat climate change.

Aside from wildfires, PG&E has moderate carbon transition risk compared to the rest of the US regulated sector due partly to the utility's exit from coal-fired generation many years ago. Additionally, over the long-term, PG&E continues to transition to a pure T&D utility as it self-generates only about half of its electric load with the remaining sourced through purchased power agreements. California's public policy response to climate change issues, which includes aggressive carbon targets and renewable portfolio standards as well as other developments such as community choice aggregators and the growth of rooftop solar, have created additional risk and uncertainty for utilities.

From a generation standpoint, less than 18% of PG&E's 2019 electric load was supplied by owned natural gas power plants. About 43% of its electric load was supplied through power purchase agreements, the majority of which are with renewables and hydro facilities, a positive ESG consideration. The remaining approximately 40% of its electric load was largely self-generated and consisted mostly of nuclear and hydro power.

Our credit analysis of PCG and PG&E also incorporates social risks primarily related to health and safety, demographic and societal trends, as well as customer relations as the company works to provide reliable and affordable service to customers and safe working conditions to employees. Taking into account PG&E's history of safety problems, including the San Bruno pipeline incident, infrastructure linked to wildfire ignitions and the impact of public safety power shutoffs on customers, PG&E has higher social risks compared to the typically moderate social risks experienced by most regulated electric and gas utility peers.

The coronavirus outbreak, weak global economic outlook and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

We expect PG&E to be resilient to recessionary pressures related to the coronavirus because of its rate-regulated business model and regulatory mechanisms such as decoupling revenues. Nevertheless, we are watching for electricity and gas usage declines, utility bill payment delinquency, and the regulatory response to counter these effects on earnings and cash flow. As the events related to the coronavirus continue, we are taking into consideration a wider range of potential outcomes, including more severe downside scenarios. We note that California's moratorium on utility disconnections until April 2021 is one of the longest in the US, which could result in PG&E of having higher than average customer bill payment delinquencies compared to peers. The effects of the pandemic could result in financial metrics that are weaker than expected; however, we see these issues as temporary and not reflective of the long-term financial or credit profile of PCG.

As for governance, we consider PCG's management and financial strategy to be in a period of transition and uncertainty as the company exits from bankruptcy and recently added 11 new members to its 14-person Board of Directors while also searching for a permanent CEO as the current CEO is set to retire on June 30, 2020.

Liquidity

PCG's SGL-2 speculative grade liquidity (SGL) rating reflects a good liquidity profile supported by relatively stable cash flow generation and a high degree of availability under external credit facilities. After the bankruptcy exit, we expect PG&E to generate negative free cash flow as capital expenditures remain significant as the utility continues to invest heavily in wildfire mitigation. PCG's liquidity will be bolstered by the company's inability to distribute common stock dividends to shareholders until it achieves a specific earnings target, which we do not expect to occur until 2023.

We project PCG to have about $250 million of cash on the balance sheet upon exit and full access to $4 billion of revolving credit facilities. The credit facilities include PCG's $500 million senior secured (stock pledge only) revolver and PG&E's $3.5 billion senior secured (all asset pledge) revolver, which includes a $1.5 billion letter of credit sublimit. Both facilities three years after the date of emergence, but each has two one-year extension options with lenders approval. If bill payment delinquencies or under-collections continue to rise due to the coronavirus pandemic, we expect the company may need to draw on its revolving credit facilities to cover cash flow shortfalls.

These facilities do not include a material adverse change clause. The PCG credit facility has two financial maintenance covenants including a limit on debt to capitalization of no more than 70% and solely to the extent the credit facility is drawn as of the end of any quarter, a minimum cash coverage ratio of at least 1.5x prior to the date of the first dividend declaration and of at least 1.0x thereafter. The PG&E credit facility only has one financial maintenance covenant which limits the debt to capitalization ratio to no more than 65%.

Outlook

PCG and PG&E's stable outlooks reflect our expectation that the utility will reduce wildfire risks and liabilities in its service territory through its significant wildfire mitigation investments and better maintenance of its infrastructure. The stable outlook also reflects our view that the California regulatory and legislative environment will remain unique and complicated, but ultimately credit supportive of the state's utilities, including the operation of the wildfire insurance fund during the next and future wildfire seasons. The stable outlook also incorporates our expectation that the companies' financial profiles will slowly strengthen through increased cash flow generation and holding company debt reduction.

FACTORS THAT COULD LEAD TO AN UPGRADE OR DOWNGRADE OF THE RATINGS

Factors that could lead to an upgrade

Because of the pending changes at the Board and senior management, execution risk related to planned equity issuance, and a lack of a track record after exiting from bankruptcy, an upgrade of PCG or PG&E's ratings is unlikely in the near term. Positive rating momentum could occur if PG&E is successful in its wildfire mitigation investments and is able to reduce both wildfire risk and potential liabilities. At the same time, positive rating momentum could occur as a result of a material strengthening of the organization's financial profile from improved cash flow generation and debt reduction, particularly at the parent.

Factors that could lead to a downgrade

PCG and PG&E's ratings could be downgraded if the company is not successful in reducing wildfire risks in its service territory, wildfire liabilities increase materially as a result of new fires, or if there is a failure by state regulators to successfully implement the provisions of AB 1054, including the liability cap, improved prudency standards and access to the wildfire insurance fund, in a consistent and credit supportive manner. Downward rating pressure could also occur if the companies' financial profiles deteriorate such that PCG's ratio of CFO pre-W/C to debt is sustained below 10% or if PG&E's ratio of CFO pre-W/C to debt is sustained below 13%.

PG&E Corporation is a regulated utility holding company headquartered in San Francisco, California that conducts nearly all of its business through Pacific Gas and Electric Company, a regulated vertically integrated utility serving northern and central California. PG&E is regulated by the California Public Utilities Commission and by the Federal Energy Regulatory Commission. PCG and PG&E are expected to exit from their Chapter 11 bankruptcy filing in July 2020. Upon emergence, PCG's assets are expected to be over $85 billion with total reported debt of approximately $38 billion. PG&E serves approximately 5.4 million electric distribution customers and 4.5 million natural gas customers.

The principal methodology used in these ratings was Regulated Electric and Gas Utilities published in June 2017 and available at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1072530 . Alternatively, please see the Rating Methodologies page on www.moodys.com for a copy of this methodology.

REGULATORY DISCLOSURES

For further specification of Moody's key rating assumptions and sensitivity analysis, see the sections Methodology Assumptions and Sensitivity to Assumptions in the disclosure form. Moody's Rating Symbols and Definitions can be found at: https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_79004.

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Regulatory disclosures contained in this press release apply to the credit rating and, if applicable, the related rating outlook or rating review.

Moody's general principles for assessing environmental, social and governance (ESG) risks in our credit analysis can be found at https://www.moodys.com/researchdocumentcontentpage.aspx?docid=PBC_1133569 .

At least one ESG consideration was material to the credit rating action(s) announced and described above.

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REFERENCES/CITATIONS

[1] Assembly Bill 1054 - California Legislature website 12-Jul-2019

Please see www.moodys.com for any updates on changes to the lead rating analyst and to the Moody's legal entity that has issued the rating.

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CREDIT OPINION
16 June 2020

New Issue

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RATINGS

Pacific Gas & Electric Company

Domicile	South San Francisco, California, United States
First Mortgage Bonds	Baa3/LGD2
Outlook	Stable

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Pacific Gas & Electric Company

Update to credit profile upon exit from bankruptcy

Summary

PG&E's credit profile considers its position as a large, fully regulated utility operating solely within the state of California. We view the California political and regulatory environment to be unique and more complicated compared to other state regulatory jurisdictions, in large part due to the California utilities' continuing exposure to wildfire risk, an important ESG consideration and a key driver of the organization's credit quality. While the regulatory framework offers several supportive cost recovery mechanisms, like decoupling, a forward test year and above average rates of return, inverse condemnation risk is unique to California utilities.

PG&E's credit incorporates this more onerous political and legislative environment, the continued high degree of exposure to wildfires and the potential for future wildfire costs to be incurred by the utility under inverse condemnation. The possibility of additional wildfire events remains high due to both climate change and population growth in high fire-threat areas. However, the financial impact of future wildfire events should be mitigated by PG&E's participation in California's recently established wildfire insurance fund as well as the new, but untested, regulatory cost recovery framework outlined by AB1054, the wildfire bill passed by the state legislature and approved by the Governor in 20191.

AB1054 did not eliminate or alter the application of inverse condemnation, so California utilities are still responsible for paying wildfire victims for wildfire damages, regardless of fault. However, the law improves utility liquidity and enhances their ability to recover wildfire costs from ratepayers by making the prudency standard more favorable and capping the cost disallowance related to wildfire claims to 20% of T&D equity rate base over any three-year period.

Over the next three years, we expect PCG's ratio of cash flow from operations pre-working capital changes (CFO pre-W/C) to debt to be in the 12-15% range and utility PG&E's ratio of CFO pre-W/C to debt to be in the 14-16% range, including the planned wildfire claim securitization bonds as on-credit debt. We expect some improvement in the companies' financial profiles through increased cash flow generation and debt reduction, particularly at the parent level. Upon exit, holding company debt will represent about 12% of consolidated debt. However, we expect holdco debt to steadily decline as the company plans to pay down this debt meaningfully over the next five years.

We acknowledge that PCG's credit metrics generally reflect a financial profile that is typically commensurate with a stronger credit. However, financial metrics alone are not representative of PCG's overall credit risk profile because of the elevated political risk and legal challenges that continue to persist. These include the company being on probation

because of the San Bruno pipeline explosion, that will continue after the bankruptcy exit, highlighting the company's history of safety and governance issues. In addition, the utility needs to continue to invest heavily in hardening its grid and bolstering its wildfire risk mitigation efforts within its service territory. This will be an ongoing process in the face of climate change and extreme weather events and largely offsets the relatively strong financial metrics.

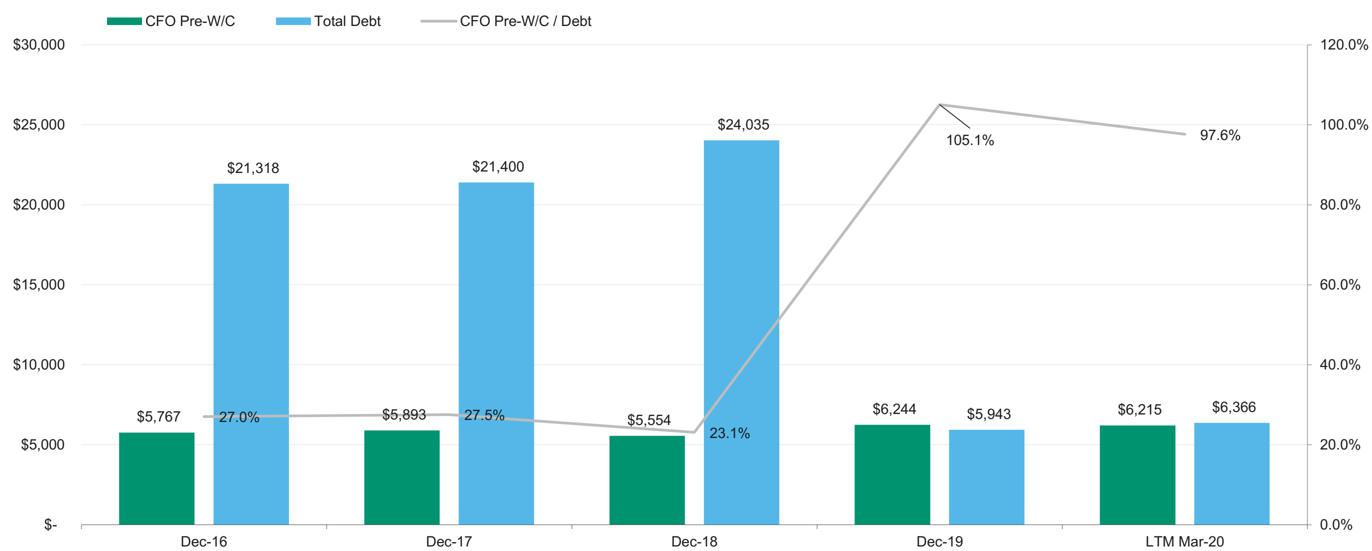
Recent Developments

The coronavirus outbreak, weak global economic outlook and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

We expect PG&E to be resilient to recessionary pressures related to the coronavirus because of its rate-regulated business model and regulatory mechanisms such as decoupling revenues. Nevertheless, we are watching for electricity and gas usage declines, utility bill payment delinquency, and the regulatory response to counter these effects on earnings and cash flow. As the events related to the coronavirus continue, we are taking into consideration a wider range of potential outcomes, including more severe downside scenarios. We note that California's moratorium on utility disconnections until April 2021 is one of the longest in the US, which could result in PG&E of having higher than average customer bill payment delinquencies compared to peers. The effects of the pandemic could result in financial metrics that are weaker than expected; however, we see these issues as temporary and not reflective of the long-term financial or credit profile of PCG.

