

## **BAMX Comments on the CAISO 2017-18 Transmission Planning Process** **Draft Study Plan**

The Bay Area Municipal Transmission group (BAMx)<sup>1</sup> appreciates the opportunity to comment on the CAISO Draft 2017-18 Transmission Planning Process (TPP) Unified Planning Assumption and Study Plan (Study Plan). The comments and questions below address the 2017-18 TPP Unified Planning Assumptions and Study Plan posted on February 22, 2017 and discussed during the February 28<sup>th</sup> stakeholder meeting. We continue to see positive enhancements to each year's plan and look forward to continuing to work with the CAISO to continuously improve the planning process.

There is much uncertainty in the current planning environment. System loads are forecast to decline and the time of peak demand is shifting, gas fired resources are facing early economic retirement, the expansion of Community Choice Aggregation (CCA) may change resource procurement patterns, the outcome of regional expansion efforts is still unknown, and impacts of efforts such transportation electrification are only just starting to come into view. In such an environment, maintaining flexibility and careful consideration of long-term investments are critical. As such, BAMx strongly supports the CAISO efforts identified on slide 28 of the stakeholder presentation to identify corrective action plans that include lower cost alternatives to the construction of transmission facilities.

### **Scope and Schedule for the 2016-2017 Planning Cycle**

BAMx continues to request that Table 2-1(Schedule for the 2017-2018 planning cycle) of the Study Plan be enhanced. The table does not delineate when the CAISO responds to each round of Stakeholder comments. BAMx believes that stakeholder review process and comments, and the CAISO's resulting responses and changes to the Study Plan are integral to creating this ever-improving process, but this important aspect has not received as much attention in the past as it should have. BAMx requests that CAISO acknowledge the improvements to the process that this ongoing feedback provides and that Table 2-1 should be expanded to identify when such responses would be available.

It is also important that stakeholders understand the options for solutions to reliability deficiencies that have been identified in the assessment. An important source for potential alternative solutions is the project submittals made through the Non-PTO Request Window. Therefore, BAMx requests that Table 2-1 be expanded to specifically identify a timely posting of Non-PTO Request Window projects.

### **Previously Approved Projects**

BAMx applauds the significant progress that the CAISO made in the 2016-17 TPP in evaluating previously approved transmission projects. However, as many projects were placed on hold rather than either being cancelled or having their scope adjusted, much work remains to be

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<sup>1</sup> BAMx consists of City of Palo Alto Utilities and City of Santa Clara, Silicon Valley Power.

completed in this planning cycle. As part of this on-going re-evaluation, BAMx supports excluding from the planning base cases all projects which the CAISO has placed on hold. This allows the annual system assessment to be used in the investigation as to whether those projects are still needed and potential interactions among the projects under review.

While there is much work ahead with respect to reevaluating the transmission projects identified in the previous transmission planning cycle, the continuing change in planning assumptions necessitate an on-going effort to ensure that all transmission projects included in the transmission plan continue to be needed and of the appropriate scope. For example, both the future reflection of the SB 350 energy efficiency mandates and the impact of behind-the-meter (BTM) generation will continue change the forecasted demands on the electric system. BAMx requests that the CAISO maintain within the transmission plan a list of all previously approved projects that have not initiated major procurement and construction activities as candidates for such on-going re-evaluation. Such a list should be inclusive of all projects types and not limited to reliability-driven projects.

In addition to the projects that the CAISO has placed on hold, BAMx requests that two high cost projects be included in this year's review of previously approved projects. First is the SCE proposed Alberhill 500 kV substation. This project was originally driven by load growth forecasts in 2006 of up to 3,000 MW additional load in the San Jacinto region that would exceed the SCE's 500/115 kV distribution bank capacity by 2012. This project has been in permitting at the CPUC since 2009 and SCE's current planned In-Service date is June 2021.<sup>2</sup> After eleven years, the planning assumptions are clearly stale. With the CEC forecasting a negative load growth for the overall SCE area both with and without the peak shift due to BTM generation, the assessment of need and CAISO concurrence with this project would certainly benefit from fresh planning information.

Second is the Ten West Link Project (aka Delaney-Colorado River Transmission Project). This project was approved in the 2013-14 TPP as an economically driven project with a benefit-to-cost ratio of 0.87 to 1.17.<sup>3</sup> The project energy benefits were based upon the differential marginal fossil generation cost in Arizona versus California with an assumed capacity benefit of 200 MW to 300 MW. Some ancillary benefits associated with Imperial Valley deliverability were also identified, but were not the primary driver and may actually lower the quantified benefit-to-cost ratio.<sup>4</sup> Again, the planning environment has changed since this project was initially approved. SB 350 has since been approved by the California legislature that increases the RPS and energy requirements, thereby reducing the need for fossil fuel based generation. Furthermore, generation is exiting the California market due to the surplus of generation capacity, calling into question the attribution of capacity value to the Ten West Link Project. These factors indicate that the 2013-2014 analysis supporting the project should be revisited. Similarly, the economic rationale for the Harry Allen-Eldorado 500 kV approved in the 2014-15 TPP should also be refreshed.

