Pacific Gas and Electric Company Securitization

A. 20-04-023

TURN HEARING EXHIBIT

TURN-30

PG&E 2020 Integrated Resource Plan - Excerpt

BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Continue Electric Integrated Resource Planning and Related Procurement Processes.	Rulemaking 20-05-003 (Filed May 7, 2020)

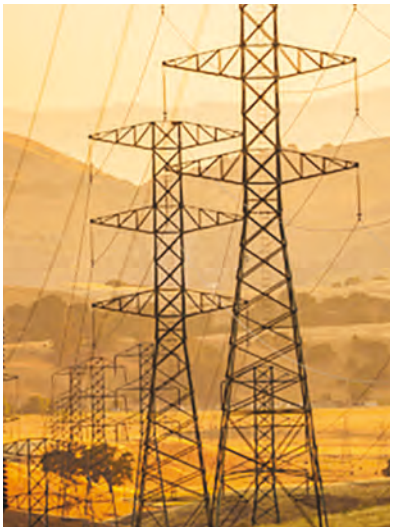
PACIFIC GAS AND ELECTRIC COMPANY'S (U 39 E) 2020 INTEGRATED RESOURCE PLAN (PUBLIC VERSION)

TYSON R. SMITH

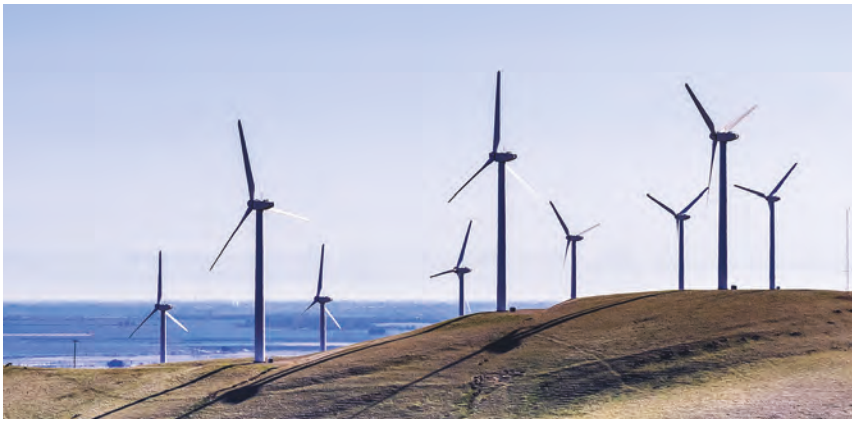
Pacific Gas and Electric Company
77 Beale Street, B30A
San Francisco, CA 94105
Telephone: (415) 973-4570
Facsimile: (415) 973-5520
E-Mail: Tyson.Smith2@pge.com

Attorney for
PACIFIC GAS AND ELECTRIC COMPANY

Dated: September 1, 2020



INTEGRATED RESOURCE PLAN



2020

Prepared for the
California Public Utilities Commission
September 1, 2020

PG&E®

III. Study Results

Overall, PG&E does not expect it will need to procure new incremental resources, beyond its current mandated procurement, in order to meet its GHG emissions benchmark of 4.737 MMT for the 46 MMT scenario. For IRP planning purposes, PG&E has an incremental need for 748 MW of new resource additions to meet its GHG emissions benchmark of 3.784 MMT[33] for the 38 MMT scenario. In addition, the RPS requirement can be met with generation from PG&E's forecasted bundled RPS-eligible resources. The use of banked RECs from prior years' excess RPS-eligible resource procurement would not be needed to meet RPS compliance until after 2030. The primary reason for the lack of new incremental resource need is load shift to CCAs.

In the following subsections, PG&E presents its portfolio results for the following areas: (1) 46 and 38 MMT Scenario Portfolios, (2) GHG Emissions, (3) Local Air Pollutants and DACs, (4) Cost and Rate Analysis, (5) System Reliability Analysis, (6) Hydro Generation Risk Management, and (7) Resource Development.

a. Conforming 46 MMT Scenario and 38 MMT Scenario Portfolios

i. Energy Sales Forecast

PG&E used a combination of IEPR and ERRA forecasted load and load modifier quantities throughout the study results section in order to complete our analysis. Pursuant to Commission guidance, the scenarios use the 2019 IEPR load forecasts, as modified in the ALJ's April 15, 2020 Ruling adopting revised CCA load forecasts for the purpose of GHG and other criteria pollutant emissions calculations. For PG&E's Cost and Rate Analysis in Section D of the study results, the Commission-approved 2020 ERRA Forecast in D.20-02-047 was used.[34] As shown in Table 2, the bundled customer sales forecast for PG&E is expected to decline by approximately 25 percent from 2020 to 2030 primarily as a result of DA and CCA load departure.

Gross System Usage represents PG&E's sales forecast prior to adjusting for EE, DG, EVs, and electrification. Net System Sales represent PG&E's sales forecast after accounting for those

[33] See PG&E's Bundled Portfolio Optimization Tool (BPOT) description under the Methodology section or Appendix 1: Bundled Portfolio Optimization Tool for details on the methodology for determining the optimal mix of new generation and storage resources to be added to the bundled portfolio under scenarios where the existing set of resources is unable to meet certain operational and/or policy constraints.

[34] The 2020 forecast for loads, supply resources, and costs is based on the Commission-approved 2020 ERRA Forecast in D.20-02-047 to maintain consistency between PG&E's most recently approved ERRA Forecast and its 2020 IRP forecasts. For all other years of the Conforming scenario, load is based on the 2019 IEPR load. See April 15th ALJ Ruling Table 1 Attachment A located here: https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M333/K160/333160852.PDF.

load modifiers. Bundled sales represent PG&E's bundled sales after accounting for DA (including BART) and CCA load.

Table 2 shows that expected increases in EE and DG photovoltaic (PV) offset the sales increase driven by economic and population growth and EV demand. This results in Net System Sales for PG&E's service area decreasing slightly from 2020 to 2030.

TABLE 2
CONFORMING SCENARIOS ENERGY SALES FORECAST (GWH)

Line No.	Description	2020[b]	2022	2026	2030
1	PG&E Gross System Usage	84,678	80,728	81,592	82,306
2	Energy Efficiency		(387)	(928)	(1,315)
3	Solar PV		(3,047)	(4,034)	(4,775)
4	Non-PV		(1,680)	(1,670)	(1,643)
5	Total Distribution Generation		(4,727)	(5,703)	(6,418)
6	Electric Vehicles		809	1,310	1,694
7	Building Electrification		0	0	0
8	Other Electrification		54	120	181
9	PG&E Net System Sales	79,440	76,476	76,392	76,449
10	Direct Access	(9,405)	(11,780)	(11,780)	(11,780)
11	Community Choice Aggregation	(34,091)	(37,508)	(37,546)	(37,892)
12	PG&E Bundled Sales	35,945	27,188	27,065	26,777

(a) Totals may not add due to rounding.

(b) 2020 Values come from Commission-approved 2020 ERRA Forecast in D.20-02-047. This results in differences (e.g., EE quantities) in incremental/ cumulative load modifier volumes.

(c) Forecast for load comes from the CPUC-approved modified 2019 IEPR Form 1.1c, finalized in ALJ ruling dated 4/15/2020 and can be found here: https://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M333/K160/333160852.PDF.

(d) All Load modifiers were calculated by the CPUC's CSP tool. Line 4 was not calculated explicitly in the tool but followed the same methodology proposed in the CSP Tool.