Exhibit 1

Historical CFO Pre-W/C, Total Debt and ratio of CFO Pre-W/C to Debt ($ MM)



Source: Moody's Financial Metrics

Credit strengths

» Credit supportive regulatory framework with several timely cost recovery mechanisms including revenue decoupling and above average returns

» AB1054 legislation includes provisions and access to a wildfire insurance fund that appear to mitigate the risk of future potential wildfire liabilities

» Financial profile expected to be commensurate with investment grade regulated utility holding company peers

» Moderate carbon transition risk

Credit challenges

» Elevated wildfire risk largely due to climate change will require extensive mitigation investments and improved operational maintenance and oversight

» Regulatory application of AB1054 provisions in response to a wildfire event remains uncertain because not yet tested

» Overhang from weakened relationship with state regulators and key policymakers due to past governance issues and operational miscues expected to continue

» Senior management transition including search for new CEO and recent turnover of majority of the Board of Directors

» Elevated political risk and public scrutiny

» Demanding public policy goals

Rating outlook

PCG and PG&E's stable outlooks reflect our expectation that the utility will reduce wildfire risks and liabilities in its service territory through its significant wildfire mitigation investments and better maintenance of its infrastructure. The stable outlook also reflects our view that the California regulatory and legislative environment will remain unique and complicated, but ultimately credit supportive of the state's utilities, including the operation of the wildfire insurance fund during the next and future wildfire seasons in California. The stable outlook also incorporates our expectation that the companies' financial profiles will slowly strengthen through increased cash flow generation and holding company debt reduction.

Factors that could lead to an upgrade

» Because of the pending changes at the CEO position, execution risk related to planned equity issuance, and a lack of a track record after exiting from bankruptcy, an upgrade of PCG or PG&E is unlikely in the near term. Positive rating momentum could occur if PG&E is successful in its wildfire mitigation investments and is able to reduce both wildfire risk and potential liabilities. At the same time, positive rating momentum could occur as a result of a material strengthening of the organization's financial profile from improved cash flow generation and debt reduction, particularly at the parent.

Factors that could lead to a downgrade

» PCG and PG&E could be downgraded if the company is not successful in reducing wildfire risks in its service territory, wildfire liabilities increase materially as a result of new fires, or if there is a failure by state regulators to successfully implement the provisions of AB 1054, including the liability cap, improved prudency standards and access to the wildfire insurance fund, in a consistent and credit supportive manner. Downward pressure could also occur if the companies' financial profiles deteriorate such that PCG's ratio of CFO pre-W/C to debt is sustained below 10% or if PG&E's ratio of CFO pre-W/C to debt is sustained below 13%.

Key indicators

Exhibit 2
Pacific Gas & Electric Company [1]

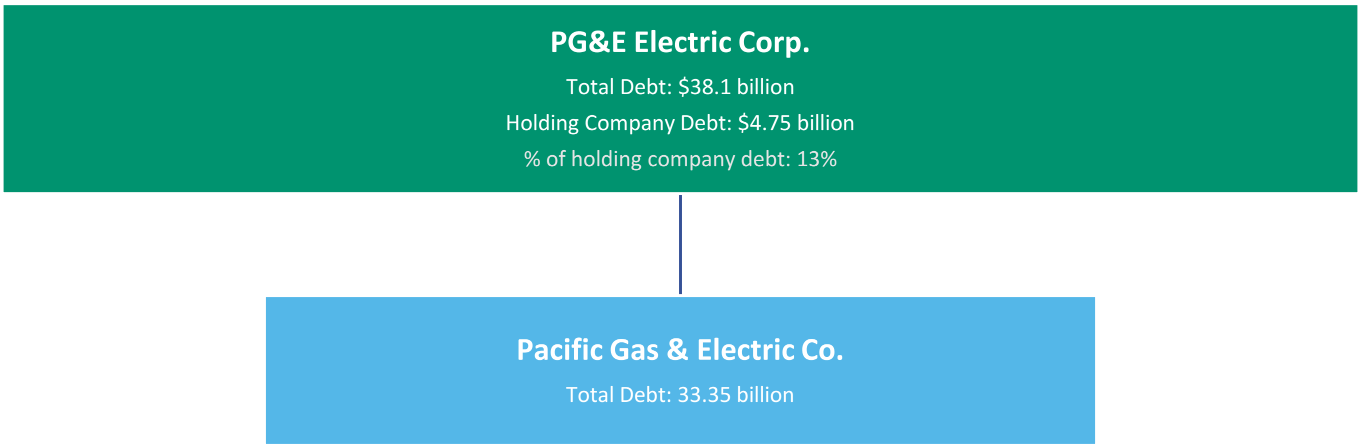
	Dec-16	Dec-17	Dec-18	Dec-19	LTM Mar-20
CFO Pre-W/C + Interest / Interest	6.9x	7.0x	6.2x	6.3x	5.7x
CFO Pre-W/C / Debt	27.0%	27.5%	23.1%	105.1%	97.6%
CFO Pre-W/C – Dividends / Debt	22.8%	23.9%	23.1%	105.1%	97.6%
Debt / Capitalization	42.8%	45.8%	60.1%	51.8%	50.7%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics

Profile

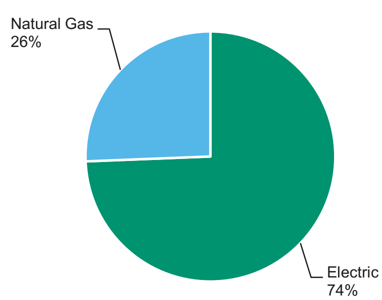
PG&E Corporation is a regulated utility holding company headquartered in San Francisco, California that conducts nearly all of its business through Pacific Gas and Electric Company, a regulated vertically integrated utility serving northern and central California. PG&E is regulated by the California Public Utilities Commission and by the Federal Energy Regulatory Commission. PCG and PG&E are expected to exit from their Chapter 11 bankruptcy filings in July 2020. Upon emergence, PCG's assets are expected to be over $85 billion with total reported debt of approximately $38 billion. PG&E serves approximately 5.4 million electric distribution customers and 4.5 million natural gas customers.

Exhibit 3
PG&E simplified organizational structure



Debt amounts reflect capital structure at emergence from bankruptcy
Source: Company

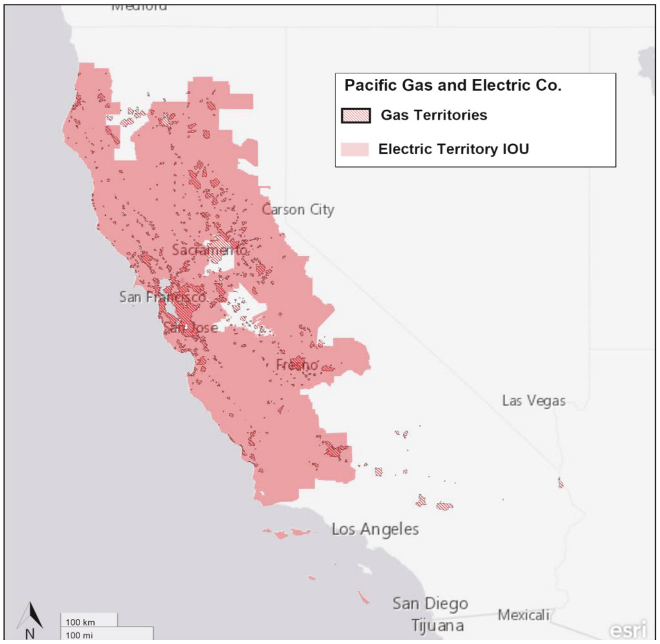
Exhibit 4
Revenue by source
As of 31 December 2019



Source: Company SEC filings

5-Exh5.7-12

Exhibit 5
PG&E's Service Territory



Source: S&P Global Market Intelligence

Detailed credit considerations

Wildfire risk remains elevated, exacerbated by inverse condemnation

Wildfires continue to be a significant risk to California utilities. Wildfires are larger and more damaging in the state because of, among other things, the effects of climate change, and population growth in high fire-risk areas. Seven of the ten most damaging fires in California, either utility or non-utility related, have occurred in the past five years.

The potential wildfire liabilities have an outsized effect on the credit quality of investor-owned utilities because of California's' application of the inverse condemnation legal doctrine. Under inverse condemnation, utilities are held strictly liable for damages from fires that were caused by utility equipment, regardless of fault or the reasonableness of its conduct.

Moreover, the ability of utilities to pass on wildfire liabilities to their ratepayers was thrown into doubt in 2017 when the CPUC disallowed the San Diego Gas & Electric Company's (SDG&E, Baa1 positive) request to recover costs associated with the utility's 2007 southern California wildfires (see "San Diego Gas & Electric Company: Regulator denies San Diego Gas & Electric's recovery of wildfire costs, a credit negative for all California utilities" 04 Dec 17). SDG&E's wildfire cost disallowance decision was the CPUC's first-ever wildfire cost recovery proceeding for regulated utilities as wildfire claims in the past had generally never exceeded the utilities' insurance coverage.

Since 2017, PG&E and Southern California Edison Company (SCE, Baa2 stable), the state's second-largest regulated electric utility, have both experienced several catastrophic wildfires. The utilities' credit quality deteriorated as it became apparent that the companies could potentially be subject to billions, or even tens of billions, of dollars in wildfire related liabilities and their ability to pass these costs to ratepayers was not assured. This was a large driver of PG&E's bankruptcy filing in January 2019 as the company faced up to an estimated $30 billion in wildfire liabilities associated with 2017 and 2018 wildfires.

AB1054 legislation, albeit untested, enhances liquidity and mitigates potential liabilities associated with future wildfire events

Following PG&E's bankruptcy filing, California passed Assembly Bill 1054 (AB 1054) in July 2019 to address the deteriorating credit condition of the state's regulated utilities. In accordance with AB 1054, a state wildfire insurance fund was established to provide utilities with immediate access to a substantial liquidity resource to cover potential damages caused by a future catastrophic wildfire ignited by its equipment, when the damages exceed the greater of $1 billion or the utility's insurance coverage. The insurance fund would be used to initially pay wildfire related claims, while the utility may be required to reimburse the fund at a later date if there are cost disallowances due to imprudence. For more discussion on AB1054, see the "FAQ on the credit implications of California's new wildfire law" (09 Aug 19).

AB 1054 includes other important provisions that we expect will mitigate a utility's exposure to potential wildfire liabilities. The legislation stipulates that the amount of cost disallowance associated with catastrophic wildfires will be capped at 20% of the utility's equity portion of its transmission and distribution (T&D) rate base over any three-year period. The state's utilities should also benefit from a more favorable prudency standard and a more expedient subrogation claims settlement process. If the wildfire insurance fund's claims-paying capability is exhausted, the disallowance cap will no longer be available, but the more favorable prudency standard will remain. Although AB1054 includes several credit supportive mechanisms, it has yet to be tested in its application in response to a wildfire event.

With PG&E's exit from bankruptcy by 30 June 2020 and participation in the wildfire insurance fund, the total size of the fund will be $21 billion. It is especially difficult to model wildfire risk because there are many variables including the effects of weather, climate change, and the utilities' risk mitigation measures. Nonetheless, the insurance fund should be large enough to cover all but the most extreme downside scenarios over the next decade. Filsinger Energy Partners, a consultancy firm engaged by California Governor Newsom's office, estimates that the fund has only a 0.9% chance of being exhausted by 2030. The stochastic model assumes that California's wildfire trend during 2014-2018 continues, utilities maintain $1 billion of wildfire liability insurance, and 75% of wildfire costs are disallowed in 2020, but this disallowance falls steadily to 25% by 2030. For more discussion on the durability of the wildfire fund, see "Regulated electric and gas Utilities -US: California's wildfire fund is sufficiently capitalized to pay out claims" (20 Nov 19).

Regulatory framework includes extensive cost recovery mechanisms

The California regulatory framework includes several cost recovery mechanisms that support credit quality. PG&E is authorized to utilize several cost recovery provisions including a revenue decoupling mechanism, procurement cost pass-through, and an automatic adjustment mechanism for authorized return on equity. California does not provide automatic recognition of investments between rate cases, but it does allow for the use of multiple future test years using attrition rate increases (i.e., scheduled rate increases in between rate cases), which reduces regulatory lag.

In California, the authorized return on equity is established in a triennial proceeding outside of a General Rate Case (GRC). In the last cost of capital proceeding, which concluded in December 2019, the CPUC maintained the utility's authorized return on equity (ROE) at 10.25% for the three-year period beginning January 1, 2020 and maintained the 52% common equity component of the utility's capital structure and reduces its preferred stock component from 1% to 0.5%.

On 20 December 2019, PG&E filed a 2020 GRC settlement agreement with several consumer advocacy groups and other key stakeholders. PG&E initially filed its GRC application in January 2019 based on a 2020 future test year. The settlement agreement includes revenue requirements of approximately $9.09 billion, $9.41 billion and $9.78 billion for each year, respectively, in the 2020 – 2022 period. The settlement provides for new two-way balancing accounts for the three largest components of the GRC application increase, the Community Wildfire Safety Program, vegetation management, and liability insurance premiums. A final decision on the GRC by the CPUC is pending.

Elevated political risk and aggressive public policy demands

We view California as a very challenging political environment for PG&E. California utilities tend to receive a high level of attention and scrutiny from both the media and the public, such that issues can often become contentious and litigious. PG&E is in a particularly vulnerable position, given its history of safety related incidents and governance issues over the last several years.

