

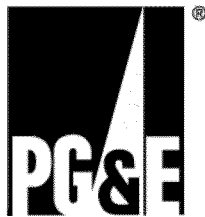
Rulemaking: 10-05-006
(U 39 E)
Exhibit No.: _____
Date: August 11, 2011
Witnesses: Various

PACIFIC GAS AND ELECTRIC COMPANY

SYSTEM RESOURCE PLAN

**ORDER INSTITUTING RULEMAKING TO INTEGRATE AND REFINE
PROCUREMENT POLICIES AND CONSIDER LONG-TERM
PROCUREMENT PLANS**

TRACK I REPLY TESTIMONY



PACIFIC GAS AND ELECTRIC COMPANY
TRACK I TESTIMONY
REPLY TESTIMONY

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1 **PACIFIC GAS AND ELECTRIC COMPANY**
2 **TRACK I TESTIMONY**
3 **REPLY TESTIMONY**
4

5 Pursuant to the *Administrative Law Judge’s Ruling Revising System Track I*
6 *Schedule* (“ALJ Ruling”), issued on March 10, 2011, and subsequent rulings
7 modifying the dates for submissions, Pacific Gas and Electric Company (“PG&E”)
8 submits this reply testimony regarding issues raised in Track I of this proceeding.

9
10 **JANICE FRAZIER-HAMPTON**
11

12 Q 1. Barbara George representing Women’s Energy Matters (“WEM”)
13 recommends closing Diablo Canyon Power Plant (“DCPP”) and San Onofre
14 Nuclear Generating Station (“SONGS”) (p. 6-7, p. 24-29). Jan Reid representing
15 himself recommends that the Commission open an Order Instituting Investigation
16 (“OII”) into the feasibility of shutting down the DCPP and SONGS facilities (p.
17 6-9). Does PG&E agree with these recommendations?
18

19 A 1. No, PG&E does not agree with these recommendations. WEM
20 recommends the immediate shutdown of DCPP and SONGS, and stopping
21 purchases from other nuclear plants without considering the impacts of such
22 actions on system reliability, the environment, or customer costs. The
23 consequences of an immediate shutdown would require a separate analysis from
24 what the Commission has identified as the scope of the Long-Term Procurement
25 Plan proceeding.

26 The magnitude of the generation provided by these nuclear plants and the
27 multiple functions that they provide to the grid would require that the need
28 assessment prepared for this proceeding start from scratch. Further, different
29 types of analysis will be necessary to investigate the reliability impact of an
30 immediate shutdown of all nuclear generation in the state. For example, to
31 address grid impacts, the California Independent System Operator (“CAISO”)
32 will need to investigate impacts on the electric transmission system, as well as
33 system-wide generation and local reliability impacts. The time and effort
34 required for these analyses, and their results, will affect not only this proceeding,

1 but also other decisions that the Commission, CAISO, and other bodies will need
2 to make in other forums regarding electric transmission and generation, and other
3 matters affecting the electric industry in the state. The current record in this
4 proceeding is not adequate to address the issues raised by WEM and Jan Reid.

5 Southern California Edison Company's ("SCE") direct testimony¹ addresses
6 at a high level the reasons why an immediate shutdown or replacement of
7 SONGS is not operationally feasible. PG&E concurs with the rationale provided
8 by SCE in its direct testimony.

9 The immediate shutdown of DCPD and SONGS would also have a
10 detrimental impact on California's ability to meet its Greenhouse Gas Emissions
11 ("GHG") goals. DCPD alone produces about 18,000 GWh, roughly 20% of
12 PG&E's customer sales annually, and avoids 6 to 7 million metric tons per year
13 of CO2 emissions, compared to conventional resources. The California Global
14 Warming Solutions Act of 2006 ("AB 32") requires reduction of GHG emissions
15 to 1990 levels by 2020. Achieving such a goal without DCPD and SONGS
16 generation will be extremely difficult.

17 Furthermore, even if sufficient energy and capacity were available in the
18 market to replace nuclear generation, there will likely be a considerable cost
19 increase in market prices and to consumer costs. For example, based on analysis
20 PG&E prepared in early 2010, the increased cost to consumers over 20 years of
21 replacing DCPD alone could range between \$3.5 billion to \$16.3 billion,
22 compared to various replacement alternatives.²

1 SCE's July 1, 2011 LTPP Track I testimony, pp. 36-41.

2 PG&E's January 29, 2010 Application before the CPUC to recover the costs of
preserving the option to operate DCPD after the expiration of its existing operating
licenses in 2024 and 2025 for Units 1 and 2.

