



Pacific Gas and Electric Company 2027 GRC

A.25-05-009

TURN HEARING EXHIBIT

TURN Ex-307

Ryan Weber

Excerpt from PG&E Testimony in last GRC (A.21-06-021) –

Exhibit PG&E-3, Volume 2 of 3

Application: 21-06-021
(U 39 M)
Exhibit No.: (PG&E-3)
Date: February 28, 2022
Witness(es): Various

PACIFIC GAS AND ELECTRIC COMPANY

2023 GENERAL RATE CASE

EXHIBIT (PG&E-3)

GAS OPERATIONS

CHAPTERS 6-10

**[INCLUDES ERRATA THROUGH
FEBRUARY 28, 2022]**

VOLUME 2 OF 3



PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 7
ASSET FAMILY – STORAGE
[INCLUDES AUGUST 27, 2021 REVISED TESTIMONY AND
ERRATA THROUGH FEBRUARY 28, 2022]

PACIFIC GAS AND ELECTRIC COMPANY
CHAPTER 7
ASSET FAMILY – STORAGE

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- 1 • Reserve Capacity – Reserve Capacity Service which provides the
2 PG&E system with emergency intraday supply in case of a significant,
3 unplanned equipment outage or other supply problem to ensure the
4 reliability of the system if such outages occur.⁴²

5 A Memorandum of Understanding (MOU) was also submitted with the
6 2019 NGSS which addressed a number of additional issues such as
7 operating requirements, rate design, Independent Storage Provider (ISP)
8 responsibilities, tariff modifications, and cost allocation.⁴³ This chapter does
9 not address issues related to cost allocation. Instead, cost allocation will be
10 addressed in a separate application currently scheduled to be filed in
11 September 2021 referred to as the PG&E GT&S Cost Allocation and Rate
12 Design proceeding.

13 **2. Updated Peak Day Supply Standard**

14 As explained above, a key component of the 2019 NGSS was an
15 analysis of peak day supply needs to determine the necessary amount of
16 storage capacity. In the 2019 GT&S Rate Case, a peak day analysis
17 (referred to by the Commission as the Reliability Supply Standard or
18 Reliability Standard) was presented to determine an appropriate level of
19 PG&E gas storage capacity.⁴⁴

20 In this proceeding, PG&E is providing an updated Peak Day Supply
21 Standard analysis to reflect current information and forecasts, as well as
22 events which have occurred since the 2019 GT&S Rate Case. Table 7-15
23 below provides an updated Peak Day Supply Standard analysis and is
24 followed by a narrative description of the information included in Table 7-15.

⁴² D.19-09-025, pp. 35, 40.

⁴³ D.19-09-025, pp. 76-84 (describing MOU terms).

⁴⁴ D.19-09-025, pp. 23-24 (describing analysis).

**TABLE 7-15
UPDATED PEAK DAY SUPPLY STANDARD ANALYSIS**

		2019	Winter	Winter	Winter	Winter	Winter	Winter
Demand		NGSS Design	2021-2022	2022-2023	2023-2024	2024-2025	2025-2026	2026-2027
1 Core Demand		2493	2571	2580	2589	2600	2612	2622
2 Industrial Demand		522	565	552	556	554	553	553
3 Electric Generation		928	786	740	730	801	889	892
4 Off-System and Shrinkage		123	123	123	123	123	123	123
5 Total Demand	Sum Line 1-4	4066	4045	3995	3998	4078	4177	4190
Supply								
6 Redwood Firm		1936	1957	1957	1957	1957	1819	1819
7 Northern ISPs		764	743	743	743	743	881	881
8 Total Northern Supply	Sum Lines 6-7	2700	2700	2700	2700	2700	2700	2700
9 Baja Firm		960	888	888	888	888	888	888
10 Gill Ranch LLC		100	100	100	100	100	100	100
11 California Production		0	35	35	35	35	35	35
12 Total Southern Supply	Sum Line 9-11	1060	1023	1023	1023	1023	1023	1023
13 Total Supply Without PG&E	Line 8 plus 12	3760	3723	3723	3723	3723	3723	3723
14 Withdrawal needed to meet demand only	Line 5 minus 13	306	322	272	275	355	454	467
15 Inventory Management and Reserve Capacity		550	550	550	550	550	550	550
16 Total withdrawal needed from PG&E Storage	Line 14 plus 15	856	872	822	825	905	1004	1017
17 Forecast Withdrawal Capacities at McDonald Island and PG&E Gill Ranch before any capacity investments			808	750	662	544	686	623
18 Capacity shortfall	Line 17 minus 16		-64	-72	-163	-361	-317	-394
Capacity Investments								
19 Retaining Los Medanos			191	180	168	184	184	184
20 Cross Compression			-	94	93	94	-	67
21 Additional Wells at McDonald Island					45	45	45	45
22 Restore PG&E Gill Ranch to 100			22	30	38	46	46	46
23 Total Capacity Additions	Sum Lines 19-22		213	304	344	369	275	342
24 Forecast PG&E Storage capacities after investments	Sum 17 and 23		1,021	1,054	1,006	913	961	965
25 Surplus or Shortfall after Identified Investments	Line 24 minus 16		149	232	182	9	(42)	(52)

