CALIFORNIA ENERGY STORAGE ALLIANCE

Stakeholder Comments

2015-2016 TPP Draft Study Plan

Submitted by	Company	Date Submitted
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CESA appreciates the opportunity to comment on the 2015-2016 Transmission Planning Process ("TPP") draft study plan.

CESA commends the ISO for its thoughtful consideration of new grid resources and non-transmission alternatives in the TPP. While we believe that much more needs to be done to develop fair methodologies to evaluate resources that don't cleanly fit into the conventional boxes of "transmission" versus "market resource," CESA recognizes the complexity in evaluating energy storage specifically in the current framework of the TPP and looks forward to continued dialogue with the ISO on this topic.

50% Renewable Energy Goal for 2030 (Special Study)

CESA recognizes that considerable detail remains to be resolved in the methodology that will be used to complete the ISO's special study on the Governor's 50% renewable energy goal. CESA also recognizes that the special study is information only, and will not be used to approve any new transmission projects. This study, however, is likely to be one of the most scrutinized and critical informational studies that the ISO has completed in recent history. It will be a tool that both critics and advocates of the goal could theoretically use to exert significant influence over the direction of state renewables policy.

The stakes, therefore, couldn't be higher that the study is conducted thoroughly, that the appropriate portfolios are analyzed, and that the appropriate level of sensitivity analysis be conducted on the results. While CESA recognizes that the portfolios are to come from the CPUC, we caution that portfolios

used as an input into the study process are a static snapshot of but one of a nearly infinite spectrum of portfolio outcomes, some of which will likely be far less optimal than others in terms of minimizing ratepayer impact and maximizing system reliability.

CESA therefore urges the ISO to think holistically about the process, and the appropriate feedback loops needed to inform the CPUC and state policymakers on the implications of a higher renewables goal. For example, the ISO's static results of the analysis may lead policymakers to assume a certain cost requirement in upgrading the transmission system to accommodate new renewables on the grid, but the ISO could provide significant value to the policymaking process by taking the analysis further. For example, CESA recommends that the ISO analysis not just evaluate the transmission implications of the portfolios provided by the CPUC, but also look at:

(1) what changes to the portfolio (within the constraints of a 50% renewables target) could be made to maximize reliability and minimize the need for new transmission

(2) what theoretical changes to existing contractual constraints could also contribute to the goals of maximizing reliability and minimizing cost (for example, import/export limitations, path ratings, etc.)

(3) what modifications to other system resources could be made to achieve the lowest cost / most reliable 50% renewables scenario (e.g., conventional resources, energy storage, electric vehicles, other distributed energy resources, etc.). For example, energy storage or grid interactive electric vehicles can and should have a tremendous impact on the system's ability to reliably and cost effectively integrate increasing levels of renewables into the grid, and the ISO's study should seriously consider the implications of how other state policy goals (such as AB2514 and the governor's 1.5 million ZEV in 2025 goal) could contribute to a more reliable and cost effective grid

(4) What are the best tools to address certain system reliability issues under a higher renewables scenario (such as reactive power)? For example, could energy storage be used as a way to manage these issues by making more renewables dispatchable and grid responsive?

These sensitivities are a critical component in crafting a truly informative study that results in concrete steps that policymakers can take to ensure successful implementation of the 50% renewables goal.

We appreciate CAISO's consideration of CESA's comments and look forward to continued participation in the CAISO's Transmission Planning Process.