1 **ANTONIO ALVAREZ**

2
3 Q 1. On Page 15 of their Testimony, Calpine recommends that the
4 Commission direct the Investor Owned Utilities (“IOUs”) as part of this
5 proceeding to procure additional capacity through intermediate term (3-5 years)
6 solicitations. Do you agree with this recommendation? Please explain why.
7

8 A 1. No, I do not agree with this recommendation. Calpine’s
9 recommendation is premature for several reasons. First, resource need has not
10 been determined. Second, many parties in this proceeding agree that the analysis
11 conducted to date is inconclusive as to the need to integrate renewables, and that
12 “further analysis is needed before any renewable integration resource need
13 determination is made.”³ Third, it is unknown whether existing units such as
14 Calpine’s will retire for economic reasons if such capacity remains uncontracted
15 for several years. Finally, the recommendation is premature because Calpine
16 jumps to the conclusion that only new conventional resources will be added to
17 meet the flexibility needs, when there may be lower cost alternatives, including
18 some of the examples Calpine lists in its testimony, that could provide additional
19 flexible capacity at a fraction of the cost of new conventional resource costs.
20

21 Q 2. On Page 20 of their Testimony, Women’s Energy Matters (“WEM”)
22 proposes “refinements in energy efficiency data” to capture the effect of weather
23 conditions on renewables production and customer demand. WEM also proposes
24 the use of demand-side resources for renewable integration (pp. 21-22). Do you
25 have any comments about WEM’s proposals?
26

27 A 2. Yes, with respect to refinements in energy efficiency data, both CPUC-
28 Required Scenarios and the IOU Common Scenarios used consistent weather
29 conditions to estimate hourly profiles for customer load and for renewable
30 production. These profiles used 2005 weather, as explained in CAISO’s direct
31 testimony. Therefore, the concern WEM raises is being addressed by using
32 consistent weather assumptions in the analysis filed on July 1, 2011.

³ See Joint Party Motion for Expedited Suspension of Track I Schedule and for Approval of Settlement Agreement, dated August 3, 2011, p. 4

1 With respect to the use of demand-side resources for renewable integration,
2 the Settlement Agreement signed by most parties in this proceeding recommends
3 that either as an extension of the current LTPP, or as part of the next LTPP cycle,
4 would include an analysis "to determine the amount and operational
5 characteristics of resources, whether supply or demand side resources, that could
6 address the operational needs of renewable integration." Therefore, if the
7 settlement is approved by the Commission, WEM's recommendation will be
8 considered.

9
10 Q 3. On Page 2 of his Testimony, L. Jan Reid proposes that the Commission
11 adopt a system capacity need of zero megawatts ("MW") for renewable
12 integration. Mr. Reid provides a list of reasons in his testimony, including that no
13 party in this proceeding has recommended that the Commission adopt a specific
14 non-zero system need for renewables integration (pp. 2-6). Do you agree with
15 Mr. Reid's recommendation?

16
17 A 3. No, I do not agree with Mr. Reid's recommendation. The analysis
18 presented so far by both CAISO and IOUs is inconclusive. As evidenced by the
19 large majority of parties in this proceeding who signed the Settlement Agreement,
20 the Settling Parties have differing views about the input assumptions used in the
21 analyses, and the conclusions that can be drawn from the analysis, just as Mr.
22 Reid disagrees with some aspects of CAISO's methodology. The Settling Parties
23 also recommend continued review and adjustment of the methodology and
24 assumptions used in the renewable integration analysis. The fact that most parties
25 have not made a recommendation on need that is different than zero is no
26 evidence that the need is zero, but that more work is needed to develop a comfort
27 level with an answer about resource need, whether the answer is zero or not.

1 **ROBERT GOMEZ**

2
3 Q 1. In their Testimony, Marin Energy Authority (“MEA”) expresses
4 concern that PG&E’s load forecast in the Track I analysis does not include
5 MEA’s current program or its planned expansion. How do you respond to this
6 concern?
7

8 A 1. PG&E followed the directive of the CPUC’s February 10, 2011 Ruling
9 to use the 2009 CEC IEPR base case load forecast in development of the CPUC-
10 Required Scenarios for Track I. The 2009 IEPR forecast did not include MEA
11 load when calculating PG&E’s bundled load. PG&E recognizes this as one of the
12 concerns it has with the CPUC-Required Scenarios.

13 However, the underlying load forecast PG&E used in its Track I IOU
14 Common Scenarios does indeed incorporate the transition of its customers to
15 MEA’s service. These estimates were developed from a list of customers
16 provided to PG&E by MEA for Phase 1 of its program, and from MEA’s January
17 2010 Implementation Plan for Phase 2 of its program.
18

19 Q 2. On Page 3 of their Testimony, MEA recommends that PG&E’s load
20 forecast should reasonably assume full roll-out of the MEA program by 2013.
21 What does PG&E’s load forecast assume?
22

23 A 2. For its Track I load forecast, PG&E does indeed assume full roll-out by
24 2013 in the IOU Common Scenarios, and estimates total MEA customer load to
25 be 762 GWh by 2020. This is entirely consistent with Table 2 in MEA’s opening
26 testimony where MEA estimates their total load to be 761 GWh by 2020.
27

28 Q 3. Page 2 of their Testimony, MEA also recommends that a final Track I
29 decision “will need to reflect this departed and departing CCA load.” Does
30 PG&E address this concern?
31

32 A 3. Yes, as PG&E has incorporated a load forecast consistent with MEAs
33 Track I Testimony into the Track I analysis via the IOU Common Scenarios,
34 PG&E believes MEA’s concerns are fully addressed.