Furthermore, there are significant demands placed on California utilities, including ambitious public policy initiatives. These include the state's Renewable Portfolio Standard and Senate Bill 100 passed in 2018, which require load serving entities to procure 60% of their total energy sales from renewables by 2030 and 100% by 2045, respectively. These initiatives may present investment opportunities for the utilities. However, they may also drive retail rates higher which could negatively impact ratepayers, particularly as the grid's reliability requires flexible generation and energy storage which remains expensive despite battery cost reductions.

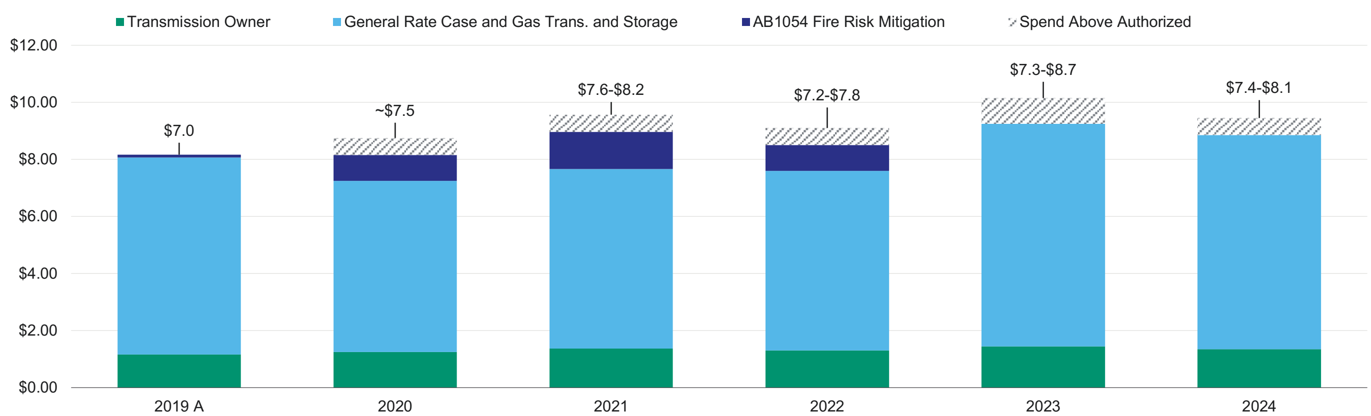
Financial metrics expected to solid even with elevated capital investments

Over the next three years, despite the current impact of the coronavirus, we expect both PCG and PG&E's credit metrics to be solid even during a period of elevated capital investments, primarily driven by higher wildfire mitigation investments. We expect PCG's ratio of cash flow from operations pre-working capital changes (CFO pre-W/C) to debt to be in the 12-15% range and PG&E's ratio of CFO pre-W/C to debt to be in the 14-16% range, including any wildfire claim securitization bonds as on-credit debt. We expect some improvement in the companies' financial profiles through increased cash flow generation and debt reduction, particularly at the parent level. Upon exit, holding company debt will represent about 12% of consolidated debt. However, we expect holdco debt to steadily decline as the company plans to pay down this debt meaningfully over the next five years.

We acknowledge that PCG's credit metrics generally reflect a financial profile that is typically commensurate with stronger credit quality. However, financial metrics alone are not representative of PCG's overall credit risk profile because of the elevated political risk and legal challenges that continue to persist. These include the company being on probation because of the San Bruno pipeline explosion, that will continue after the bankruptcy exit.

In addition, the utility needs to continue to invest heavily in hardening its grid and bolstering its wildfire risk mitigation efforts within its service territory. This will be an ongoing process in the face of climate change and extreme weather events and largely offsets the relatively strong financial metrics. PG&E's capital expenditures are expected to reach approximately $7.5 billion in 2020 and could reach as high as $8.2 billion in 2021 and remain elevated for the foreseeable future. The higher annual capex spending over the next few years is considerably more than the average annual capital investments of about $5.9 billion over the last five years. The company's capex forecast includes approximately $3.2 billion of fire risk mitigation investments during 2019 – 2022, included in the utility's approved wildfire mitigation plans on which PG&E will not earn an equity return.

Exhibit 6
Forecasted Capital Expenditures 2019A-2024
$ in billions

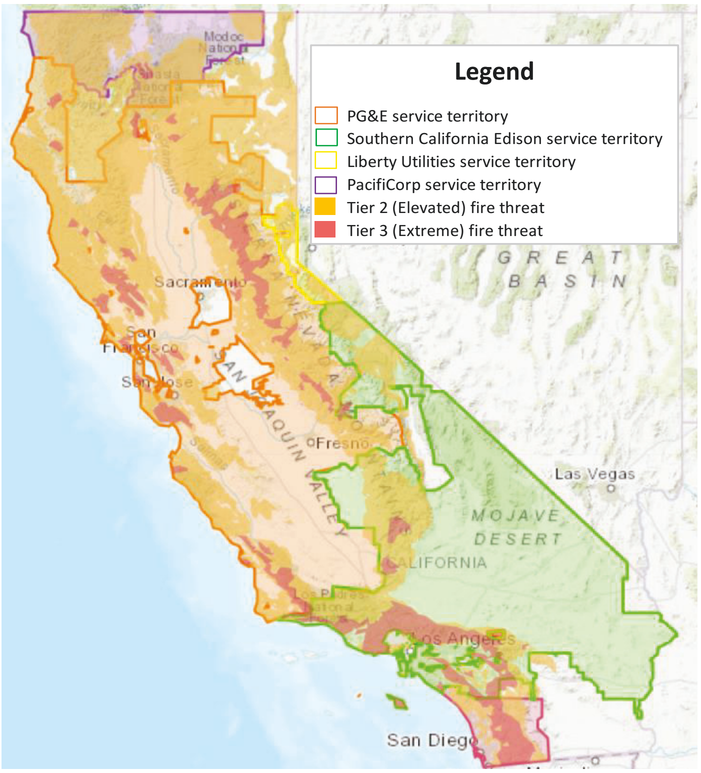


Source: Company presentation

ESG Considerations

ESG considerations are a key driver of both PCG and PG&E's credit quality and primarily focus on the elevated environmental risk that arises from the organization's significant exposure to wildfires that ultimately lead to its bankruptcy filing last year. PG&E's equipment has been found to be the cause of several major fires over the last few years. The wildfires, which the state of California believes is partly driven by climate change, have added to the state's urgency to combat climate change. Although the state has added significant protection with the aforementioned wildfire insurance fund, the negative financial impact of wildfires could continue to undermine the utility's financial stability and make it more difficult to carry out its decarbonization mandates to combat climate change.

Exhibit 7
CPUC high fire threat map



Source: CPUC, Moody's Investors Service

Aside from wildfires, PG&E has moderate carbon transition risk compared to the rest of the US regulated sector due partly to the utility's exit from coal-fired generation many years ago. Additionally, over the long-term, PG&E continues to transition to a pure T&D utility as it self-generates only about half of its electric load with the remaining sourced through purchased power agreements. California's public policy response to climate change issues, which includes aggressive carbon targets and renewable portfolio standards as well as other developments such as community choice aggregators and the growth of rooftop solar, have created additional risk and uncertainty for utilities.

From a generation standpoint, less than 18% of PG&E's 2019 electric load was supplied by owned natural gas power plants. About 43% of its electric load was supplied through power purchase agreements, the majority of which are with renewables and hydro facilities, a credit positive ESG consideration. The remaining approximately 40% of its electric load was largely self-generated and consisted mostly of nuclear and hydro power.

PG&E's natural gas distribution business, which accounts for about 25% of revenues, is allowed timely recovery of its natural gas commodity purchase costs through a pass through to customers via an effective cost recovery mechanism. However, California's aggressive clean energy policies could eventually cause downward pressure on natural gas volumes in the utility sector. There is also the potential for growth of electric heat pumps, which could lead to declining use by residential customers if decarbonization of home heating becomes a policy objective in the future. These risks are, however, long-term in nature and partly mitigated because PG&E's revenues are de-coupled from sales volumes. Moody's framework for assessing carbon transition risk in this industry is set out in "Prudent regulation key to mitigating risk, capturing opportunities of decarbonization" (2 Nov 2017).

Our credit analysis of PCG and PG&E also incorporates social risks primarily related to health and safety, demographic and societal trends, as well as customer relations as the company works to provide reliable and affordable service to customers and safe working conditions to employees. Taking into account PG&E's history of safety problems, including the 2010 San Bruno pipeline explosion incident, infrastructure linked to wildfire ignitions and the impact on customers of public safety power shutoffs, PG&E has higher social risks compared to the typically moderate social risks experienced by most regulated electric and gas utility peers.

As for governance, we consider PCG's management and financial strategy to be in a period of transition and uncertainty as the company exits from bankruptcy and recently added 11 new members to its 14-person Board of Directors while also searching for a permanent CEO as the current CEO is set to retire on June 30, 2020.

Liquidity analysis

PCG's SGL-2 speculative grade liquidity rating reflects a good liquidity profile supported by relatively stable cash flow generation and a high degree of availability under external credit facilities. After the bankruptcy exit, we expect PG&E to generate negative free cash flow as capital expenditures remain significant as the utility continues to invest heavily in wildfire mitigation. PCG's liquidity will be bolstered by the company's inability to distribute common stock dividend to shareholders until it achieves a specific earnings target, which we do not expect to occur until 2023.

We project PCG to have about $250 million of cash on the balance sheet upon exit and full access to $4 billion of revolving credit facilities. The credit facilities include PCG's $500 million senior secured (stock pledge only) revolver and PG&E's $3.5 billion senior secured (all asset pledge) revolver, which includes a $1.5 billion letter of credit sublimit. Both facilities three years after the date of emergence, but each has two one-year extension options with lenders approval. PG&E will also have access to a $1 billion accounts receivable securitization facility. If bill payment delinquencies or under-collections continue to rise due to the coronavirus pandemic, we expect the company may need to draw on its revolving credit facilities to cover cash flow shortfalls.

These facilities do not include a material adverse change clause. The PCG credit facility has two financial maintenance covenants including a limit on debt to capitalization of no more than 70% and solely to the extent the credit facility is drawn as of the end of any quarter, a minimum cash coverage ratio of at least 1.5x prior to the date of the first dividend declaration and of at least 1.0x thereafter. The PG&E credit facility only has one financial maintenance covenant which limits the debt to capitalization ratio to no more than 65%.

Upcoming maturities in the near-to-intermediate term include PG&E's temporary debt including a $4.5 billion term loan maturing in June 2021 and $1.5 billion maturing December 2021. The temporary debt is expected to be paid off using securitization bond financing expected to be issued in the first half of 2021 if approved by the CPUC. The nearest dated long-term bond maturities include three tranches totaling $1.175 billion due in 2023.

Structural considerations

As part of the plan of reorganization, PG&E's capital structure includes about $9.6 billion of reinstated pre-petition debt, approximately $11.9 billion of exchanged debt as amended in the restructuring support agreement, incremental new first mortgage bond debt of about $5.9 billion and a $6 billion temporary secured term loan debt that is pari passu to the utility's first mortgage bonds. To the extent the temporary debt is in the form of short-dated bonds rather than a term loan, these bonds would also be pari passu to the first mortgage bonds, and therefore rated Baa3. PG&E expects to refinance this temporary debt with wildfire claim securitization bonds in the first half of 2021 if such bonds are approved by the CPUC.

All of the debt in PG&E's capital structure is secured on a first lien basis by substantially all of the utility's real assets and certain tangible assets. The parent's $4.75 billion senior secured debt issuance could be in the form of either term loans or notes, secured in this case by a pledge of the stock of PG&E. All of the proceeds received as part of the debt issuances will be held in escrow until PCG and PG&E emerge from bankruptcy. The parent's term loan will be held at PG&E Corp Term Loan B Escrow temporarily until emergence. We note that PCG will be required to issue $9 billion of new equity as part of its emergence plan and, while an equity backstop commitment exists, challenges in executing this transaction remain. The successful execution of the equity issuance is assumed and incorporated in the organization's ratings. The ratings also incorporate our expectation that the company will receive plan confirmation from the bankruptcy court by June 30, 2020 and PG&E exits bankruptcy soon thereafter with full participation in the wildfire insurance fund established by AB 1054. Failure to receive plan confirmation will result in a redemption of the new debt.

We utilized Moody's Loss Given Default (LGD) methodology to determine the individual rating assessments on the debt securities within the PCG capital structure. The ratings are based on PCG's CFR of Ba2 and Probability of Default Rating (PDR) of Ba3-PD. The Baa3 rating on the utility's first mortgage bonds, incorporating a one notch override, reflects the senior position of the debt within the capital structure and it's all asset security pledge. The one notch override reflects the historically high recovery rate of secured utility debt and also considers the high recovery rate most recently observed for PG&E's unsecure debt in the current bankruptcy. The B1 rating on the parent's senior secured (stock pledge only) debt reflects its junior position within the capital structure and the B1 rating on PG&E's preferred stock reflects the subordinated nature of these securities.

