

Statement of Purpose

The ISO, in collaboration with an advisory group and through stakeholder consultation, is tasked with extending and completing the renewable integration study work conducted for the CPUC's Long Term Procurement Proceeding (CPUC-LTPP), Docket R. 10-05-006, by identifying, executing, and reviewing additional high value renewable integration analysis and sensitivities by the end of 2011. This additional study work will be used to identify generic quantities of needs and examine generation and non-generation resource alternatives to meet integration (system flexibility) needs. The work is being conducted pursuant to the terms and conditions of the CPUC-LTPP settlement agreement entered into by the ISO and most of the parties to the proceeding. The objective of this effort is to refine the study methodology and assumptions and to incorporate additional information regarding local capacity resource needs for the final renewable integration studies that will be used in conjunction with the established LTPP scenarios that will be performed between January 2012 and March 2012 and will be submitted in the CPUC-LTPP. This is in preparation to inform a CPUC decision, either as an extension of the current LTPP or in a successor LTPP. The updated renewable integration studies will also incorporate results from the Local Capacity Requirements/Once-through-cooling study work currently underway by the ISO in parallel with this effort.

The advisory group for these extended studies is made up of technical resources with expertise in power system planning, analysis and modeling, and electricity market design. The advisory group represents a variety of groups in the CPUC-LTPP and includes one member that is not affiliated with any stakeholder group. Based on input from a broader community of parties in the LTPP, the advisory group will review, guide, evaluate, and recommend those sensitivities that will have the highest value based on the ability of the suggested work to:

- Validate and/or refine the study methodology,
- Bound the range of potential needs of flexible upward capacity,
- Address generation and non-generation alternatives for meeting identified needs,
- Address the timing of needs, and
- Study potential effects of market design features on both the needs and the effectiveness of alternatives in meeting these needs

This renewable integration study work is one part of a broader set of ISO renewable integration study work and intends to inform the CPUC-LTPP proceeding as well as other ongoing operational requirements and system needs efforts by state agencies and the ISO,. The broader ISO work is also investigating frequency response and inertia needs, distributed energy resource visibility and control, predictive Automatic Generation Control algorithms, and market design and product development. The renewable integration study work is also intended to inform the consideration and design of market enhancement to facilitate renewable integrations.