CEERT Comments on 2016/2017 TPP

CEERT has no comments on the draft 2016/2017 TPP itself, but has the following comments on some of the Special Studies. Most of the following comments relate to clarifications that, if possible, should be considered in the Final Draft 2016/2017 TPP – therefore, these comments are submitted today. Some relate to potential follow on to the studies for either the next TPP cycle or other regulatory venues. Although those comments are due on March 14, they are included here. Please consider these comments as serving for the March 14 comments as well.

50% RPS Special Study

- Please clarify when results labeled "in-state" and "out of state" refer to the geographical boundaries of California or the CAISO Balancing Authority. Given that approximately one-third of California load is located in other Balancing Authorities and the CAISO BA includes Southern Nevada, it will be easy to become confused. Based on the two recent presentations, CEERT assumes that most if not all of the results refer to the CAISO BA as "in-state," but this point needs to be explicit and consistently worded.
- On a similar note, please document the resource mix assumed for both non-CAISO CA BAs and fully "out of state" BAs in the study. How were the portfolios, presumably consistent with a statewide 50% RPS requirement, selected for the non-CAISO CA BAs and do they vary between the scenarios?
- Please consider publishing the annual production cost and CO2 emission differences between the scenarios along with the dispatch gas price used in order to provide some context for the value of the changes observed. A simple three row ("in-state" FD, ""in-state" EO, "out of state " FD and EO) by six column (CAISO, CA total, WECC wide for Annual Production Cost and GHG Emissions) table along with a short explanation should suffice.
- Please explain in detail how the "net export limit" is modeled – especially in light of the above geographic boundaries. How much of the 2k limit is taken up by "in-state" exports.
- Please explain how the "out of state" wind is dispatched. Is it "must take" in every hour? Is it subject to economic curtailment? Does it have dispatch priority over other contractual imports such as Palo Verde or existing RPS eligible imports?

It is clear that the results of this Special Study largely depend on the details of how imports and exports from the CAISO BA are modeled and how the proposed import portfolios interact with the RPS legislative direction (commonly referred to as the "Bucket Rules") and the CPUC and CEC regulations implementing the legislative intent. There needs to be a cogent explanation of this in the text as well as detailed documentation for the practitioners.

Going forward, this model and these data bases represent the only current tool that can simultaneously deal with dispatch, deliverability and reliability. Thus it could be critical to inform at least the CPUC IRP process as well as the CARB Scoping Plan GHG reduction target setting process. The CAISO must stand ready to exercise this tool in an open source process where stakeholders can propose questions to be studied, consensus can be reached as to how to perform the modeling exercise and communicate the results. The current formal process of the CPUC transmitting a single set of inputs and a single portfolio for study will simply not be sufficient to allow a robust exploration of alternatives.

Bulk Storage Special Study

At the Feb 28 Stakeholder meeting, there was little time to absorb the meaning of the results of the Bulk Storage Special Study and the relatively large difference in the results from previous work. In response to the specific request for ideas on other scenarios/ value streams to consider, CEERT suggests that a potentially large value stream for locational value of at least the LEAPS and/or San Vincente projects could be mitigating the potential "need" to invest large sums in increased reliability of the gas transmission/storage infrastructure in Southern California. Think the two recent incidences of shortages on the interstate pipeline system leading to potential curtailments of gas supplies to generate electricity, think Aliso Canyon, think the $600 M proposal currently before the CPUC to retire Line 1600 (a 1949 vintage pipeline that does not meet the safety standards promulgated following the San Bruno incident) and replace it with a 36 in diameter line that would increase the send out capacity of the SDG&E system by some 30%. A principal justification of these proposed projects is to improve electric sector reliability due to the need for local in-Basin gas capacity on peak. CEERT is not in any way endorsing the need for any of these projects. However, in light of the imperative that overall gas burn must significantly decrease over the next ten to twenty years in order to meet the

State’s climate policy, is bulk electricity storage a more cost effective way to achieve this “reliability” as opposed to large investments in new gas infrastructure?