



**Pacific Gas and Electric Company Securitization**

**A. 20-04-023**

**TURN HEARING EXHIBIT**

**TURN-13**

**PG&E RESPONSES TO TURN DATA REQUEST 15**

**PACIFIC GAS AND ELECTRIC COMPANY**  
**Securitization 2020**  
**Application 20-04-023**  
**Data Response**

PG&E Data Request No.:	TURN_015-Q01-07Rev01		
PG&E File Name:	Securitization2020_DR_TURN_015-Q01-07Rev01		
Request Date:	November 13, 2020	Requester DR No.:	TURN-PG&E-15
Date Sent:	November 23, 2020 (Original) December 2, 2020 (Revised)	Requesting Party:	The Utility Reform Network
PG&E Witness:	Q1: Jan Berman Q2-Q3: David Thomason Q4: Jan Berman Q5: David Thomason Q6: Various Q7: David Thomason	Requester:	Thomas Long

Pacific Gas and Electric Company (PG&E) submits the following revised response to The Utility Reform Network’s (TURN) fifteenth set of data requests, served on November 13, 2020. The revised answers to Question 02 and Question 05 correct an error in the description of the alternative scenarios presented in PG&E’s rebuttal testimony, and this response supersedes the prior response served on November 23, 2020.

All of PG&E’s prior objections to this set of data requests, set forth in PG&E’s Data Response served on November 23, 2020, are incorporated herein by reference.

**QUESTION 01**

PG&E’s claims “there is good reason to anticipate significant increased load growth over the long term” (p. 1-13).

- a. What is PG&E’s expected (mean) forecast for its electricity demand growth through 2050?
- b. What is PG&E’s expected (mean) forecast for its gas demand growth through 2050?
- c. How does PG&E characterize the uncertainty of these forecasts, e.g., probability-weighted scenarios, distribution around a mean, etc.?
- d. Provide any and all supporting data, analysis, and documentation used to develop these expected (mean) forecasts and characterizations of uncertainty.
- e. Provide any and all supporting data, analysis, and documentation that were reviewed but not used to develop these forecasts and characterizations of uncertainty.

## **ANSWER 01**

PG&E objects to this request as vague and ambiguous. PG&E further objects to this request as overbroad and unduly burdensome, and beyond the scope of the rebuttal testimony. PG&E further objects to this request as seeking information that is confidential and implicates proprietary and intellectual property considerations. Subject to its objections, PG&E responds as follows:

The testimony set forth in Chapter 11, Rebuttal Regarding Load Growth (J. Berman), cites California's policies and publicly-available modeling and studies commissioned by the California Energy Commission and others to show that there is good reason to anticipate significant increased load growth over the long term, and that long-term electric demand forecasts for 2030 to 2050 look materially different than forecasts for 2020 to 2030. The testimony does not cite or otherwise rely on PG&E's internal load forecasts, which are not at issue in this proceeding. In a good faith effort to respond to TURN's request, PG&E will provide on a confidential basis a summary of PG&E's current internal electric sales forecast. See 2020Securitization\_DR\_TURN\_15-Q01\_Atch01CONF. PG&E currently does not characterize uncertainty around its internal system electric forecast. PG&E's electric demand forecast integrates the impacts of economic drivers with demand side activity forecasts including transportation and building electrification. Given limited historical data and uncertainties around future policy and technological developments with respect to certain demand side activities, assumption driven scenarios are used to elicit expert feedback with the objective of producing a point forecast. With respect to gas, PG&E presented its gas demand forecasts through 2035 in the 2020 California Gas Report, which is available at the link below. See Figure 5, p. 40, and tabular data beginning at p. 86. As described in the 2020 California Gas Report, PG&E has developed scenarios to characterize uncertainties around the gas forecast related to weather (Cold Weather/Dry Hydro) and adoption of building electrification in the retrofit sector.

[https://www.pge.com/pipeline\\_resources/pdf/library/regulatory/downloads/cgr20.pdf](https://www.pge.com/pipeline_resources/pdf/library/regulatory/downloads/cgr20.pdf)

## **QUESTION 02**

PG&E states that it "anchored its forecast of taxable income on growth in rate base of 7 percent from 2025 through 2030 and 5 percent thereafter" (Rebuttal, p. 6-5).

