BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF CALIFORNIA

Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans.

Rulemaking 12-03-014

Response of the California Independent System Operator to Key Technical Questions

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California ISO Responses to Key Technical Questions for Parties in Response to Energy Division Proposed Scenarios for Use in 2012 LTPP (R.12-03-014)

The ISO has reviewed the Energy Division's proposed scenarios and has concerns about the underlying assumptions, proposed use of the scenarios and other matters. However, the ISO understands that these issues will be addressed on October 1 when policy comments are solicited. With respect to technical issues, the ISO presents these comments in response to Questions No. 1 and No. 6.

Question 1. Technical Errors in the Scenarios

The load levels used in the scenarios should be the coincident peak load for all the PTOs and not the summation of each PTO's peak load.

Question 6. Scenario Prioritization

Scenarios

For the purposes of the LTTP renewable integration analysis of needs and flexibility that are conducted using a deterministic production simulation methodology, the ISO uses a 1 in 2 high load¹ scenario. A high load case is presented as one of the scenarios; however the net load for year 2022 was 52,602 MW, which is lower than the net load in the Base Load scenario by 283 MW and is mainly due to high levels of uncommitted energy efficiency and small PV. The ISO believes this is unrealistic and recommends an additional scenario that is comprised of the High Load case without any uncommitted energy efficiency. Also, small PV addition should be included on the supply side and the load should be increased by a corresponding amount.

For the purposes of the LTTP renewable integration analysis of needs and flexibility that are conducted using a stochastic production simulation methodology, the ISO recommends using the High Load scenario case with a load distribution centered around a 1 in 2 load without any uncommitted energy efficiency. Also, small PV additions should be included on the supply side and the load should be increased by a corresponding amount. The high extreme would be a load level of 10% higher than the adjusted High Load level.

Base CAISO (MIC) Import

The import capability shown in the CPUC's scenarios for years 2013 through 2034 is 16,469 MW. This number is the Maximum RA Import Capability for 2013 published by the ISO, which also contains transmission rights for load serving entities outside the ISO.

¹ Net Electricity Peak Demand by Agency and Balancing Authority

When these external entities' allocations are removed, the available import capability for loads into the ISO is 13,308 MW (see row "Step 2" in the spreadsheet at <u>http://www.caiso.com/Documents/2013Assigned_UnassignedRAImportCapability_BranchGroups-AfterStep6.pdf</u>). This 13,308 MW also includes an adjustment of approximately 1,130 MW, for a select number of branch groups, in order to allow some pre-RA import commitments to count until they expire. Thus, the available import capability for loads into the ISO without the adjustments is approximately 12,178 MW.

The ISO's analysis of hourly historical net import into the ISO for the past ten years, which includes both high and low hydro years within California, shows a maximum simultaneous net import of approximately 12,400 MW, which is consistent with the import calculation discussed above. A distribution of the hourly simultaneous net import for the past ten years is shown in Figure 1.

Therefore, as shown on Figure 1, the ISO recommends that the 16,469 MW proposed for use in the scenarios be reduced to no more than 12,400 MW based on historical maximum LSEs utilization of import capacity.

