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Submitted to the CAISO at regionaltransmission@CAISO.com by Rachel Gold (Policy Director) and Susan Schneider (Consultant)

RE: Comments of the Large-scale Solar Association on the draft Study Plan for the 2016-2017 Transmission Planning Process

The Large-scale Solar Association (LSA) hereby submits these comments about the CAISO's draft Study Plan (Plan), for the 2016-2017 Transmission Planning Process (TPP). LSA's comments address the Special Studies proposed in the Plan for this next study cycle – specifically, the 50% RPS Study.

While the main parts of the Transmission Plan will continue to be based on a 33% RPS in this cycle, the Plan proposes continued examination of selected issues related to the legislative mandate to implement a 50% RPS level by 2030, through a Special Study. The topics proposed for this study, and LSA's feedback, are shown below.

- **“Anticipate potential transmission needs to meet” a 50% RPS goal.** LSA supports this objective. While we understand the need for additional work to craft 50% RPS portfolios for use in the main TPP studies, the 50% RPS Study in the last planning cycle clearly identified some areas where transmission congestion and renewables curtailment could be a strong concern.

Given the long lead time for development of new transmission (and/or transmission alternatives), it would be prudent in this study cycle to make at least a preliminary evaluation of any new transmission that might be needed to address these problems.

- **“Consider potential impacts of transmission-related curtailment on conventional generation.** LSA agrees that this is an important area of study that should be included because, among other things, these impacts could also affect the transmission analysis discussed above.
- **“Evaluate out-of-state renewables impacts on the reliability performance and curtailment of renewables.”** It is not clear from the brief description in the Plan what the CAISO plans to study here, and LSA requests that the CAISO include additional explanation in the final Plan.
- **“Provide a framework for considering interregional transmission proposals emerging through the interregional coordination processes developed in compliance with FERC Order No. 1000.”** The Plan notes that, based on information to date, this could be a vehicle for studying the proposals for long transmission lines to import Wyoming or New Mexico wind generation.

LSA does not oppose study of these options. However, LSA notes that there is also considerable solar potential closer to the CAISO area geographically and urges the CAISO not to limit its study to the specific proposals of Wyoming or New Mexico wind.

In addition to these topics, LSA urges the CAISO to add an additional topic to this Special Study: A closer examination of export feasibility.

The 50% RPS Study in the last planning cycle examined net-export scenarios between 2,000 and 8,000 MW. This is a wide range (up to approximately the maximum historical simultaneous export level), but this study did not examine the feasibility of these export levels. Optimal ways to address potential CAISO system over-supply may be different at the lower export levels than at the upper level.

LSA suggests study of two aspects of the export issue.

The first aspect is physical feasibility, i.e., the ability of adjacent or nearby regions to absorb excess energy from the CAISO, when it is likely to be available. For example, their ability to absorb this energy, given:

- The potential loads of these areas at the times of the day or year when surplus energy is likely to be available; and/or
- The operating flexibility, i.e., large resources in those areas when the extra energy is likely to be available.

The second aspect is an assessment of institutional constraints, i.e., any transmission or generation ownership or contractual issues that could impede California's ability to export energy to other areas when it is likely to be available. LSA recommends this portion of the study also identify potential actions, by the CAISO and/or other entities that would reduce or remove these limitations.