- a. What is PG&E's expected (mean) forecast for its rate base growth through 2050?
- b. How does PG&E characterize the uncertainty of this forecast, e.g., probability-weighted scenarios, distribution around a mean, etc.?
- c. Provide any and all supporting data, analysis, and documentation used to develop this expected (mean) forecast and characterization of uncertainty.
- d. Provide any and all supporting data, analysis, and documentation that were reviewed but not used to develop this forecast and characterization of uncertainty.

## **ANSWER 02 REVISION 01**

PG&E objects to this request as vague and ambiguous. PG&E further objects to this request as overbroad and unduly burdensome. PG&E further objects to this request as seeking information protected by the attorney-client privilege and/or attorney work product doctrine. PG&E's response excludes any privileged information or attorney work product. Subject to its objections, PG&E responds as follows:

PG&E has not developed a rate base forecast separate from the updated financial forecast (2020-2024) and taxable income forecast (2020-2050) presented in this proceeding. PG&E previously provided workpapers and analysis supporting these forecasts. PG&E has not done statistical analysis of uncertainty related to rate base growth, or the taxable income forecast. In its rebuttal testimony, PG&E presented alternative scenarios of the Monte Carlo simulation model that show sensitivities of the expected value of the Customer Credit Trust to changes in future taxable income, including scenarios in which all taxable income is eliminated in a single year (Chapter 6, Customer Credit Mechanism and Investment Returns – Rebuttal, p. 6-32; Chapter 10, Expert Rebuttal Regarding Customer Benefit, pp. 10-13 to 10-15); PG&E's taxable income is 20% below PG&E's forecast in every year (pp. 10-16 to 10-17); and PG&E makes Additional Shareholder Contributions more slowly as posited by TURN (pp. 10-18 to 10-21). These alternative scenarios confirm that the proposed Securitization is beneficial to customers under a wide range of outcomes. PG&E's long-term taxable income forecast incorporates PG&E's updated financial forecast through 2024 and estimated rate base growth of 7% from 2025 through 2030 and 5% thereafter. This forecast is reasonable based on PG&E's historical rate base growth, and likely conservative given the substantial capital investments PG&E will make in the coming years to replace aging assets and implement fire risk mitigation, including system hardening, and other projects to meet California's climate policy goals. The key period is from 2021 through 2035, when the cap of \$7.59 billion in Additional Shareholder Contributions is expected to be reached. Although PG&E's actual taxable income may be higher or lower than the forecast, such possible developments have not been incorporated into the model because they cannot be predicted with accuracy, and historical results do not provide a reasonable basis to alter the taxable income forecast because they reflect a number of extraordinary events that are not predictive of future events, as explained in more detail in Chapter 6, Customer Credit Mechanism and Investment Returns – Rebuttal (D. Thomason; G. Allen). See pp. 6-14 to 6-16.

## **QUESTION 03**

TURN understands that PG&E's model generates the income forecast from the rate base forecast.

- a. How does PG&E characterize the uncertainty of income beyond what is introduced by the uncertainty in rate base (for example, the uncertainty in forecast ROE, disallowances, penalties), e.g., probability-weighted scenarios, distribution around a mean, etc.?
- b. Provide any and all supporting data, analysis, and documentation used to develop this characterization of uncertainty.

- c. Provide any and all supporting data, analysis, and documentation that were reviewed but not used to develop this forecast and characterization of uncertainty.

### **ANSWER 03**

PG&E objects to this request as vague and ambiguous. PG&E further objects to this request as overbroad and unduly burdensome. PG&E further objects to this request as seeking information protected by the attorney-client privilege and/or attorney work product doctrine. PG&E's response excludes any privileged information or attorney work product. Subject to its objections, PG&E responds as follows:

PG&E refers TURN to its response to Question 2 above.

### **QUESTION 04**

PG&E cites several third-party demand forecasts (pp. 11-4 to 11-8), e.g., CEC, SCE, EPRI. Please provide:

- a. All available reports, data, and analyses associated with these forecasts.
- b. All available reports, data, and analyses associated with other third-party demand forecasts that were reviewed but not included in PG&E's testimony.