Rating methodology and scorecard factors

Exhibit 8
Rating Factors
Pacific Gas & Electric Company

Regulated Electric and Gas Utilities Industry Scorecard [1][2]	Current LTM 3/31/2020		Moody's 12-18 Month Forward View As of Date Published [3]	
Factor 1 : Regulatory Framework (25%)	**Measure**	**Score**	**Measure**	**Score**
a) Legislative and Judicial Underpinnings of the Regulatory Framework	Baa	Baa	Baa	Baa
b) Consistency and Predictability of Regulation	Ba	Ba	Ba	Ba
Factor 2 : Ability to Recover Costs and Earn Returns (25%)				
a) Timeliness of Recovery of Operating and Capital Costs	Baa	Baa	Baa	Baa
b) Sufficiency of Rates and Returns	Baa	Baa	Baa	Baa
Factor 3 : Diversification (10%)				
a) Market Position	A	A	A	A
b) Generation and Fuel Diversity	A	A	A	A
Factor 4 : Financial Strength (40%)				
a) CFO pre-WC + Interest / Interest (3 Year Avg)	6.5x	Aa	4.7x - 5.2x	A
b) CFO pre-WC / Debt (3 Year Avg)	55.0%	Aaa	13% - 16%	Baa
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	53.3%	Aaa	11% - 14%	Baa
d) Debt / Capitalization (3 Year Avg)	40.6%	A	62% - 66%	Ba
Rating:				
Scorecard-Indicated Outcome Before Notching Adjustment		A2		Baa2
HoldCo Structural Subordination Notching				
a) Scorecard Indicated Outcome		A2		Baa2
b) Actual Rating Assigned		Baa3		Baa3

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2] As of 3/31/2020(L);
[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.
Source: Moody's Financial Metrics

Appendix

Exhibit 9

Cash Flow and Credit Metrics [1]

CF Metrics	Dec-16	Dec-17	Dec-18	Dec-19	LTM Mar-20
As Adjusted					
FFO	5,871	5,915	(6,276)	(6,085)	(5,455)
+/- Other	(104)	(22)	11,830	12,329	11,670
CFO Pre-WC	5,767	5,893	5,554	6,244	6,215
+/- ΔWC	(1,451)	49	(880)	(944)	(1,535)
CFO	4,316	5,942	4,674	5,300	4,680
- Div	916	789	(10)	-	2
- Capex	5,690	5,677	6,493	6,803	7,259
FCF	(2,290)	(523)	(1,810)	(1,503)	(2,582)
(CFO Pre-W/C) / Debt	27.0%	27.5%	23.1%	105.1%	97.6%
(CFO Pre-W/C - Dividends) / Debt	22.8%	23.9%	23.1%	105.1%	97.6%
FFO / Debt	27.5%	27.6%	-26.1%	-102.4%	-85.7%
RCF / Debt	23.2%	24.0%	-26.1%	-102.4%	-85.7%
Revenue	17,667	17,138	16,760	17,129	17,424
Cost of Good Sold	5,396	5,035	4,482	3,620	3,503
Interest Expense	970	976	1,073	1,179	1,319
Net Income	1,255	1,585	(240)	309	580
Total Assets	68,631	68,162	76,650	84,559	86,096
Total Liabilities	50,615	48,785	64,095	79,448	80,534
Total Equity	18,015	19,377	12,556	5,111	5,562

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months
Source: Moody's Financial Metrics

Exhibit 10

Peer Comparison Table [1]

	Pacific Gas & Electric Company			Southern California Edison Company			San Diego Gas & Electric Company			Southern California Gas Company		
	Baa3 Stable			Baa2 Stable			(P)Baa1 Positive			A1 Negative		
(in US millions)	FYE Dec-18	FYE Dec-19	LTM Mar-20	FYE Dec-18	FYE Dec-19	LTM Mar-20	FYE Dec-18	FYE Dec-19	LTM Mar-20	FYE Dec-17	FYE Dec-18	FYE Dec-19
Revenue	16,760	17,129	17,424	12,611	12,306	12,270	4,568	4,925	5,049	3,785	3,962	4,525
CFO Pre-W/C	5,554	6,244	6,215	3,556	-367	-535	1,412	1,369	1,447	1,192	885	1,259
Total Debt	24,035	5,943	6,366	15,486	17,284	19,409	6,917	6,775	7,076	4,124	4,673	5,340
CFO Pre-W/C / Debt	23.1%	105.1%	97.6%	23.0%	-2.1%	-2.8%	20.4%	20.2%	20.5%	28.9%	18.9%	23.6%
CFO Pre-W/C – Dividends / Debt	23.1%	105.1%	97.6%	17.5%	-4.8%	-7.5%	16.8%	20.2%	17.6%	28.9%	17.9%	20.7%
Debt / Capitalization	60.1%	51.8%	50.7%	45.7%	42.9%	45.4%	47.4%	43.2%	44.0%	45.9%	46.4%	46.7%

[1] All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR* = Ratings under Review, where UPG = for upgrade and DNG = for downgrade
Source: Moody's Financial Metrics

Ratings

Exhibit 11

Category	Moody's Rating
PACIFIC GAS & ELECTRIC COMPANY	
Outlook	Stable
First Mortgage Bonds	Baa3/LGD2
Pref. Stoc k	B1/LGD5
PARENT: PG&E CORPORATION	
Outlook	Stable
Corporate Family Rating	Ba2
Senior Secured	B1/LGD5
Speculative Grade Liquidity	SGL-2

Source: Moody's Investors Service

REPORT NUMBER 1231724

MOODY'S
INVESTORS SERVICE

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CREDIT OPINION
16 June 2020

New Issue

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RATINGS

PG&E Corporation

Domicile	South San Francisco, California, United States
Long Term Rating	Ba2
Type	LT Corporate Family Ratings
Outlook	Stable

Please see the ratings section at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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PG&E Corporation

Update to credit profile upon exit from bankruptcy

Summary

PCG's credit profile considers subsidiary PG&E's position as a large, fully regulated utility operating solely within the state of California. We view the California political and regulatory environment to be unique and more complicated compared to other state regulatory jurisdictions, in large part due to the California utilities' continuing exposure to wildfire risk, an important ESG consideration and a key driver of the organization's credit quality. While the regulatory framework offers several supportive cost recovery mechanisms, like decoupling, a forward test year and above average rates of return, inverse condemnation risk is unique to California utilities.

PCG's credit incorporates this more onerous political and legislative environment, the continued high degree of exposure to wildfires and the potential for future wildfire costs to be incurred by the utility under inverse condemnation. The possibility of additional wildfire events remains high due to both climate change and population growth in high fire-threat areas. However, the financial impact of future wildfire events should be mitigated by PG&E's participation in California's recently established wildfire insurance fund as well as the new, but untested, regulatory cost recovery framework outlined by AB1054, the wildfire bill passed by the state legislature and approved by the Governor in 20191.

AB1054 did not eliminate or alter the application of inverse condemnation, so California utilities are still responsible for paying wildfire victims for wildfire damages, regardless of fault. However, the law improves utility liquidity and enhances their ability to recover wildfire costs from ratepayers by making the prudency standard more favorable and capping the cost disallowance related to wildfire claims to 20% of T&D equity rate base over any three-year period.

Over the next three years, we expect PCG's ratio of cash flow from operations pre-working capital changes (CFO pre-W/C) to debt to be in the 12-15% range and utility PG&E's ratio of CFO pre-W/C to debt to be in the 14-16% range, including the planned wildfire claim securitization bonds as on-credit debt. We expect some improvement in the companies' financial profiles through increased cash flow generation and debt reduction, particularly at the parent level. Upon exit, holding company debt will represent about 12% of consolidated debt. However, we expect holdco debt to steadily decline as the company plans to pay down this debt meaningfully over the next five years.

We acknowledge that PCG's credit metrics generally reflect a financial profile that is typically commensurate with a stronger credit. However, financial metrics alone are not representative of PCG's overall credit risk profile because of the elevated political risk and legal challenges that continue to persist. These include the company being on probation

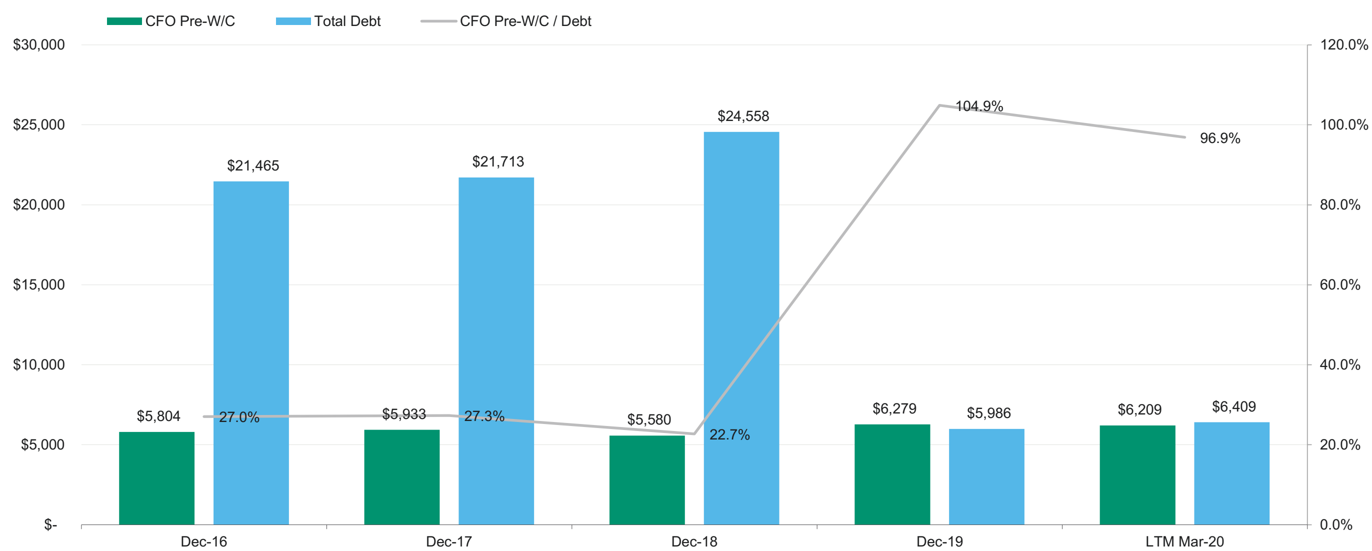
because of the San Bruno pipeline explosion, that will continue after the bankruptcy exit, highlighting the company's history of safety and governance issues. In addition, the utility needs to continue to invest heavily in hardening its grid and bolstering its wildfire risk mitigation efforts within its service territory. This will be an ongoing process in the face of climate change and extreme weather events and largely offsets the relatively strong financial metrics.

Recent Developments

The coronavirus outbreak, weak global economic outlook and asset price declines are creating a severe and extensive credit shock across many sectors, regions and markets. The combined credit effects of these developments are unprecedented. We regard the coronavirus outbreak as a social risk under our ESG framework, given the substantial implications for public health and safety.

We expect PG&E to be resilient to recessionary pressures related to the coronavirus because of its rate-regulated business model and regulatory mechanisms such as decoupling revenues. Nevertheless, we are watching for electricity and gas usage declines, utility bill payment delinquency, and the regulatory response to counter these effects on earnings and cash flow. As the events related to the coronavirus continue, we are taking into consideration a wider range of potential outcomes, including more severe downside scenarios. We note that California's moratorium on utility disconnections until April 2021 is one of the longest in the US, which could result in PG&E of having higher than average customer bill payment delinquencies compared to peers. The effects of the pandemic could result in financial metrics that are weaker than expected; however, we see these issues as temporary and not reflective of the long-term financial or credit profile of PCG.

Exhibit 1
Historical CFO Pre-W/C, Total Debt and ratio of CFO Pre-W/C to Debt ($ MM)



Source: Moody's Financial Metrics

Credit strengths

» Credit supportive regulatory framework with several timely cost recovery mechanisms including revenue decoupling and above average returns

» AB1054 legislation includes provisions and access to a wildfire insurance fund that appear to mitigate the risk of future potential wildfire liabilities

» Financial profile expected to be commensurate with investment grade regulated utility holding company peers

» Moderate carbon transition risk

Credit challenges

» Elevated wildfire risk largely due to climate change continues and will require extensive mitigation investments and improved operational maintenance oversight

» Regulatory application of AB1054 provisions in response to a wildfire event remains uncertain because not yet tested

» Overhang from weakened relationship with state regulators and key policymakers due to past governance issues and operational miscues expected to be lengthy

» Senior management transition including search for new CEO and recent turnover of majority of the Board of Directors

» Elevated political risk and public scrutiny

» Demanding public policy goals and moderate carbon transition risk

Rating outlook

PCG and PG&E's stable outlooks reflect our expectation that the utility continues on its path to successfully reduce major wildfire risks and liabilities in its service territory through continued significant wildfire mitigation investments and better maintenance of its infrastructure. The stable outlook also reflects our expectation that the California regulatory and legislative environment remains credit supportive of the state's utilities including the implemented, albeit untested, AB1054 legislation and the creation of the wildfire insurance fund in the event of a major wildfire event. The stable outlook also incorporates our expectation that the companies' financial profiles will continue to strengthen through increased cash flow generation and holding company debt reduction.

