BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Planning.	Rulemaking 12-03-014 (Filed March 22, 2012)

OPENING BRIEF OF ENVIRONMENTAL DEFENSE FUND ON TRACK 4 OF THE LONG-TERM PROCUREMENT PLANNING DOCKET

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I. INTRODUCTION

The Environmental Defense Fund ("EDF") respectfully submits this Opening Brief[1] regarding the Track 4 proceeding, which considers the long-term local capacity needs resulting from the closure of San Onofre Nuclear Power Station ("SONGS"), along with the loss of fossil fuel generation associated with implementation of once-through-cooling ("OTC") rules, to the California Public Utilities Commission ("Commission").

As stated in EDF's testimony, the closure of SONGS – along with the shuttering of the coastal area's aging, inefficient, gas-fired power plants – should serve as a historical marker, the event that signaled the end of one energy era, and the ushering in of a new customer-centric grid dominated by renewable electricity sources and flexible pricing approaches.[2] SONGS' closure presents a unique opportunity to advance towards greater integration of the state's Preferred Resources, particularly state-of-the-art energy efficiency, a wide variety of demand response

[1] Administrative Law Judge Gamson directed the submission of Opening Briefs on November 25, 2013 and Reply Briefs on December 16, 2013.
[2] EDF-1, p. 2.

resources - including robustly marketed time-of-use tariffs and automated "fast" demand response ("DR") that is fully visible to CAISO - and distributed and utility scale renewable generation, as well as energy storage.[3][4] It should not result in procurement of additional resources that have not been demonstrated to be necessary for long-term reliability in Southern California.

II. DISCUSSION

A. The Need for Additional Procurement Has Not Been Sufficiently Established.

While the utilities have requested additional procurement approval in the current track, the actual need of such procurement has not been established by the utilities and CAISO. For example as acknowledged during cross-examination, CAISO has not accounted for the potential for DR resources, including more robust pricing now possible with the full deployment of advance metering infrastructure, or small-scale photovoltaics to address any lingering supply gaps.[5] During cross-examination CAISO witness Sparks discussed the Operator's treatment of DR and its possible underutilization in ISO's analysis;

> A. The DR is, in our understanding, is the existing DR that doesn't have characteristics that -- at least currently doesn't have characteristics that meet the needs. Not to say that we couldn't find some other DR or modify that DR, but at this point in time we didn't want to cause confusion that that DR, as it exists today, could meet the need. And so that was not included in the residual calculation. The incremental small PV is actually a load modifier, it's typically behind the meter; and again, because it's not really known where the locations are, it was not included either. Not to say that it couldn't be used to meet the need if the characteristics are appropriate and it becomes more certain.[6]

Further, ISO witness Sparks stated in Exhibit ISO-5 that further studies, such as the

[3] EDF-1, p. 3.
[4] Proposed Decision of Commissioner Peterman in R. 10-12-007 ("Order Instituting Rulemaking Pursuant to Assembly Bill 2514 to Consider the Adoption of Procurement Targets for Viable and Cost-Effective Energy Storage Systems") at 10 (Oct. 17, 2013).
[5] ISO-5, p. 29. The exhibit states that ISO considered a higher amount of DR and additional small PV "...to a certain extent."
[6] Transcript ("Tr."), pp. 1456, line 21 – 1457, line 10.

transmission study currently underway and expected in draft by January 2014 is necessary before further full procurement needs are addressed.[7]

In addition to the underutilization of DR and renewable resources in the CAISO analysis, the utilities have not presented a clear description of the scope of its additional procurement request. Under cross-examination, SDG&E witness Anderson requested flexibility in the utility's request, "We don't know the numbers this precisely. We ought to have some range to be flexible given the size of bids and the size of power plants."[8] Further, SCE's testimonies indicate that significant uncertainty is associated with the need for additional resources. For example, SCE study scenarios "…show that no new generation is needed to meet NERC Reliability Standards."[9] Likewise, the utility has stated that its model results indicate that it does not need any *additional* conventional generation to meet reliability, showing a requirement of 1,055 MW in the LA Basin and 1,200 MW of recently authorized generation.[10]

The use of Preferred Resources,[11] particularly DR and EE, and including additional deployment of small and large scale renewables, time-variant pricing, demand-bidding programs, emergency load curtailment programs, and direct load control, as well as energy storage – was not fully explored by CAISO, SDG&E or SCE to address uncertain grid needs. For example, in their assessments of long-term needs due to the closure of SONGS, neither the CAISO nor the

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[7] ISO-5, pp. 29-31.
[8] Tr. p. 1845, lines 23-26.
[9] SC-1, page 6.
[10] SCE-1, Figure II-2, titled "Results of SCE's Studies," shows 1,055 MW of New LA Basin Generation needs, but 1,200 MW of Track 1 New Conventional Generation Authorizations, which more than meets that local need.
[11] Preferred Resources are defined in the State's Energy Action Plan II as follows: "The Energy Action Plan supports a "loading order" of Preferred Resources to meet California's increasing energy needs. Energy efficiency and demand response are first, followed by renewable sources and clean distributed generation. To the extent that these efforts are unable to satisfy increasing energy and capacity needs, the state supports clean and efficient fossil-fired generation. Concurrently, electricity transmission infrastructure must be improved to support the development of renewable energy sources."

investor owned utilities ("IOUs") considered the impact of future tariff changes.[12] In addition, SCE witness Silsbee testified that the participation in DR programs was held constant in its analysis.[13]