### **ANSWER 04**

PG&E objects to this request as vague and ambiguous. PG&E further objects to this request as overbroad and unduly burdensome. PG&E further objects to this request as seeking information protected by the attorney-client privilege and/or attorney work product doctrine. PG&E's response excludes any privileged information or attorney work product. Subject to its objections, PG&E responds as follows:

The modeling and studies cited in Chapter 11, Rebuttal Regarding Load Growth (J. Berman), are publicly available, and PG&E provided links to access the documents in the testimony. Additional materials related to the modeling for the SB 100 Joint Agency Report are available here: <https://www.energy.ca.gov/event/workshop/2020-09/senate-bill-100-draft-results-workshop>. Additional materials related to the *Deep Decarbonization in a High Renewables Future, Updated Results from the California PATHWAYS Model* report are available here: <https://www.ethree.com/projects/deep-decarbonization-california-cec/>. Additional materials related to the SCE Pathway 2045 study are available here: <https://www.edison.com/home/our-perspective/pathway-2045.html>. PG&E is not presently aware of additional materials related to the EPRI study. Additional reports, data, and analyses associated with these publicly-available third-party forecasts, if any, are equally available to TURN, as are other publicly-available third-party forecasts.

## QUESTION 05

PG&E (Rebuttal, p. 6-17) asserts that, with respect to taxable income, “none of [Mr. Ellis’s] assumptions,” including those regarding “shocks” and random variation, is correct.”

- a. Explain why PG&E believes Mr. Ellis’ assumptions related to shocks and random variation are incorrect. Provide any data, analysis, and documentation supporting this assertion.
- b. What specifically is incorrect about Mr. Ellis’s characterization of the historic variability in PG&E’s income? Are the data or calculations erroneous? If so, in what way? Provide any and all supporting data, analysis, and documentation.
- c. Does PG&E contend that its income will *not* be subject to any variability or deviation from its forecast through 2050?
  - i. If so, provide any and all data, analysis, and documentation supporting this assertion.
  - ii. If not, explain the nature and cause of such variability and deviation and provide any and all supporting data, analysis, and documentation.
- d. Does PG&E contend that its income will *not* be subject to any currently unexpected shocks (defined as a year-on-year change of +/50%) to its forecast through 2050?
  - i. If so, provide any data, analysis, and documentation supporting this assertion.
  - ii. If not, explain the nature and cause of such shocks and provide any and all supporting data, analysis, and documentation.
- e. If the answer to c. or d. is “no”, explain why PG&E did not include either or both of these uncertainties in its modeling of the Trust?
- f. Provide any and all supporting data, analysis, and documentation used in responding to the above questions.

## ANSWER 05 REVISION 01

PG&E objects to this request as vague and ambiguous. PG&E further objects to this request as overbroad and unduly burdensome. PG&E further objects to this request as seeking information protected by the attorney-client privilege and/or attorney work product doctrine. PG&E’s response excludes any privileged information or attorney work product. Subject to its objections, PG&E responds as follows:

a. – b. TURN appears to misunderstand the cited language from Chapter 6, Customer Credit Mechanism and Investment Returns – Rebuttal (D. Thomason; G. Allen). The phrase “those assumptions” at page 6-17, line 10, refers to Mr. Ellis’ assumptions for load growth and rate base growth, as referenced on lines 4-5 and 8-9. This passage in the rebuttal testimony does not assert that Mr. Ellis’ assumptions with regard to historical EBIT and shocks are incorrect per se. As explained in more detail in Chapter 6, Customer Credit Mechanism and Investment Returns – Rebuttal (D. Thomason; G. Allen), the unadjusted historical results presented in Mr. Ellis’s workpapers do not provide a reasonable basis to alter a forecast of future taxable income because they

reflect a number of extraordinary events that are not predictive of future events. See page 6-14, line 6 through page 6-16, line 14, which addresses adjustments to historical EBIT and taxable income.