Factors that could lead to an upgrade

» Because of the pending changes at the CEO position, execution risk related to planned equity issuance, and a lack of a track record after exiting from bankruptcy, an upgrade of PCG or PG&E is unlikely in the near term. Positive rating momentum could occur if PG&E is successful in its wildfire mitigation investments and is able to reduce both wildfire risk and potential liabilities. At the same time, positive rating momentum could occur as a result of a material strengthening of the organization's financial profile from improved cash flow generation and debt reduction, particularly at the parent.

Factors that could lead to a downgrade

» PCG and PG&E could be downgraded if the company is not successful in reducing wildfire risks in its service territory, wildfire liabilities increase materially as a result of new fires, or if there is a failure by state regulators to successfully implement the provisions of AB 1054, including the liability cap, improved prudency standards and access to the wildfire insurance fund, in a consistent and credit supportive manner. Downward pressure could also occur if the companies' financial profiles deteriorate such that PCG's ratio of CFO pre-W/C to debt is sustained below 10% or if PG&E's ratio of CFO pre-W/C to debt is sustained below 13%.

Key indicators

Exhibit 2

PG&E Corporation [1]

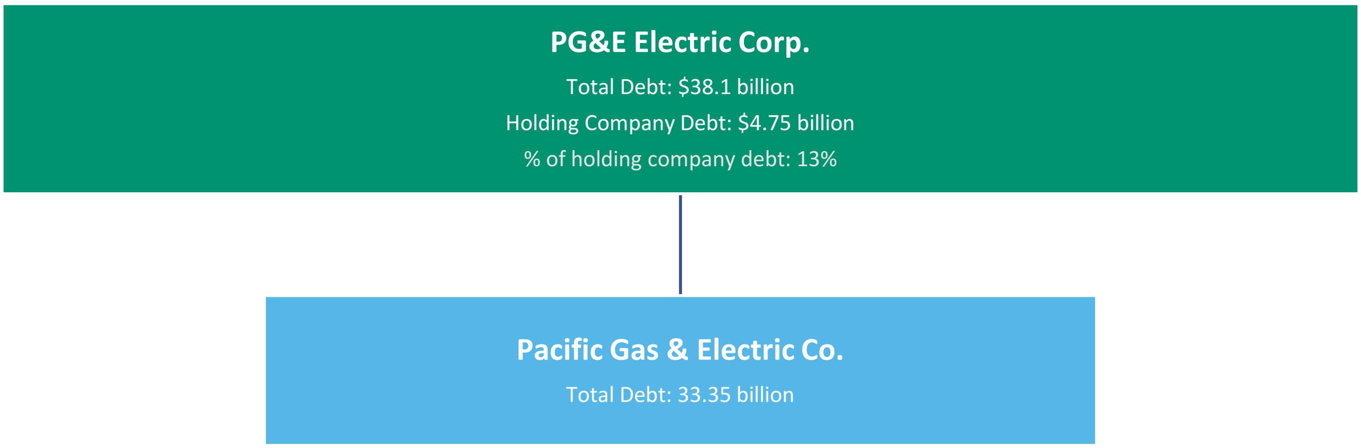
	Dec-16	Dec-17	Dec-18	Dec-19	LTM Mar-20
CFO Pre-W/C + Interest / Interest	7.0x	7.0x	6.1x	6.2x	5.6x
CFO Pre-W/C / Debt	27.0%	27.3%	22.7%	104.9%	96.9%
CFO Pre-W/C – Dividends / Debt	22.8%	22.7%	22.8%	105.1%	97.1%
Debt / Capitalization	43.4%	46.6%	61.0%	52.4%	51.7%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
Source: Moody's Financial Metrics

Profile

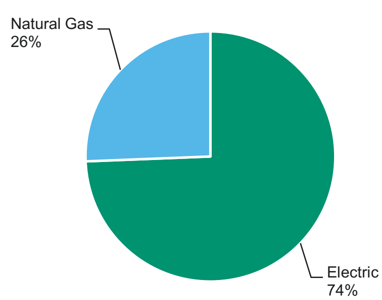
PG&E Corporation is a regulated utility holding company headquartered in San Francisco, California that conducts nearly all of its business through Pacific Gas and Electric Company, a regulated vertically integrated utility serving northern and central California. PG&E is regulated by the California Public Utilities Commission and by the Federal Energy Regulatory Commission. PCG and PG&E are expected to exit from their Chapter 11 bankruptcy filings in July 2020. Upon emergence, PCG's assets are expected to be over $85 billion with total reported debt of approximately $38 billion. PG&E serves approximately 5.4 million electric distribution customers and 4.5 million natural gas customers.

Exhibit 3
PG&E simplified organizational structure



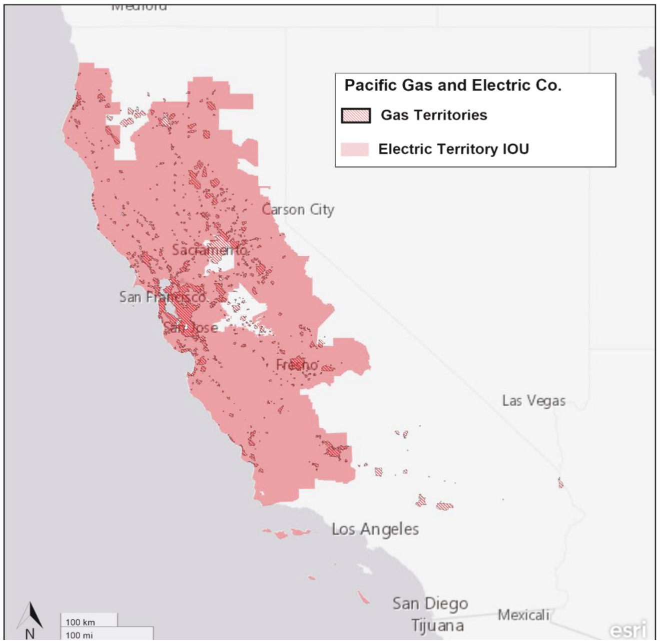
Debt amounts reflect capital structure at emergence from bankruptcy
Source: Company

Exhibit 4
Revenue by source
As of 31 December 2019



Source: Company SEC filings

Exhibit 5
PG&E's Service Territory



Source: S&P Global Market Intelligence

Detailed credit considerations

Wildfire risk remains elevated, exacerbated by inverse condemnation

Wildfire risk remains elevated, exacerbated by inverse condemnation

Wildfires continue to be a significant risk to California utilities. Wildfires are larger and more damaging in the state because of, among other things, the effects of climate change, and population growth in high fire-risk areas. Seven of the ten most damaging fires in California, either utility or non-utility related, have occurred in the past five years.

The potential wildfire liabilities have an outsized effect on the credit quality of investor-owned utilities because of California's' application of the inverse condemnation legal doctrine. Under inverse condemnation, utilities are held strictly liable for damages from fires that were caused by utility equipment, regardless of fault or the reasonableness of its conduct.

Moreover, the ability of utilities to pass on wildfire liabilities to their ratepayers was thrown into doubt in 2017 when the CPUC disallowed the San Diego Gas & Electric Company's (SDG&E, Baa1 positive) request to recover costs associated with the utility's 2007 southern California wildfires (see "San Diego Gas & Electric Company: Regulator denies San Diego Gas & Electric's recovery of wildfire costs, a credit negative for all California utilities" 04 Dec 17). SDG&E's wildfire cost disallowance decision was the CPUC's first-ever wildfire cost recovery proceeding for regulated utilities as wildfire claims in the past had generally never exceeded the utilities' insurance coverage.

Since 2017, PG&E and Southern California Edison Company (SCE, Baa2 stable), the state's second-largest regulated electric utility, have both experienced several catastrophic wildfires. The utilities' credit quality deteriorated as it became apparent that the companies could potentially be subject to billions, or even tens of billions, of dollars in wildfire related liabilities and their ability to pass these costs to ratepayers was not assured. This was a large driver of PG&E's bankruptcy filing in January 2019 as the company faced up to an estimated $30 billion in wildfire liabilities associated with 2017 and 2018 wildfires.

AB1054 legislation, albeit untested, enhances liquidity and mitigates potential liabilities associated with future wildfire events

Following PG&E's bankruptcy filing, California passed Assembly Bill 1054 (AB 1054) in July 2019 to address the deteriorating credit condition of the state's regulated utilities. In accordance with AB 1054, a state wildfire insurance fund was established to provide

5-Exh5.7-26

utilities with immediate access to a substantial liquidity resource to cover potential damages caused by a future catastrophic wildfire ignited by its equipment, when the damages exceed the greater of $1 billion or the utility's insurance coverage. The insurance fund would be used to initially pay wildfire related claims, while the utility may be required to reimburse the fund at a later date if there are cost disallowances due to imprudence. For more discussion on AB1054, see the "FAQ on the credit implications of California's new wildfire law" (09 Aug 19).

AB 1054 includes other important provisions that we expect will mitigate a utility's exposure to potential wildfire liabilities. The legislation stipulates that the amount of cost disallowance associated with catastrophic wildfires will be capped at 20% of the utility's equity portion of its transmission and distribution (T&D) rate base over any three-year period. The state's utilities should also benefit from a more favorable prudency standard and a more expedient subrogation claims settlement process. If the wildfire insurance fund's claims-paying capability is exhausted, the disallowance cap will no longer be available, but the more favorable prudency standard will remain. Although AB1054 includes several credit supportive mechanisms, it has yet to be tested in its application in response to a wildfire event.

With PG&E's exit from bankruptcy by 30 June 2020 and participation in the wildfire insurance fund, the total size of the fund will be $21 billion. It is especially difficult to model wildfire risk because there are many variables including the effects of weather, climate change, and the utilities' risk mitigation measures. Nonetheless, the insurance fund should be large enough to cover all but the most extreme downside scenarios over the next decade. Filsinger Energy Partners, a consultancy firm engaged by California Governor Newsom's office, estimates that the fund has only a 0.9% chance of being exhausted by 2030. The stochastic model assumes that California's wildfire trend during 2014-2018 continues, utilities maintain $1 billion of wildfire liability insurance, and 75% of wildfire costs are disallowed in 2020, but this disallowance falls steadily to 25% by 2030. For more discussion on the durability of the wildfire fund, see "Regulated electric and gas Utilities -US: California's wildfire fund is sufficiently capitalized to pay out claims" (20 Nov 19).

Regulatory framework includes extensive cost recovery mechanisms

The California regulatory framework includes several cost recovery mechanisms that support credit quality. PG&E is authorized to utilize a revenue decoupling mechanism, procurement cost pass-through, and an automatic adjustment mechanism for authorized return on equity. California does not provide automatic recognition of investments between rate cases, but it does allow for the use of multiple future test years using attrition rate increases (i.e., scheduled rate increases in between rate cases), which reduces regulatory lag.

In California, the authorized return on equity is established in a triennial proceeding outside of a General Rate Case (GRC). In the last cost of capital proceeding, which concluded in December 2019, the CPUC maintained the utility's authorized return on equity (ROE) at 10.25% for the three-year period beginning January 1, 2020 and maintained the 52% common equity component of the utility's capital structure and reduces its preferred stock component from 1% to 0.5%.

On 20 December 2019, PG&E filed a 2020 GRC settlement agreement with several consumer advocacy groups and other key stakeholders. PG&E had initially filed its GRC application in January 2019 based on a 2020 future test year. The settlement agreement includes revenue requirements of approximately $9.09 billion, $9.41 billion and $9.78 billion for each year, respectively, in the 2020 – 2022 period. The settlement provides for new two-way balancing accounts for the three largest components of the GRC application increase, the Community Wildfire Safety Program, vegetation management, and liability insurance premiums. A final decision on the GRC by the CPUC is pending.

Elevated political risk and aggressive public policy demands

We view California as a very challenging political environment for PG&E. California utilities tend to receive a high level of attention and scrutiny from both the media and the public, such that issues can often become contentious and litigious. PG&E is in a particularly vulnerable position, given its history of safety related incidents and governance issues over the last several years.

Furthermore, there are significant demands placed on California utilities, including ambitious public policy initiatives. These include the state's Renewable Portfolio Standard and Senate Bill 100 passed in 2018, which require load serving entities to procure 60% of their total energy sales from renewables by 2030 and 100% by 2045, respectively. These initiatives may present investment opportunities for the utilities. However, they may also drive retail rates higher which could negatively impact ratepayers, particularly as the grid's reliability requires flexible generation and energy storage which remains expensive despite battery cost reductions.

