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THE OFFICE OF RATEPAYER ADVOCATES' COMMENTS ON THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR'S DRAFT 2017-18 TRANSMISSION PLANNING PROCESS UNIFIED PLANNING ASSUMPTIONS AND STUDY PLAN

March 14, 2017

The Office of Ratepayer Advocates (ORA) is the independent consumer advocate within the California Public Utilities Commission (CPUC), with a statutory mandate to obtain the lowest possible rates for utility services consistent with reliable and safe service levels, and the state's environmental goals. The following are ORA recommendations on the draft California Independent System Operator's (CAISO) 2017-18 Transmission Planning Process Unified Planning Assumptions and Study Plan and the associated February 28, 2017 stakeholder meeting.

ORA supports the CAISO's proposal to investigate the transmission planning impacts of the expected time shift in the system peak.

ORA supports the CAISO's proposal in this planning cycle to begin investigating the transmission planning impacts of the expected shift in the time of day of the system peak load due to the forecasted high penetration of Behind-the-Meter (BTM) generation. While the California Energy Commission (CEC) has cautioned that the use of the CEC final adjusted managed peak forecast peak-shift scenario be limited to "review (of) previously-approved projects or procurement of existing resource adequacy resources to maintain local reliability, but should not be used in identifying new needs triggering new transmission projects,"¹ ORA anticipates that this fundamental change in system load profile will play an increasingly important role in transmission system planning. The CAISO should work with the CEC in developing sufficient confidence in the modelling of the peak forecast with growing BTM generation such that the forecast can be used as a base case assumption in future planning cycles.

ORA recommends that the CAISO develop transmission plan elements needed to support future transmission plans based on a shifted peak forecast.

ORA recommends that the CAISO also develop other elements of the transmission plan (such as assumptions and calculation methodologies) necessary to support the anticipated shifted peak forecast as the future baseline forecast. Such transmission planning elements include expected

¹CEC-200-2016-016 California Energy Demand Updated Forecast, 2017-2027, January 2017 p. 1

generation patterns for non-dispatchable² and hydroelectric resources, intertie imports/exports levels, and equipment ratings under the new expected ambient conditions.

<u>ORA supports the CAISO's continued review and evaluation of previously approved</u> projects, including the previously approved projects placed on hold; and recommends that the CAISO narrowly define the allowable scope of ongoing work on all remaining proposed reliability projects.</u>

ORA supports the CAISO's continued review of previously approved projects in the next planning cycle. ORA also supports using the final adjusted managed peak shift scenario³ for this sensitivity analysis. As a baseline, ORA supports excluding from the planning base cases all projects which the CAISO has placed on hold due to potential significant scope change.⁴ This would allow the annual system assessment to be used in the investigation as to whether those projects are still needed and the potential interactions among the projects under review.

For the four projects that the CAISO has instructed PG&E to proceed with, but not file at the CPUC for the required certificate or permit, ORA is concerned about continuing to accrue costs on these projects that may ultimately be cancelled or significantly revised.⁵ For this reason, ORA recommends that the CAISO clearly define the exact work and information needed to assist with its decision on new transmission projects, and requests that PG&E proceed with only this defined scope of work. Finally, the decision to either cancel or change the project scope should be made as soon as possible in order to avoid unnecessary customer costs. While the CAISO indicated that such a decision would not be formalized until the Board action in the next planning cycle (March 2018), the CAISO should inform PG&E and stakeholders of its findings at the earliest opportunity in order to minimize unnecessary costs.

ORA recommends the early release of the CAISO's base case models so that stakeholders have more time to understand the impact of new planning assumptions.

In previous planning cycles, the stakeholders have not had access to the CAISO's base case models until late August, when the CAISO also releases its preliminary reliability assessment results. ORA encourages the CAISO to make the base case models available to stakeholders as soon as the models are finalized, rather than waiting until the preliminary reliability assessment results are available. Earlier release of the new planning assumptions would allow stakeholders

 $[\]frac{2}{2}$ This is a renewable generation dispatch pattern to be used in the system assessment base cases, which may differ from the output levels used in the CAISO's deliverability analysis.

³ CEC California Energy Demand (CED) Updated Forecast 2017-2027.

 $[\]frac{4}{2}$ These include the four projects that the CAISO has recommended that PG&E to proceed with, but not file at the CPUC for the required certificate or permit, plus eleven projects and one project in the PG&E and SDG&E area, respectively for which the CAISO recommends putting all development activities on hold until a review is complete. CAISO 2016-17 Draft Transmission Plan, January 31, 2017.

 $[\]frac{5}{2}$ ORA also provided these recommendations in its March 3, 2017, comments on the CAISO's 2016-2017 Transmission Planning Process.

additional time to understand how those new assumptions impact the forecasted power flows and loading on critical system elements identified in the previous planning cycle.

<u>ORA recommends the CAISO provide its Special Studies results and underlying data for</u> <u>consideration in the California Public Utilities Commission's (CPUC) Integrated Resource</u> <u>Planning (IRP) Proceeding.⁶</u>

The CAISO proposes to continue its work on several Special Studies initiated in the prior planning cycle, including the 50% renewable portfolio standard (RPS) special study of the Out-of-State (OOS) focused portfolio, as well as continued coordination with the other western planning regions on interregional transmission project studies. During the February 28th workshop, the CAISO indicated that the 2016-17 TPP Special Studies currently demonstrate no need for additional deliverability network upgrades (DNU) within the CAISO footprint to accommodate the OOS full capacity deliverability status (FCDS) resources imported on the existing transmission system. ORA requests that the CAISO provide this information to the California Public Utilities Commission (CPUC) Integrated Resource Planning (IRP) proceeding for consideration in the capacity expansion model studies that would likely be used to develop the 50% RPS portfolios in the subsequent TPP cycles.

In addition to the 50% RPS special study, the CAISO plans to study frequency response, gaselectric reliability, and the economic early retirement of gas generation.² Omitted from this list is the analysis of large energy storage. The CAISO's presentation regarding large pumped storage highlighted the potential for other value streams that should be considered in assessing the role of energy storage in integrated planning.⁸ In order to evaluate the need for OOS transmission, it is necessary to compare the cost of OOS transmission to meet the 50% RPS with the full cost of an in-state RPS portfolio or in-state RPS portfolio plus energy storage. It is essential to understand the total customer cost of the options available to meet California's policy objectives while maintaining the reliability of its electric grid. This CPUC's IRP proceeding is the best place for this assessment. ORA supports the CAISO's continued participation in the CPUC's IRP proceeding, and respectfully requests that it make available the Special Studies' underlying data as needed to facilitate an open and transparent process.

If you have any questions or comments please contact Joseph Abhulimen at Joseph.Abhulimen @cpuc.ca.gov or (415) 703-1552.

⁶ Rulemaking (R.) 16-02-007, Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements.

 $^{^{2}}$ Study of the characteristics of slow response local capacity resources is proposed to proceed on a parallel to the TPP in support of activities at the CPUC.

⁸ The CAISO's presentation indicated insufficient market revenues to support large pumped storage, but the production cost simulation modeling did not consider all potential revenue streams. *Bulk Energy Storage Resource Case Study– Update with the 2016 LTPP Assumptions,* February 28, 2017.