c. – f. PG&E has not asserted that its actual taxable income will not be subject to any variability or deviation from the forecast, or the possibility of an unexpected shock in the future. PG&E's long-term taxable income forecast incorporates PG&E's updated financial forecast through 2024 and estimated rate base growth of 7% from 2025 through 2030 and 5% thereafter. This forecast is reasonable based on PG&E's historical rate base growth, and likely conservative given the substantial capital investments PG&E will make in the coming years to replace aging assets and implement fire risk mitigation, including system hardening, and other projects to meet California's climate policy goals. The key period is from 2021 through 2035, when the cap of \$7.59 billion in Additional Shareholder Contributions is expected to be reached. PG&E's taxable income forecast reflects the best available data to input into the Monte Carlo simulation model to evaluate the expected value of the Customer Credit Trust over the life of the Recovery Bonds. Although PG&E's actual taxable income may be higher or lower than the forecast, or may experience shocks in the future, such possible developments have not been incorporated into the model because they cannot be predicted with accuracy, and historical results do not provide a reasonable basis to alter the taxable income forecast because they reflect a number of extraordinary events that are not predictive of future events, as explained in more detail in Chapter 6, Customer Credit Mechanism and Investment Returns – Rebuttal (D. Thomason; G. Allen). See pp. 6-14 to 6-16. In its rebuttal testimony, PG&E presented alternative scenarios of the Monte Carlo simulation model that show sensitivities of the expected value of the Customer Credit Trust to changes in future taxable income, including scenarios in which all taxable income is eliminated in a single year (Chapter 6, Customer Credit Mechanism and Investment Returns – Rebuttal, p. 6-32; Chapter 10, Expert Rebuttal Regarding Customer Benefit, pp. 10-13 to 10-15); PG&E's taxable income is 20% below PG&E's forecast every year (pp. 10-16 to 10-17); and PG&E makes Additional Shareholder Contributions more slowly as posited by TURN (pp. 10-18 to 10-21). These alternative scenarios confirm that the proposed Securitization is beneficial to customers under a wide range of outcomes.

#### **QUESTION 06**

Provide all workpapers for the Rebuttal testimony, including but not limited to, underlying data, analysis (including any live/functional spreadsheet models), calculations and documentation used in preparing all of the analyses, figures, and tables in Chapters 6, 10, and 11.

#### **ANSWER 06**

PG&E objects to this request as vague and ambiguous. Subject to its objections, PG&E responds as follows:

PG&E will provide workpapers prepared in support of PG&E's rebuttal testimony.

## QUESTION 07

In its discussion of the potential impacts of catastrophic adverse events (pp. 10-13 ff.), PG&E presents the results of assuming the elimination of taxable income in 2029.

- a. Is it PG&E's contention that such an event can occur only once over the life of the Securitization?
  - i. If so, how did PG&E reach that conclusion?
  - ii. If not, what is PG&E's estimation of the expected frequency and magnitude of such events? How do these estimates compare to the historical frequency and magnitude of such events?
- b. Provide any and all supporting data, analysis, and documentation used in preparing these estimates.

## ANSWER 07

PG&E objects to this request as vague and ambiguous. PG&E further objects to this request as overbroad and unduly burdensome. PG&E further objects to this request as seeking information protected by the attorney-client privilege and/or attorney work product doctrine. PG&E's response excludes any privileged information or attorney work product. Subject to its objections, PG&E responds as follows:

PG&E has not asserted that a catastrophic adverse event could occur only once over the life of the Recovery Bonds. The key period is from 2021 through 2035, when the cap of \$7.59 billion in Additional Shareholder Contributions is expected to be reached. PG&E presented an alternative scenario in which all taxable income is eliminated in 2029 to provide an illustrative example of the potential impact on the expected value of the Customer Credit Trust of a catastrophic event such as a major wildfire in the next few years for which costs are ultimately reimbursed by PG&E to the Go-Forward Wildfire Fund up to the disallowance cap. For purposes of this proceeding, PG&E is not estimating the frequency and magnitude of future catastrophic adverse events such as catastrophic wildfires. In light of the extensive wildfire mitigation efforts that have been and will be undertaken by PG&E, and the framework established by AB 1054 including with respect to the Go-Forward Wildfire Fund, a scenario in which there is a single wildfire payout before 2035 that is ultimately not recoverable and of such magnitude as to eliminate all taxable income for that year is a reasonable alternative scenario to evaluate the risks and benefits related to the proposed Securitization.