As stated in its testimony, EDF estimates in Southern California Edison's service territory, if just 20 percent of ratepayers adopted the existing voluntary TOU rate peak demand would fall by almost 630 megawatts ("MW"), more than enough to address that utility's uncertain need for 500 MW. If half of Edison's ratepayers adopted the TOU tariff, almost 1,600 MW of peak demand would be avoided, or two-thirds of SONGS capacity.[14]

B. The Use of Preferred Resources Is Underutilized.

The underutilization of DR and renewable resources in the analysis by CAISO and the utilities unnecessarily favors the procurement of additional generation, that if procured will exist and require recoupment long beyond its necessity. If, the Commission grants the procurement of additional megawatts based on the current lack of clear analysis, EDF strenuously advocates for the use of only Preferred Resources to meet any additional needs. To ignore or downplay the future of the electric environment in Southern California in reliance upon status quo combustible resources such as natural gas-fired plants, undermines the intent of the states Energy Action Plan and denies California the clean future.

In 2002, the legislature passed Assembly Bill 57, codified in California Public Utilities Code ("PU") 454.5, requiring the investor-owed utilities to procure electricity and the Commission to review and adopt their associated long-term procurement plans ("LTPP"). PU

[12] Tr., pp. 1696, line 26 – 1697, line 25 and 2158.
[13] Tr. at 2135.
[14] EDF-1, p. 13.

Code 454.5 requires that a number of parameters be met by both the IOU and the Commission for the LTPP to be approved. PU 454.5(b)(9)(C) requires:

> A showing that the procurement plan will achieve the following:
> The electrical corporation shall first meet its unmet resource needs through all available energy efficiency and demand reduction resources that are cost effective, reliable and feasible.

PU Code 454.5 requirements are also reflected in the *Energy Action Plan* ("EAP") adopted by the Commission, the California Energy Commission ("CEC"), and the California Power Authority in 2003. The goal of the EAP is to:

> Ensure that adequate, reliable, and reasonably-priced electrical power and natural gas supplies, including prudent reserves, are achieved and provided through policies, strategies, and actions that are cost-effective and environmentally sound for California's consumers and taxpayers.[15]

The EAP stipulates that the Commission "will carry out their energy-related duties and responsibilities based upon the information and analyses contained in the assessment:"[16]

> The *Action Plan* envisions a "loading order" of energy resources that will guide decisions made by the agencies jointly and singly. First, the agencies need to optimize all strategies for increasing conservation and energy efficiency so as to minimize increases in electricity and natural gas demand. Second, any need for new generation must be first addressed by renewable energy resources and distributed generation. Only after these two conditions are met, because the preferred resources require sufficient investment and adequate time to "get to scale," the commissions will procure additional clean, fossil fuel, central-station generation.[17]

In the 2005 EAP II, description of the loading order further illuminated the role of demand response:

> The loading order identifies energy efficiency and demand response as the State's preferred means of meeting growing energy needs. After cost-effective efficiency and demand response, we rely on renewable sources of power and distributed generation, such as combined heat and power applications. To the extent

[15] California Energy Action Plan, adopted 2003, p. 2.
[16] *Id*. at 3-4.
[17] *Id*. at 4.

> efficiency, demand response, renewable resources, and distributed generation are unable to satisfy increasing energy and capacity needs, we support clean and efficient fossil-fired generation.[18]

In 2008, the agencies adopted the *Update to the EAP,* in which the agencies reaffirmed California's commitment to "reducing greenhouse gas emissions." With this commitment as the backdrop, the updated EAP examined ways to increase the employment of the loading order's energy efficiency and demand response.[19]

The underutilization of DR and renewable resources in the analyses developed by CAISO and the utilities violates state policy on Preferred Resources, and biases additional procurement in favor of generation. As previously discussed, there is not a strong empirical basis to procure additional resources. If the Commission does grant the procurement of additional resources, EDF strenuously advocates for the use of only Preferred Resources.

In comparison to combustion resources, the siting of EE, DR, and small and large scale renewable generation is significantly less likely to face time delays and substantial obstacles to implementation. As noted by SCE, gas-fired generation ("GFG") and transmission projects face "…lengthy permitting and construction times…"[20] Similarly, SDG&E indicated that "…there is substantial uncertainty as to how quickly transmission projects can be licensed and built."[21]

Finally, both SCE and SDG&E are seeking authorization to start procuring fossil fuel generation in case it is determined that such assets are needed as a result of further load analyses or the failure of Preferred Resources to deliver on their promise. To be consistent with the

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[18] Energy Action Plan II, adopted 2005, p. 2, http://docs.cpuc.ca.gov/word_pdf/REPORT/51604.pdf.
[19] California Updated Energy Action Plan, adopted 2008, p. 1, http://www.cpuc.ca.gov/NR/rdonlyres/58ADCD6A-7FE6-4B32-8C70-7C85CB31EBE7/0/2008_EAP_UPDATE.PDF
[20] SCE-1, p. 47.
[21] Robert B. Anderson, *Prepared Direct Testimony of San Diego Gas and Electric Company*, August 26, 2013, page 2.

loading order and minimize unnecessary procurements, EDF recommends that contingency planning be based first on fully securing Preferred Resources.

III. CONCLUSION

WHEREFORE, EDF respectfully requests the Commission grant any additional resources based on the integration of Preferred Resources in the Long-Term Procurement Planning. The closure of SONGS and the planned closures of the OTC plants have put California at a crossroads, with the opportunity to make decisions now and impact our energy future for decades to come. EDF concludes and strongly recommends the Commission utilize preferred resources, including demand response and other options outlined above, to address the needs created by the closure of SONGS.

Respectfully signed and submitted on November 25, 2013

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