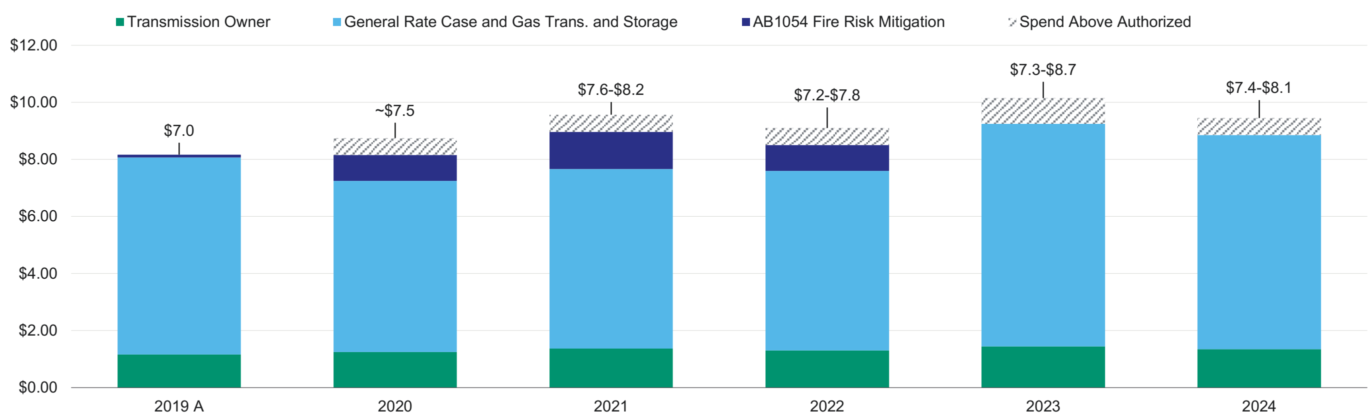
Financial metrics expected to solid even with elevated capital investments

Over the next three years, despite the current impact of the coronavirus, we expect both PCG and PG&E's credit metrics to be solid even during a period of elevated capital investments, primarily driven by higher wildfire mitigation investments. We expect PCG's ratio of cash flow from operations pre-working capital changes (CFO pre-W/C) to debt to be in the 12-15% range and PG&E's ratio of CFO pre-W/C to debt to be in the 14-16% range, including any wildfire claim securitization bonds as on-credit debt. We expect some improvement in the companies' financial profiles through increased cash flow generation and debt reduction, particularly at the parent level. Upon exit, holding company debt will represent about 12% of consolidated debt. However, we expect holdco debt to steadily decline as the company plans to pay down this debt meaningfully over the next five years.

We acknowledge that PCG's credit metrics generally reflect a financial profile that is typically commensurate with stronger credit quality. However, financial metrics alone are not representative of PCG's overall credit risk profile because of the elevated political risk and legal challenges that continue to persist. These include the company being on probation because of the San Bruno pipeline explosion, that will continue after the bankruptcy exit.

In addition, the utility needs to continue to invest heavily in hardening its grid and bolstering its wildfire risk mitigation efforts within its service territory. This will be an ongoing process in the face of climate change and extreme weather events and largely offsets the relatively strong financial metrics. PG&E's capital expenditures are expected to reach approximately $7.5 billion in 2020 and could reach as high as $8.2 billion in 2021 and remain elevated for the foreseeable future. The higher annual capex spending over the next few years is considerably more than the average annual capital investments of about $5.9 billion over the last five years. The company's capex forecast includes approximately $3.2 billion of fire risk mitigation investments during 2019 – 2022, included in the utility's approved wildfire mitigation plans on which PG&E will not earn an equity return.

Exhibit 6
Forecasted capital expenditures 2019A-2024
$ in billions

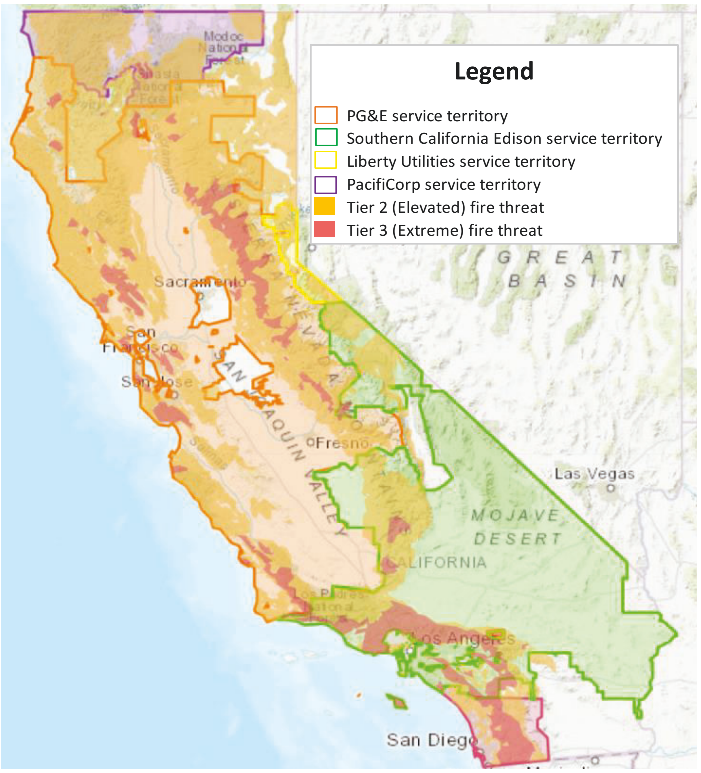


Source: Company presentation

ESG Considerations

ESG considerations are a key driver of both PCG and PG&E's credit quality and primarily focus on the elevated environmental risk that arises from the organization's significant exposure to wildfires that ultimately lead to its bankruptcy filing last year. PG&E's equipment has been found to be the cause of several major fires over the last few years. The wildfires, which the state of California believes is partly driven by climate change, have added to the state's urgency to combat climate change. Although the state has added significant protection with the aforementioned wildfire insurance fund, the negative financial impact of wildfires could continue to undermine the utility's financial stability and make it more difficult to carry out its decarbonization mandates to combat climate change.

Exhibit 7
CPUC high fire threat map



Source: CPUC, Moody's Investors Service

Aside from wildfires, PG&E has moderate carbon transition risk compared to the rest of the US regulated sector due partly to the utility's exit from coal-fired generation many years ago. Additionally, over the long-term, PG&E continues to transition to a pure T&D utility as it self-generates only about half of its electric load with the remaining sourced through purchased power agreements. California's public policy response to climate change issues, which includes aggressive carbon targets and renewable portfolio standards as well as other developments such as community choice aggregators and the growth of rooftop solar, have created additional risk and uncertainty for utilities.

From a generation standpoint, less than 18% of PG&E's 2019 electric load was supplied by owned natural gas power plants. About 43% of its electric load was supplied through power purchase agreements, the majority of which are with renewables and hydro facilities, a credit positive ESG consideration. The remaining approximately 40% of its electric load was largely self-generated and consisted mostly of nuclear and hydro power.

PG&E's natural gas distribution business, which accounts for about 25% of revenues, is allowed timely recovery of its natural gas commodity purchase costs through a pass through to customers via an effective cost recovery mechanism. However, California's aggressive clean energy policies could eventually cause downward pressure on natural gas volumes in the utility sector. There is also the potential for growth of electric heat pumps, which could lead to declining use by residential customers if decarbonization of home heating becomes a policy objective in the future. These risks are, however, long-term in nature and partly mitigated because PG&E's revenues are de-coupled from sales volumes. Moody's framework for assessing carbon transition risk in this industry is set out in "Prudent regulation key to mitigating risk, capturing opportunities of decarbonization" (2 Nov 2017).

Our credit analysis of PCG and PG&E also incorporates social risks primarily related to health and safety, demographic and societal trends, as well as customer relations as the company works to provide reliable and affordable service to customers and safe working conditions to employees. Taking into account PG&E's history of safety problems, including the 2010 San Bruno pipeline explosion incident, infrastructure linked to wildfire ignitions and the impact on customers of public safety power shutoffs, PG&E has higher social risks compared to the typically moderate social risks experienced by most regulated electric and gas utility peers.

As for governance, we consider PCG’s management and financial strategy to be in a period of transition and uncertainty as the company exits from bankruptcy and recently added 11 new members to its 14-person Board of Directors while also searching for a permanent CEO as the current CEO is set to retire on June 30, 2020.

Liquidity analysis

PCG's SGL-2 speculative grade liquidity rating reflects a good liquidity profile supported by relatively stable cash flow generation and a high degree of availability under external credit facilities. After the bankruptcy exit, we expect PG&E to generate negative free cash flow as capital expenditures remain significant as the utility continues to invest heavily in wildfire mitigation. PCG’s liquidity will be bolstered by the company’s inability to distribute common stock dividend to shareholders until it achieves a specific earnings target, which we do not expect to occur until 2023.

We project PCG to have about $250 million of cash on the balance sheet upon exit and full access to $4 billion of revolving credit facilities. The credit facilities include PCG’s $500 million senior secured (stock pledge only) revolver and PG&E’s $3.5 billion senior secured (all asset pledge) revolver, which includes a $1.5 billion letter of credit sublimit. Both facilities three years after the date of emergence, but each has two one-year extension options with lenders approval. PG&E will also have access to a $1 billion accounts receivable securitization facility. If bill payment delinquencies or under-collections continue to rise due to the coronavirus pandemic, we expect the company may need to draw on its revolving credit facilities to cover cash flow shortfalls.

These facilities do not include a material adverse change clause. The PCG credit facility has two financial maintenance covenants including a limit on debt to capitalization of no more than 70% and solely to the extent the credit facility is drawn as of the end of any quarter, a minimum cash coverage ratio of at least 1.5x prior to the date of the first dividend declaration and of at least 1.0x thereafter. The PG&E credit facility only has one financial maintenance covenant which limits the debt to capitalization ratio to no more than 65%.

Upcoming maturities in the near-to-intermediate term include PG&E’s temporary debt including a $4.5 billion term loan maturing in June 2021 and $1.5 billion maturing December 2021. The temporary debt is expected to be paid off using securitization bond financing expected to be issued in the first half of 2021 if approved by the CPUC. The nearest dated long-term bond maturities include three tranches totaling $1.175 billion due in 2023.

Structural considerations

As part of the plan of reorganization, PG&E’s capital structure includes about $9.6 billion of reinstated pre-petition debt, approximately $11.9 billion of exchanged debt as amended in the restructuring support agreement, incremental new first mortgage bond debt of about $5.9 billion and a $6 billion temporary secured term loan debt that is pari passu to the utility’s first mortgage bonds. To the extent the temporary debt is in the form of short-dated bonds rather than a term loan, these bonds would also be pari passu to the first mortgage bonds, and therefore rated Baa3. PG&E expects to refinance this temporary debt with wildfire claim securitization bonds in the first half of 2021 if such bonds are approved by the CPUC.

All of the debt in PG&E’s capital structure is secured on a first lien basis by substantially all of the utility’s real assets and certain tangible assets. The parent’s $4.75 billion senior secured debt issuance could be in the form of either term loans or notes, secured in this case by a pledge of the stock of PG&E. All of the proceeds received as part of the debt issuances will be held in escrow until PCG and PG&E emerge from bankruptcy. The parent’s term loan will be held at PG&E Corp Term Loan B Escrow temporarily until emergence. We note that PCG will be required to issue $9 billion of new equity as part of its emergence plan and, while an equity backstop commitment exists, challenges in executing this transaction remain. The successful execution of the equity issuance is assumed and incorporated in the organization’s ratings. The ratings also incorporate our expectation that the company will receive plan confirmation from the bankruptcy court by June 30, 2020 and PG&E exits bankruptcy soon thereafter with full participation in the wildfire insurance fund established by AB 1054. Failure to receive plan confirmation will result in a redemption of the new debt.

We utilized Moody’s Loss Given Default (LGD) methodology to determine the individual rating assessments on the debt securities within the PCG capital structure. The ratings are based on PCG’s CFR of Ba2 and Probability of Default Rating (PDR) of Ba3-PD. The Baa3 rating on the utility’s first mortgage bonds, incorporating a one notch override, reflects the senior position of the debt within the capital structure and it’s all asset security pledge. The one notch override reflects the historically high recovery rate of secured utility debt and also considers the high recovery rate most recently observed for PG&E’s unsecure debt in the current bankruptcy. The B1 rating on the parent's senior secured (stock pledge only) debt reflects its junior position within the capital structure and the B1 rating on PG&E's preferred stock reflects the subordinated nature of these securities.

