BEFORE THE PUBLIC UTILITIES COMMISSION OF

THE STATE OF CALIFORNIA

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

COMMENTS OF THE UTILITY REFORM NETWORK ON WORKSHOP PLANNING ASSUMPTIONS FOR USE IN THE 2014 LONG TERM PROCUREMENT PLAN PROCEEDING AND THE CAISO 2014-2015 TRANSMISSION PLANNING PROCESS

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January 8, 2014

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Pursuant to Administrative Law Judge Gamson's email Ruling of December 19, 2013 (Ruling), TURN offers the following comments on the materials presented at the December 18, 2013 workshop in R.12-03-014, the 2012 Long-Term Procurement Plan (LTPP) docket.[1] TURN offers comments on two aspects of the workshop materials.

Question 7 of the Ruling's "Key Technical Questions…"

Question 7 of the Ruling asked if "the production profile of each category of storage identified in the CPUC Storage Target Decision [should] be modeled…as a fixed profile or as a dispatchable resource".[2] Key purposes of future storage procurements will be meeting peak loads at the times they occur and managing variations in demand on the electric system.[3] The ability of assumed new storage resources to provide cycling services to support grid reliability must thus be considered in the Commission's final need assessments in this case. TURN prefers that such cycling capabilities be included in the parties' reliability modeling in the first place and thus prefers that storage resources be modeled as dispatchable resources. But if modeling some storage resources as dispatchable is not practical for either technical or time reasons, the Commission must instead reflect the dispatchability of storage in any need findings by adjusting the results of such modeling downward to reflect the presence of storage.

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[1] Per the Ruling, these comments are being filed in the newly-established 2014 LTPP docket, R.13-12-010.

[2] The complete name of the document attached to the Ruling was "Key Technical Question for Parties in Response to December 18th, 2013 Workshop on Planning Assumptions and Scenarios for use in the CPUC 2014 Long Term Procurement Plan Proceeding and the CAISO 2014-2015 Transmission Planning Process".

[3] See D.13-10-040, pp. 9-10.

Production Cost Modeling Using "1-in-5" Loads

TURN is concerned about the potential conflation of two load concepts: the annual peak loads (in MW for a single annual peak hour) used for transmission reliability modeling and the annual energy loads (in MWh for every hour of a year) used for production cost modeling and generation reliability modeling. Both types of loads have a long, established history in reliability planning. However, these measures of load are used for fundamentally different types of modeling and attempts to mix the two concepts must be made only with great care, if at all.

The Scenario Matrix included in the "Planning Assumptions…" document suggests these concepts may get mixed.[4] For Scenarios 1a to 1c, the column labeled "Load" states modeling will be conducted using "1-in-5 year" and "1-in-10 year" (hot) weather loads. Use of such loads for traditional peak-hour transmission modeling is reasonable and consistent with the Commission's effort to coordinate its planning with the CAISO's Transmission Planning Process (TPP).[5] However, the "Notes" for Scenario 1c suggest that hourly production cost simulations will be conducted using "mid" or "1-in-2 year" energy loads and a "1-in-5 year" hot weather peak load.[6]

As noted, these types of loads have not traditionally been mixed in reliability modeling. It is possible to create an annual hourly "mid" or "1-in-2 year" load shape that includes a single "1-in-5 year" peak hour value that is several percent higher than the "1-in-2

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[4] The complete name of this Attachment to the Ruling was "Planning Assumptions and Scenarios for use in the CPUC 2014 Long-Term Procurement Plan Proceeding and CAISO 2014-15 Transmission Planning Process". The Scenario Matrix is in Section 6 (p. 23) of the Attachment.

[5] This attempt is denoted by the use of the acronym TPP in these scenario names.

[6] The abbreviation "Prod cost sims" presumably refers to such simulations.

year" peak hour load. However, given that such "1-in-5 year" peak hours do not occur in isolation, but instead usually occur during a sustained heat wave, the value of such modeling is doubtful.[7] Should the Commission or any party want to perform production cost modeling based on the approach seemingly anticipated for Scenario 1c, it should define what the purpose of such modeling would be and then propose and document a methodology for estimating hourly loads that is consistent with these two different approaches and yields reasonable hourly load shapes.[8]

TURN appreciates the opportunity to provide these comments.

Respectfully submitted,

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Dated: January 8, 2014

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[7] Based on discussion at the December 18, 2013 workshop, TURN understands the purpose of the modeling proposed in Scenario 1c to be solely for estimating the resources that will operate under economic dispatch in a "1-in-5 year" peak hour. If so, this simple approach to constructing loads may be reasonable. However, if the results of the modeling of other hours are to be given any weight, a more thoughtful approach to combining these modeling approaches is necessary.

[8] The CAISO developed a method for preparing hourly loads based on a combination of both concepts for its modeling efforts for Track 2 of the 2012 LTPP. However, given the cancellation of Track 2, TURN did not attempt to analyze the CAISO's approach further. TURN has also not located public documentation of this aspect the CAISO's methodology, aside from differences in the amount of Energy Efficiency assumed in the "Base" and "TPP" cases. (See slides 18 and 20 of August 26, 2013 presentation titled "CAISO's Deterministic Operational Flexibility Modeling Results," available under "2012 LTPP" at http://www.cpuc.ca.gov/PUC/energy/Procurement/LTPP/ltpp_history.htm.