1 In Table 7-15, the column entitled “2019 NGSS Design” represents the
2 forecasts that were included in the 2019 NGSS. The columns to the right of
3 the NGSS Design column represent the peak day forecast for 1-year periods
4 (e.g., 2021-2022, 2022-2023, etc.). Below, information included in the
5 Table 7-15 is explained.

- 1 • Demand (lines 1-5) – PG&E has updated the demand forecasts for core,
 2 industrial, electric generation customers. The Core Demand (line 1) is
 3 the forecast demand for core customers anticipated during a 1 day in
 4 10-year peak day event. The Industrial Demand (line 2) is the forecast
 5 for noncore industrial demand in the winter months of a 1 in 10-year
 6 cold/dry year from the California Gas Report. The Electric Generation
 7 demand forecast (line 3) reflects gas demand estimates for the minimum
 8 electric generation throughput needed to support electric reliability on a
 9 peak winter day.⁴⁵ This forecast also reflects the retirement of Diablo
 10 Canyon Power Plant in 2024 and 2025, which is expected to have a
 11 significant impact on the near-term forecast of gas demand for electric
 12 generation.⁴⁶ The Off-System and Shrinkage forecast (line 4) is firm
 13 off-system contracts under Schedule G-XF, approximately
 14 80,000 MMcf/d and the amount of additional gas that is delivered by the
 15 customer to cover the approximately 1.3 percent shrinkage on the
 16 system. Finally, line 5 totals lines 1-4.
- 17 • Supply (lines 6-13) – PG&E has also updated its supply forecasts,
 18 dividing these forecasts between northern and southern supply.⁴⁷ For
 19 northern supply, PG&E has included updated forecasts for the Redwood
 20 transmission pipeline firm supply and Northern ISPs (lines 6-7).
 21 However, northern supply is constrained to a total of 2,700 MMcf/d. For
 22 southern supply, PG&E has included firm capacity on the Baja
 23 transmission pipeline (line 9), as well as Gill Ranch storage. In addition,

⁴⁵ The peak winter day uses the 1-in-10 temperature of 34 degrees Fahrenheit. This event occurred on December 8, 2013. The analysis grew electric load from 2013 through 2026 using the California Energy Commission’s California Energy Demand 2019-2030 forecast. See California Energy Commission, California Energy Demand 2019-2030 Managed Forecast – Mid Demand/Mid AAEE Case, Form 1.5a.

⁴⁶ To determine the electric reliability need, PG&E subtracted available in-state non-gas fired electric generation resources and estimated available power imports. The resulting gas-fired generation required to support the peak day state-wide electric demand was apportioned between northern and southern California. The proportion estimate uses the NP-26 California Independent System Operator load share less gas-fired generation connected to the Kern River pipeline. Last, the estimate adds gas demand for cogeneration connected to the PG&E gas system. The cogeneration gas demand uses the average the December demands for years 2017 through 2019.

⁴⁷ Northern supply represents gas supply coming into PG&E’s service territory from the northern part of its service territory while southern supply comes from the south.