Rating methodology and scorecard factors

Exhibit 8

Rating Factors

PG&E Corporation

Regulated Electric and Gas Utilities Industry Grid [1][2]	Current LTM 3/31/2020		Moody's 12-18 Month Forward View As of Date Published [3]	
Factor 1 : Regulatory Framework (25%)	**Measure**	**Score**	**Measure**	**Score**
a) Legislative and Judicial Underpinnings of the Regulatory Framework	Baa	Baa	Baa	Baa
b) Consistency and Predictability of Regulation	Ba	Ba	Ba	Ba
Factor 2 : Ability to Recover Costs and Earn Returns (25%)				
a) Timeliness of Recovery of Operating and Capital Costs	Baa	Baa	Baa	Baa
b) Sufficiency of Rates and Returns	Baa	Baa	Baa	Baa
Factor 3 : Diversification (10%)				
a) Market Position	A	A	A	A
b) Generation and Fuel Diversity	A	A	A	A
Factor 4 : Financial Strength (40%)				
a) CFO pre-WC + Interest / Interest (3 Year Avg)	6.4x	Aa	4.1x - 4.6x	Baa
b) CFO pre-WC / Debt (3 Year Avg)	54.9%	Aaa	12% - 15%	Baa
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	52.6%	Aaa	12% - 15%	Baa
d) Debt / Capitalization (3 Year Avg)	41.0%	A	65% - 69%	B
Rating:				
Scorecard-Indicated Outcome Before Notching Adjustment		A2		Baa3
HoldCo Structural Subordination Notching	-1	-1	-1	-1
a) Scorecard-Indicated Outcome		A3		Ba1
b) Actual Rating Assigned		Ba2		Ba2

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations.
[2] As of 3/31/2020(L);
[3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures.
Source: Moody's Financial Metrics

Appendix

Exhibit 9

Cash Flow and Credit Metrics [1]

CF Metrics	Dec-16	Dec-17	Dec-18	Dec-19	LTM Mar-20
As Adjusted					
FFO	5,908	6,026	(6,236)	(6,061)	(5,468)
+/- Other	(104)	(93)	11,816	12,340	11,677
CFO Pre-WC	5,804	5,933	5,580	6,279	6,209
+/- ΔWC	(1,453)	37	(889)	(985)	(1,515)
CFO	4,351	5,970	4,691	5,294	4,694
- Div	909	1,009	(12)	(12)	(12)
- Capex	5,662	5,646	6,465	6,802	7,259
FCF	(2,221)	(685)	(1,762)	(1,497)	(2,553)
(CFO Pre-W/C) / Debt	27.0%	27.3%	22.7%	104.9%	96.9%
(CFO Pre-W/C - Dividends) / Debt	22.8%	22.7%	22.8%	105.1%	97.1%
FFO / Debt	27.5%	27.8%	-25.4%	-101.3%	-85.3%
RCF / Debt	23.3%	23.1%	-25.3%	-101.1%	-85.1%
Revenue	17,666	17,135	16,759	17,129	17,424
Cost of Good Sold	5,411	5,052	4,496	3,620	3,503
Interest Expense	973	983	1,085	1,213	1,356
Net Income	1,258	1,555	(252)	307	549
Total Assets	68,615	68,084	77,011	85,141	86,633
Total Liabilities	50,841	49,019	64,543	80,013	81,134
Total Equity	17,774	19,065	12,467	5,128	5,499

[1] All figures and ratios are calculated using Moody's estimates and standard adjustments. Periods are Financial Year-End unless indicated. LTM = Last Twelve Months
Source: Moody's Financial Metrics

Exhibit 10

Peer Comparison Table [1]

	PG&E Corporation			Edison International			Sempra Energy			Xcel Energy Inc.		
	Ba2 Stable			Baa3 Stable			Baa1 Rating(s) Under Review			Baa1 Stable		
	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM	FYE	FYE	LTM
(in US millions)	Dec-18	Dec-19	Mar-20	Dec-16	Dec-17	Mar-20	Dec-16	Dec-17	Mar-20	Dec-16	Dec-17	Dec-19
Revenue	16,759	17,129	17,424	11,869	12,320	12,313	10,183	11,207	10,960	11,107	11,404	11,529
CFO Pre-W/C	5,580	6,279	6,209	3,129	3,982	-678	2,309	3,608	4,149	3,178	3,314	3,470
Total Debt	24,558	5,986	6,409	14,914	16,520	23,602	18,959	21,331	29,661	16,051	16,917	19,632
CFO Pre-W/C / Debt	22.7%	104.9%	96.9%	21.0%	24.1%	-2.9%	12.2%	16.9%	14.0%	19.8%	19.6%	17.7%
CFO Pre-W/C – Dividends / Debt	22.8%	105.1%	97.1%	16.4%	19.4%	-6.7%	8.2%	12.8%	9.9%	15.6%	15.3%	13.6%
Debt / Capitalization	61.0%	52.4%	51.7%	41.2%	48.9%	54.9%	50.3%	54.7%	54.8%	47.6%	52.8%	52.8%

[1] All figures & ratios calculated using Moody's estimates & standard adjustments. FYE = Financial Year-End. LTM = Last Twelve Months. RUR* = Ratings under Review, where UPG = for upgrade and DNG = for downgrade
Source: Moody's Financial Metrics

Ratings

Exhibit 11

Category	Moody's Rating
PG&E CORPORATION	
Outlook	Stable
Corporate Family Rating	Ba2
Senior Secured	B1/LGD5
Speculative Grade Liquidity	SGL-2
PACIFIC GAS & ELECTRIC COMPANY	
Outlook	Stable
First Mortgage Bonds	Baa3/LGD2
Pref. Stock	B1/LGD5

Source: Moody's Investors Service

REPORT NUMBER 1231733

MOODY'S
INVESTORS SERVICE

PACIFIC GAS AND ELECTRIC COMPANY

CHAPTER 5

EXHIBIT 5.8

FITCH RATING ACTION

FitchRatings

15 Jun 2020 | New Rating

Fitch Assigns IDRs of 'BB' to PG&E Corp. and Pacific Gas and Electric Co.; Outlook Stable

Fitch Ratings-New York-15 June 2020:

Fitch Ratings has assigned Long-Term Issuer Default Ratings (IDR) of 'BB' to PG&E Corporation (PCG) and Pacific Gas and Electric Company (PG&E). The Rating Outlooks are Stable.

The ratings and Stable Outlooks for the holding company and utility reflect considerable credit risk associated with potential catastrophic wildfires, driven by cycles of drought-rain-drought, high heat, low humidity and high winds, among other factors, and a growing urban-wildland interface. PG&E's relatively mature asset base has been prone to failure, igniting a large number of destructive wildfires in 2017-2018. In Fitch's opinion, enactment of California Assembly Bill (A.B.) 1054, Senate Bill (S.B.) 901 and a number of other laws during 2018 and 2019 designed to protect the public against deadly wildfires and facilitate socialization of wildfire liabilities under inverse condemnation while mitigating financial risk to investor-owned utilities are constructive developments. Efforts ongoing at PCG to restructure its operations and prioritize meaningful safety culture improvement and safety-related investment are credit supportive.

The sharp decline in deadly catastrophic wildfires in 2019 compared to the 2017-2018 fire seasons is an encouraging sign that wildfire mitigation efforts may be bearing fruit. Nonetheless, risk of future wildfire activity on par with 2017-2018 cannot be ruled out and remains a primary credit concern. Reversing reputational risk associated with a history rife with regulatory and legal violations, catastrophic system failures and lax safety culture will be challenging in light of the utility's mature, far flung electric and natural gas asset base in a state prone to natural disaster. Liabilities associated with public safety power shut-offs and political and customer resistance to them are significant concerns from a credit point of view. Fitch does not believe financial effects from coronavirus shelter-in-place orders will have a meaningful impact on PG&E's creditworthiness in light of full revenue decoupling and establishment of the coronavirus pandemic protections memorandum account. Shortfalls in cash collections are expected to have a relatively minor impact on FFO-leverage in 2020 and be are expected to be reversed during 2021-2023. The ratings assume PCG and PG&E will emerge from bankruptcy on terms consistent with the bankruptcy court approved $59 billion plan of reorganization and exit funding as discussed below.

Key Rating Drivers

PoR Confirmation Expected: On June 8, 2020, the U.S. Bankruptcy Court Northern District concluded hearings to consider confirming the debtors' plan of reorganization (PoR). On June 11, 2020, the court issued a financing order allowing PCG and PG&E to access capital markets in a manner consistent with its proposed PoR. Fitch assumes the court will approve the debtors' PoR by June 30, 2020.

The plan has the support of California Governor Newsom and was approved by the California Public Utilities Commission (CPUC) on May 28, 2020 and the Federal Energy Regulatory Commission (FERC) on May 12, 2020.

The companies' PoR provides compensation to wildfire victims, implements a safety oversight framework that could lead to the loss of the utility's operating license if it fails to achieve certain safety milestones, requires regional restructuring to bring management closer to customers to better understand their needs, mandates changes in board composition and strongly links executive compensation to safety, among other things.

Fitch notes that PCG, consistent with its PoR, recently announced major changes to its board of directors including the appointment of 11 new directors and retirement of 10 existing directors. The number of board members will increase by one to 14 and the changes will become effective upon emergence from bankruptcy.

Chapter 11 Exit Funding: Primary components of PCG's and PG&E's $59 billion funding plan include reinstated and new debt exchanged for certain pre-petition utility debt totaling approximately $21.0 billion, $5.9 billion of new issue utility debt and $6 billion of temporary debt and $4.75 billion of new issue holding company debt secured by a residual claim in the value of the utility. In addition, PCG plans to issue approximately $16 billion of common equity, $6.75 billion of which will be issued as shares to the wildfire victims' trust. PG&E plans to refinance $6.0 billion of debt issued in the restructuring with low cost securitization bonds in the first half of next year pending CPUC approval. Fitch expects PG&E to participate in the $21 billion wildfire fund created under Assembly Bill (A.B.) 1054 upon exit from Chapter 11.

Credit Ratios Support Ratings: Fitch expects 2020 to be a transition year for PG&E and PCG. In 2021, Fitch estimates FFO leverage of 6.0x and 6.5x, respectively, for the utility and holding company, improving to 5.0x and 5.3x in 2022. FFO leverage is in Fitch's view consistent with the current rating category given the utility's heightened wildfire-related and other risk factors. Sequential years of meaningfully less destructive post-2019 firestorm activity, achievement of debt reduction consistent with Fitch's projections and demonstrably improved safety record could lead to future credit rating upgrades.

Securitization: Fitch expects the CPUC will authorize PG&E's pending securitization filing. Proceeds from the relatively low cost, off-balance sheet debt would be used to reduce debt and fund payments to wildfire victims more efficiently. While delays and even rejection of the proposed $7.5 billion securitization cannot entirely be ruled out, Fitch notes that the Governor filed a statement supporting the debtors' restructuring plan with the U.S. Bankruptcy Court Northern District of California in March 2020 stating, among other things, that the proposed securitization is in the public interest.

Fitch does not believe downgrades would be triggered if the proposed securitization was rejected by the commission. However, prospective improvement in creditworthiness, all else equal, would be diminished.

A.B. 1054 Enacted: A.B. 1054 was signed into law July 2019 and is part of a broad effort underway across California to address root causes and minimize the destructive force and frequency of catastrophic wildfires. Enactment of AB 1054 and creation of a $21 billion wildfire insurance fund under the law is, in Fitch's opinion, a positive credit development. The magnitude of the fund is further enhanced by a 40% limitation of subrogation claims under the law.

The insurance fund provides a means to meet potential liabilities from post-July 12, 2019 wildfires, without increasing customer rates, as the state pursues a comprehensive effort to battle catastrophic wildfires on several fronts including enhanced forestry management, building standards and changes in state and utility investment, operation, cooperation, preparedness and response. Toward that end, Governor Newsom signed into law 22 bills in October 2019 designed to improve California's wildfire prevention, mitigation and response efforts, while continuing progress toward the state's clean energy goals.

Reasonable Prudence Standard: In addition to formation of the wildfire insurance fund, AB 1054 shifts the burden of proof to a more reasonable standard that is consistent with that applied by FERC. The agency approved San Diego Gas & Electric's (SDG&E) net 2007 wildfire-related jurisdictional liabilities, while the CPUC rejected SDG&E's petition for recovery of net jurisdictional costs.

The legislation also mandates a certification process that includes triennial filings of wildfire mitigation plans with annual updates and requires greater focus on utility safety culture from the board of directors to rank-and-file employees and links executive compensation to safety. In the event that a utility is found to be imprudent, A.B. 1054 limits exposure to 20% of the utility's T&D equity rate base or approximately $2.4 billion for PG&E.

Insurance Fund Buffers IOU Exposure: The $21 billion wildfire insurance fund provided under A.B. 1054 began operation in 2019 with SCE and SDG&E electing to participate and contributing their required initial payments of $2.7 billion to the fund. PCG has indicated that it also plans to participate in the wildfire insurance fund and pay its share totaling $6.7 billion (composed of its initial $4.8 billion contribution plus its $1.9 billion contribution over 10 years) upon emergence from Chapter 11.

Fires, IC Challenge Creditworthiness: California is unique in applying inverse condemnation (IC) to wildfires caused by utility equipment. Under the doctrine of inverse condemnation, a utility may be held strictly liable for property damage and legal expenses if its equipment is deemed to have played a role igniting the fires, even if the utility followed all rules and regulations. Inverse condemnation is typically applied to public utilities which, unlike private utilities, have the ability to raise rates to recover costs associated with third-party liabilities on a timely basis as a way to socialize costs associated with floods and other disasters.

Socialization of wildfire costs through IC generally results in relatively timely settlement of wildfire victims' claims where utility equipment is deemed to have ignited the fire. Utilities, under IC, may not be able to recover claims until long after paying victims, if at all. Liquidity pressure from the timing mismatch between liability payment and recovery is, in Fitch's view, the most pressing threat to utility creditworthiness under IC given the parabolic increase in 2017-2018 wildfire liabilities. Access to the A.B. 1054 wildfire insurance fund in the event of a major fire is expected address the IC liquidity issue. This, along with changes in prudence standards are key factors supporting PCG's and PG&E's ratings.

The key risk to PCG's and PG&E's credit stability is continued large wildfires and more rapid than expected exhaustion of the wildfire fund. Prudence risk due to utility conduct and/or CPUC interpretation of A.B.1054 standards are also a concern for creditors.

