

SDGE Comments to 2015/2016 Draft Study Plan

- Page 22 of the 2015-2016 Study Plan. Carlsbad Energy Center is referred as 558MW, on the CAISO Presentation it shows 633MW. SDG&E is using 633MW.
- Page 30 of the 2015-2016 Study Plan. SDG&E imports is set at 2,850MW, SDG&E is assuming 3,500MW for all summer peak load cases.
- Page A-26 of the 2015-2016 Study Plan. Cabrillo II units (Kearny, Miramar and El Cajon) are assumed retired in 2017. SDG&E is assuming retirement in 2016.

Thanks,

Fidel Castro, P.E.

Transmission Planning, SDG&E

**SDG&E’s Supplemental Comments on the
CAISO’s February 17, 2015 draft document entitled
“2015-2016 Transmission Planning Process Unified Planning Assumptions and Study Plan”**

On March 9, 2015 SDG&E submitted comments on the CAISO’s February 17, 2015 draft document entitled “2015-2016 Transmission Planning Process Unified Planning Assumptions and Study Plan.” The comments below are in addition to those submitted on March 9, 2015.

Section 6.1 of the draft document states that the CAISO “will perform a special study to provide information regarding the potential need for public policy-driven transmission additions or upgrades to support a state 50% renewable energy goal.” (page 41) This study could be helpful in developing transmission expansion plans that would support long-term greenhouse gas (GHG) reduction goals.

The CAISO states that this study will “help inform the state’s procurement processes about the cost impacts of achieving 50% renewable energy goal largely through the addition of new ISO grid-connected generating facilities.” It seems that the CAISO has already decided to limit this study to “ISO grid-connected generating facilities” and the basis for imposing this limitation is not stated, nor is it prudent. Existing state law allows renewable energy outside the state of California that is scheduled when produced to count towards California’s Renewable Portfolio Standard (RPS) requirement. Accordingly, even if it were necessary to schedule out-of-state renewable energy across non-CAISO transmission to reach a California balancing authority operator, such renewable energy should be considered eligible to count towards a 50% renewable energy goal.

It is unclear whether, in exploring the cost impacts of achieving a 50% renewable energy goal, the CAISO will consider the construction of new CAISO-controlled transmission that reaches out-of-state areas of high quality renewable resource development potential. Whether CAISO-controlled or not, the CAISO should be interested in exploring all transmission expansion options that offer a low cost way of a 50% renewable energy goal. These options should include any transmission which opens up high quality out-of-state renewable resource development potential. For example, high quality wind development potential exists in Wyoming and New Mexico and consumers deserve a serious assessment of the cost-effectiveness of developing these resources as a way of achieving California’s 50% renewable energy goal.

The CAISO’s draft document indicates that the study “will estimate the expected amount of congestion-related curtailment of renewables that would likely result” at the 50% RPS level.¹ This is a useful exercise but it misses what could be a more significant impact: The increase in congestion-related costs that result not from physical curtailment of renewable energy, but rather from the difference in Locational Marginal Prices (LMPs) where higher cost thermal generation in the California load centers has to be dispatched upward, and lower cost thermal generation outside of the California load centers has to be dispatched downward, to mitigate congestion on the transmission system. In this regard, SDG&E supports the March 9, 2015 comments of

¹ The CAISO’s draft document states that “additional details about the proposed study methodology are provided later in this section.” It does not appear that any “additional details” are actually provided.

TransWest Express which recommend the use of the CAISO's Transmission Economic Assessment Methodology (TEAM) to gain a complete view of net cost impacts on CAISO consumers. For any given study case, the TEAM identifies gross consumer costs, congestion rents, surplus loss revenues and producer surplus accruing to CAISO consumers. Comparing these results across study cases containing different mixes/locations of renewable resources and associated transmission additions, will provide information that will help stakeholders identify the lowest cost way of achieving a 50% renewable energy goal.

The draft document does not explain how the 50% RPS portfolio will be developed. To date the CAISO has relied exclusively on renewable resource portfolios developed by the CPUC through use of the RPS Calculator model. The RPS Calculator model is currently undergoing needed enhancements but the upgraded model will not be available for use in the CAISO's 2015-2016 Transmission Planning Process (TPP). More importantly, even with enhancements, the spreadsheet model is simply not capable of the robust analysis that is required in order to determine whether a particular transmission upgrade would cost-effectively accommodate new out-of-state renewable resource development. Such development could materially change the composition of RPS portfolios used in the CAISO's annual TPP thus far. For example, to date, the RPS Calculator model has never selected a significant quantity of wind from Wyoming or New Mexico.

SDG&E recommends that the CAISO's draft study plan be modified to also explore out of state renewables and not limit its consideration of the 50% renewable energy goal to renewable portfolios produced by the RPS Calculator model. By considering renewable resources, both in state and out of state, the CAISO will be in a position to make the most economic decision for consumers. Additionally, the CAISO's study plan should indicate that the CAISO will accept stakeholder input on whether there are renewable resource portfolios, other than that provided by the RPS Calculator model, that would achieve a 50% renewable energy goal at a lower overall cost.