



Stakeholder Comments
2017-2018 TPP Draft Study Plan

Submitted by	Company	Date Submitted
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CESA appreciates the opportunity to comment on the 2017-2018 Transmission Planning Process (“TPP”) Draft Study Plan. CESA is encouraged to see that the CAISO is committed to increasing the opportunity for non-transmission alternatives in the transmission planning analysis.¹ In these comments, CESA provides feedback and recommendations on the two continuing special studies as well as the process for identifying non-transmission alternatives as a potential mitigation solution for reliability concerns.

50% RPS Special Study

After reviewing the Draft Study Plan, CESA is concerned that the 2017-2018 TPP will yield the same results as the 2016-2017 TPP given that the 33% Renewable Portfolio Standard (“RPS”) scenario will be used once again, as the California Public Utilities Commission (“CPUC”) develops a 50% RPS scenario for use in the Integrated Resources Plan (“IRP”) proceeding (R.16-02-007) and the 2018-2019 TPP. Most likely, the CESA believes that the 2017-2018 TPP will again identify no need for new transmission or non-transmission alternative projects even as there may be imminent transmission needs in the near future. CESA understands that the CAISO cannot expedite the process for developing updated assumptions and scenarios including a 50% RPS, which the CPUC provides.²

¹ *Revised Draft 2016-2017 Transmission Plan*, published on March 8, 2017. p. 2.

² CESA provided comments on February 9, 2017 on the Draft Assumptions and Scenarios Document, which will serve as a one-time, one-year continuation of the Long-Term Procurement Plan (“LTPP”) until the IRP process and modeling efforts fully develop. CESA’s comments on these assumptions can be found here:

Consequently, the 50% RPS Special Study plays an important role in informing the CAISO on the potential need for policy-driven transmission additions or upgrades. Instead of starting a new special study, the CAISO has indicated that it will focus on completing and updating this special study. The 2016-2017 TPP analyzed in-state and out-of-state portfolios, with differing deliverability statuses, and thereby focused largely on how interregional transmission and exports/imports could meet California’s renewable goals and minimize curtailment.

Given the currently stalled efforts to greater interregional transmission and exports/imports, CESA recommends that the 50% RPS Special Study could benefit from evaluating how non-transmission alternatives such as energy storage can cost-effectively meet some of the policy-driven transmission needs. Varying ranges of non-transmission alternatives could be tested in the existing in-state portfolios (similar to how the CAISO tested different sensitivities of the net export constraint) to assess how non-transmission alternatives impact renewable builds, renewable curtailment, and production costs.

In summary, this special study is an opportunity to inform the CAISO on a range of solutions to policy-driven transmission needs. At the moment, the only mitigation measure being explored in this special study is exports and imports between California and other states.

Large Energy Storage Special Study

CESA commends the CAISO for conducting the Large Energy Storage Special Study in the 2015-2016 and the 2016-2017 TPP cycles. CESA appreciates that the CAISO explored the benefits of pumped hydro storage (“PHS”) with an updated 50% RPS scenario and added an examination of possible locational benefits, in addition to the system-wide ramping and flexibility benefits. However, CESA raises issue with one of the key changes in the assumptions made – *i.e.*, the prices for renewable curtailment – which may have significantly affected the outcomes of this special study. The CAISO even acknowledged how the results of the study are sensitive to the assumptions, which generally lead to conservative curtailment results and understate the benefits of PHS.³

Specifically, the CAISO used -\$300/MWh as the price for all renewable generation curtailment in the 50% RPS Special Study in the 2015-2016 TPP cycle, but changed this assumption to -\$15/MWh for the first 200 GWh of curtailment, -\$25/MWh for additional 12,400 GWh of curtailment, and -\$300/MWh thereafter⁴ because it “mimics the CAISO market mechanism to

<http://www.storagealliance.org/sites/default/files/Filings/2017-02-10%20CESA%27s%20Reply%20Comments%20on%20Draft%202017%20Assumptions%20%26%20Scenarios%20-%20FINAL.pdf>

³ *Revised Draft 2016-2017 Transmission Plan*, published on March 8, 2017. p. 323.

⁴ *Ibid.* p. 313.

curtail renewable generation with economic bids and self-schedules.”⁵ Likely based on this assumption, the effectiveness and net market revenues of PHS may have been significantly reduced. It is unclear to CESA how and why this assumption was used, including why the price of curtailment is so low. CESA understands a sensitivity analysis will be conducted with these curtailment prices as part of extension work and it is important to consider these results before drawing firm conclusions from the study. The significance of these results should not be devalued by not being part of the core study/report.

CESA therefore recommends that the sensitivity analysis with renewable generation curtailment prices be conducted and the results be considered and included with the core study to avoid reducing the significance of these results. In addition, the costs assumptions used for storage should be presented clearly in the assumptions to inform the market. The Large Energy Storage Special Study should again be included in the 2017-2018 Draft Study Plan, which it is not currently. Given the such drastic change in assumptions from one TPP cycle to the next, and the CAISO’s admission that the results of this study are sensitive to the assumptions used, CESA believes a re-run of the study is necessary with moderate assumptions for renewable curtailment.

Non-Transmission Alternative Identification Process

CESA applauds the CAISO’s consideration of non-transmission alternatives in the transmission planning analysis. Over the past few years, CESA has noticed that several energy storage projects have been submitted in the request window as a transmission mitigation solution, but were not selected for a number of reasons, including for lack of cost effectiveness and not meeting the specific reliability need. Developers of these non-transmission alternatives would significantly benefit from understanding how cost effectiveness evaluations are conducted and being provided with more detailed data on the reliability need.

First, the cost effectiveness evaluations may not be accounting for the full range of benefits that energy storage as a non-transmission alternative can provide. A key challenge is that there is currently no consensus methodology to allocate costs and attribute specific benefits of non-transmission alternatives such as energy storage that can function as both a transmission asset and a market resource. Part of the challenge of analyzing energy storage facilities is the broad array of benefits it can provide. Some of those benefits can be reflected through market revenues to a storage provider. In a Policy Statement issued on January 19, 2017, the Federal Energy Regulatory Commission (“FERC”) affirmed that electric storage resources can provide transmission and clarified that providing services at both cost- and market-based rates is

⁵ *Ibid.* p. 318.

permissible as a matter of policy.⁶ Given this guidance, CESA recommends that the CAISO develop a consensus methodology to more comprehensively consider the cost effectiveness of energy storage resources as non-transmission alternatives and explore ways to mitigate any concerns about CAISO independence, double cost recovery, and wholesale market competitiveness impacts.

Second, the scope and detail of the data provided by the CAISO and the investor-owned utilities (“IOUs”) must be improved and made transparent to allow for non-transmission alternative developers to submit a quality technical proposal that addresses the identified transmission reliability need.

The two above issues require stakeholder processes to develop a benefit-cost allocation methodology and to identify the types of information and data that are needed for third parties to develop high-quality non-transmission alternatives to address identified transmission reliability needs.

Conclusion

CESA appreciates the CAISO’s consideration of CESA’s comments and looks forward to continued participation in the CAISO’s Transmission Planning Process.

⁶ 158 FERC ¶ 61,051 *Utilization of Electric Storage Resources for Multiple Services When Receiving Cost-Based Rate Recovery*. Docket No. PL17-2-000, issued on January 19, 2017.