Public Safety Power Shutoffs: PG&E initiated public safety power shutoffs (PSPS) during periods of elevated wildfire risk in 2019 as a part of its wildfire mitigation plan. While PG&E believes the PSPS were effective preventing wildfires in its service territory, the public and political reaction was overwhelmingly negative. Notably, Governor Newsom has made it clear that widespread, lengthy outages are unacceptable and the CPUC opened a recently completed investigation into the outages. This year, legislation was introduced that, if enacted, would penalize investor-owned utilities for public safety power outages if the CPUC determined the utility did not act in a reasonable or prudent manner implementing the PSPS.

PG&E recognizes the hardship caused by PSPS and is working with state and local authorities to mitigate the impacts going forward through significantly greater communication and community support. Management intends to reduce the frequency and duration of PSPS events through micro-grid deployment and strategic sectionalizing of its grid and ongoing wildfire resilience investment and operational changes.

Large Capex Requirements: Capex at PG&E during 2020-2024 are expected to approximate $37.0 billion-$40.3 billion driven by electric and natural gas infrastructure upgrades, wildfire mitigation, electrification of transportation and transmission infrastructure investment. Under the terms of AB 1054, $3.2 billion of PG&E's total 2019-2022 wildfire mitigation capex will not earn a ROE.

PG&E's wildfire mitigation investment is focused on system hardening in high fire threat districts, including replacing overhead circuits, installing stronger poles or undergrounding lines and enhanced vegetation management and situational awareness. PG&E is also focused on reducing the adverse effects of public safety power shut-offs by reducing their duration and the number of customers impacted.

ESG Factors: PCG and PG&E have Environmental, Social and Governance (ESG) Relevance Scores (RS) of 5 for exposure to environmental impacts and ESG RS of 5 for exposure to social impacts.

These scores are linked to the increase in the size and destructive force of the 2017-2018 firestorms and related adverse impacts to the utility's relationship with ratepayers and regulators. The ESG RS scores also consider reputational damage and risk associated with PG&E's criminal conviction on six felony counts and corporate probation related to the 2010 San Bruno pipeline explosion and fire. PG&E has been subject to fines and penalties in recent years due to violation of laws and regulations at both its electric and natural gas operations. More recently, PG&E entered a guilty plea to 84 counts of manslaughter and one count of unlawfully causing a fire resolving criminal proceedings in connection with the 2018 Camp Fire.

Due to the threat of wildfires, PG&E is potentially exposed to large third party liabilities, heightened regulatory uncertainty regarding full and timely recovery of wildfire related costs and criminal prosecution. PCG's and PG&E's ESG RS scores for exposure to environmental and social impacts have a negative impact on the companies' credit profile and are relevant to the ratings in conjunction with other factors.

2020 GRC Settlement: In December 2019, PG&E and major parties to a settlement agreement filed a motion with the CPUC seeking approval of a settlement that resolves all of the issues raised by these parties. If approved by the commission, the proposed settlement would increase rates $575 million, $318 million and $367 million, respectively, in 2020, 2021 and 2022. Rates as proposed by the settlement would be $428 million, $38 million and $114 million lower in 2020, 2021 and 2022, respectively, than the amounts supported by PG&E in its Nov. 1, 2019 updated testimony in the GRC proceeding. Fitch believes that a final CPUC decision approving the proposed settlement would be a constructive credit development.

Parent-Subsidiary Rating Linkage: Operating utility PG&E accounts for virtually all of PCG's consolidated earnings and cash flows. Fitch utilizes a weaker parent-stronger subsidiary approach in applying the agency's parent-subsidiary rating criteria. PCG is dependent on cash flows from PG&E to meet its ongoing obligations. Rating linkage between PCG and PG&E is strong and Fitch takes a bottom up approach. PCG's IDR is the same as PG&E's, reflecting the parent's dependence on the utility to meet its ongoing obligations, relatively low parent-only debt and structural subordination of PCG debt relative to PG&E.

Recovery Analysis: Under Fitch criteria, the individual security ratings at PCG and PG&E may be notched above or below their IDRs as a result of the relative recovery prospects in a hypothetical default scenario. PCG is a holding company with no operations of its own and is dependent on cash distributions from its core operating subsidiary, PG&E, to meet its ongoing obligations. Debt instruments at the corporate parent are subordinated to the utility and recovery prospects given default are a function of residual value at the utility.

Fitch conservatively estimates going-concern enterprise value using several methods and primarily relied on projected YE 2020 rate base of $44.5 billion. Fitch also calculated going-concern enterprise value using a multiple range of 7.0x-7.5x estimated 2020 EBITDA, which yielded value consistent with the rate base approach. The multiple is at the low-end of peer trading multiples and lower than each of the purchase multiples in a sample of sector M&A transactions. The recovery analysis resulted in a Recovery Rating of 'RR1', implying outstanding recovery, for the utility's secured debt and a Recovery Rating of 'RR4', implying average recovery, for the PG&E Corp.'s secured debt.

Derivation Summary

PCG, similar to peer utility holding companies Edison International (EIX; BBB-/Stable) and Pinnacle West Capital (PNW; A-/ Negative), is solely dependent on earnings and cash flow from its wholly owned California-based utility subsidiary, PG&E. PCG's, EIX's and PNW's respective core operating utilities (OpCo) are PG&E, Southern California Edison Co. (SCE; BBB-/Stable) and Arizona Public Service Co. (APS; A-/Negative). PNW, through sole operating utility subsidiary APS, supplies electricity to large portions of Arizona. Similarly, EIX and PG&E through their sole operating utilities, SCE and PG&E, respectively, provide electricity to large portions of California. By contrast, FirstEnergy Corporation (FE; BBB/Stable), a large multi-state utility holding company operates 10 utilities across six Mid-Atlantic states, has much greater earnings, cash flow and regulatory diversity. Virtually all of PCG's, EIX's FE's and PNW's consolidated cash flows are from utility operations. Conversely, Sempra Energy's operations are more diverse. SRE's utility operations account for approximately 80% of consolidated earnings with competitive operations contributing the remainder.

SRE's California-based combination electric and gas utility has a far better track record avoiding catastrophic wildfires compared to PCG's and EIX's OpCos. SDG&E was able to avoid catastrophic wildfires and related outsized liabilities in 2017-2018, unlike PG&E and SCE. Parent-only debt at PCG and EIX is expected to remain below 20% and is considerably higher for FE and SRE at approximately 34% and in excess of 35%, respectively. Fitch projects FFO-leverage for FE of 6.0x in 2021 and 5.8x in 2022 with SRE averaging 4.5x in the next three years.

PCG's core operating utility, PG&E, is one of the nation's largest combination electric and gas utilities with total assets as of March 31, 2020 of $87 billion, considerably larger than SCE ($65 billion), SDG&E ($21 billion) and APS ($18 billion). The regulatory environment in Arizona, similar to California prior to the advent of outsized wildfires in 2017-2018, has generally been supportive from a credit point of view with both jurisdictions providing utilities operating in the state with a reasonable opportunity to earn their authorized ROE. However, unlike APS, meaningful uncertainty exists for California utilities regarding the risk of future firestorms and recovery of potentially large third-party liabilities. Uncertainty regarding the magnitude, frequency and destructive force of future wildfires and efforts to enhance wildfire resilience is a key risk factor to the creditworthiness of PG&E, SCE and, to a somewhat lesser degree, SDG&E. The significant reduction in catastrophic wildfire destruction in 2019 offers a modicum of hope that measures deployed by the California utilities and state and local authorities (including an extensive legislative response) will meaningfully reduce catastrophic wildfire activity, destruction and liability. Fitch projects FFO leverage for SCE to be 4.7x in 2020 and SDG&E to be in the high 3x range in the next few years. FFO leverage for PCG and PG&E is estimated by Fitch at 6.5x and 6.0x in 2021.

Key Assumptions

Fitch's Key Assumptions in Its Base Case Include the Following:

--Final CPUC decision consistent with PG&E's 2020 GRC settlement.

--10.25% CPUC and FERC authorized ROE.

--Total 2020-2024 capex range of $37.0 billion-$40.3 billion ($7.4 billion - $8.1 billion per annum on average).

--No equity return on approximately $3.2 billion of wildfire mitigation capex.

--Incorporates CPUC authorized capital structure waiver and a hypothetical 52% equity ratio for regulatory purposes.

--CPUC authorizes issuance of $7.5 billion securitization bonds.

--FERC jurisdiction transmission wildfire costs are fully recovered.

--Rate base CAGR of 8% from a base of $40 billion in 2019.

--Full recovery of $2.5 billion of deferred wildfire-related restoration, prevention and insurance costs.

RATING SENSITIVITIES

Factors that could, individually or collectively, lead to positive rating action/upgrade:

PG&E Corporation

An upgrade of Pacific Gas and Electric.

Reputational, safety culture and potential catastrophic wildfire risks argue strongly against rating upgrades for PCG in the near-to-intermediate term. Nonetheless, improvements in these and other key areas at the utility (as listed directly below) along with consolidated PCG FFO-leverage of better than 5.5x could lead to positive rating actions.

Pacific Gas and Electric Company

Meaningful reduction in the size and scale of prospective wildfire activity in PG&E's service territory.

Consistent improvement in PG&E's safety culture leading to resolution of legal, regulatory and reputational challenges.

Robust A.B. 1054 wildfire fund levels relative to future utility claims.

Improvement in FFO-leverage to better than 5.5x.

Factors that could, individually or collectively, lead to negative rating action/downgrade:

PG&E Corporation

A downgrade of Pacific Gas and Electric.

Inability to reduce parent-only debt as expected.

PCG FFO-leverage of worse than 6.0x on a sustained basis along with realization of key sensitivities listed directly below for the utility could result in future credit rating downgrades.

Pacific Gas and Electric

Continuation of catastrophic wildfire activity on par with the Northern California wildfires of 2017 and the Camp fire in 2018 and resulting large third-party liabilities under inverse condemnation.

Failure to ameliorate reputational challenges.

Disallowance of wildfire liabilities due to imprudence.

More rapid than expected drawdown of the AB 1054 wildfire fund due to persistent wildfire activity and large third party liabilities.

Inability to address asset failures and deliver demonstrable improvement in safety culture.

Deterioration in rate regulation.

Adverse developments stemming from PG&E's corporate probation.

Unfavorable legislative developments.

These or other factors resulting in FFO-leverage of worse than 6.0x on a sustained basis.

Best/Worst Case Rating Scenario

International scale credit ratings of Non-Financial Corporate issuers have a best-case rating upgrade scenario (defined as the 99th percentile of rating transitions, measured in a positive direction) of three notches over a three-year rating horizon; and a worst-case rating downgrade scenario (defined as the 99th percentile of rating transitions, measured in a negative direction) of four notches over three years. The complete span of best- and worst-case scenario credit ratings for all rating categories ranges from 'AAA' to 'D'. Best- and worst-case scenario credit ratings are based on historical performance. For more information about the methodology used to determine sector-specific best- and worst-case scenario credit ratings, visit https://www.fitchratings.com/site/re/10111579.

Liquidity and Debt Structure

Adequate Liquidity: As of March 31, 2020, PG&E Corporation and the Utility had access to approximately $4.6 billion of total liquidity comprised of approximately $1.5 billion of Utility Cash, $0.4 billion of PG&E Corporation cash and $2.7 billion of availability under the DIP Credit Agreement. Like most utilities PG&E is expected to be free cash flow negative based on Fitch's assumptions and its large capex program. Negative FCF is a function of high capex driven by spending to mitigate catastrophic wildfire activity and meet California's greenhouse gas reduction goals, which are among the most aggressive in the nation. Fitch expects cash shortfalls to be funded with a balanced mix of debt and equity.

REFERENCES FOR SUBSTANTIALLY MATERIAL SOURCE CITED AS KEY DRIVER OF RATING
The principal sources of information used in the analysis are described in the Applicable Criteria.

ESG Considerations

PCG and PG&E have Environmental, Social and Governance (ESG) Relevance Scores (RS) of 5 for exposure to environmental impacts and ESG RS of 5 for exposure to social impacts. The scores primarily reflect issues related to loss of life and property destruction related to wildfire activity and recurring lapses in safety and culture.

Except for the matters discussed above, the highest level of ESG relevance, if present, is a score of 3. This means ESG scores are credit neutral or have only a minimal impact on PCG and PG&E either due to their nature or the way in which they are being managed by the companies. For more information on ESG Relevance Scores visit www.fitchratings.com/esg.

PG&E Corporation; Long Term Issuer Default Rating; New Rating; BB; RO:Sta
----senior secured; Long Term Rating; New Rating; BB
Pacific Gas & Electric Company; Long Term Issuer Default Rating; New Rating; BB; RO:Sta
----senior secured; Long Term Rating; New Rating; BBB-
----preferred; Long Term Rating; New Rating; BB

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Applicable Criteria

Corporate Hybrids Treatment and Notching Criteria (pub. 11 Nov 2019)
Corporate Rating Criteria (pub. 01 May 2020) (including rating assumption sensitivity)
Corporates Notching and Recovery Ratings Criteria (pub. 14 Oct 2019) (including rating assumption sensitivity)
Parent and Subsidiary Rating Linkage (pub. 27 Sep 2019)

Applicable Model

Numbers in parentheses accompanying applicable model(s) contain hyperlinks to criteria providing description of model(s).
Corporate Monitoring & Forecasting Model (COMFORT Model), v7.9.0 (1)

Additional Disclosures

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