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<sup>2</sup> SCE Quarterly AB970 Report, January 2017, CPUC A.09-09-022.

<sup>3</sup> CAISO 2013-14 Transmission Plan, Tables 5.7-25 and 5.7-26.

<sup>4</sup> *ibid.* p. 265

### **Peak Load Forecast**

BAMx supports the integration of the important work by the CEC to incorporate the impact of BTM generation on the expected load profile. We note that though the CEC staff has cautioned that use of peak-shift modifier should be limited to “review previously-approved projects or procurement of existing resource adequacy resources to maintain local reliability but should not be used in identifying new needs triggering new transmission project,”<sup>5</sup> such a recommendation leads to inconsistent evaluation of transmission capital investments. The planning assumptions should not vary simply because a transmission project is under-going reevaluation or is being considered for the first time.

Also, a planning study of an evening peak requires more model adjustments than simply adjusting the load level. For example, transmission equipment ratings are dependent on environmental factors such a solar input, ambient temperature, and wind speed. Understanding how these factors change under evening peak conditions and the impact of the change on equipment ratings should be reflected in such planning studies. Additionally, generation and import patterns during evening periods will need to be better understood.

While the CEC has recently provided an updated load forecast in the 2016 IEPR, it is important to note that this forecast does not yet reflect the mandate to double California’s energy efficiency goals. As such, recommendations in the coming planning cycle need to be sufficiently robust to support a finding of a reliability, policy, or economic need even if future loads show an accelerated decline.

### **Special Studies**

The CAISO proposes to continue work on several Special Studies from the prior planning cycle including the 50% RPS special study of Out-of-State (OOS) focused portfolio as well as continued coordination with the other western planning regions on interregional transmission project studies. During the February 28<sup>th</sup> meeting, the CAISO indicated, based upon the 2016-17 TPP Special Studies that they do not see any need for additional delivery network upgrades (DNU) within the CAISO footprint to accommodate the OOS full capacity deliverability status (FCDS) resources imported on the existing transmission system. BAMx requests that the CAISO provide this information to the Integrated Resource Planning (IRP) capacity expansion tool that would presumably be used to develop the 50% RPS portfolios in the subsequent TPP cycles. Additionally it is not clear whether the external transmission upgrades that may be necessary to accomplish an increased OOS focus portfolio are fully known. Developing a better understanding of what transmission improvements may be needed would be a valuable objective for this planning cycle.

During the February 28<sup>th</sup> meeting, the CAISO indicated that assumed export limits have a significant impact on the amount of renewable curtailment (slides #9-11). The CAISO needs to explain the underlying assumptions for the 2,000MW of net export limit. Some of the questions that need to be answered are: How was the 2,000MW of net export limit determined? Was it based upon some sort of historical data analysis? Would it not be reasonable to expect that

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<sup>5</sup> CEC-200-2016-016 California Energy Demand Updated Forecast, 2017-2027, January 2017, p. 51

neighboring balancing authorities would enter into transactions to purchase negatively priced energy in excess of the historical limit of 2,000MW? How was the 2,000MW of net export limit enforced on the multiple inter-ties in the production cost simulations model? It is essential that the CAISO provide clarifications to stakeholders around the critical assumption of limiting the CAISO's net export capability.

### **FERC Order 1000 Process**

This cycle will be the second year of the first full cycle of the biennial FERC Order 1000 interregional coordination process for collaborating with neighboring planning regions on large, interregional transmission projects. The cycle should be completed this year and the final work product produced. Again, BAMx recommends that Table 2-1 schedule in the Study Plan be expanded to include descriptions of the activities that support the FERC Order 1000 process including interregional meetings and when materials would be available to stakeholders. Also, while the steps in implementing the FERC ordered process are identified in section 24.17 and 24.18 of the CAISO tariff, the implementation process is not well defined. For example, the CAISO Tariff states the following:

#### **24.18.3.2 Joint Evaluation of an Interregional Transmission Project**

For each Interregional Transmission Project that meets the requirements of Section 24.18.3.1, the CAISO (if it is a Relevant Planning Region) will participate in a joint evaluation by the Relevant Planning Regions that is to commence in the calendar year of the Interregional Transmission Project's submittal in accordance with Section 24.18.3.1, or the immediately following calendar year. With respect to any such Interregional Transmission Project, the CAISO (if it is a Relevant Planning Region) will confer with the other Relevant Planning Region(s) regarding the following:

- (i) Interregional Transmission Project data and projected Interregional Transmission Project costs; and
- (ii) the study assumptions and methodologies it is to use in evaluating the Interregional Transmission Project pursuant to its regional transmission planning process.

For each Interregional Transmission Project that meets the requirements of Section 24.18.3.1, the CAISO(if it is a Relevant Planning Region):

- (a) will seek to resolve any differences it has with the other Relevant Planning Regions relating to the Interregional Transmission Project or to information specific to other Relevant Planning Regions insofar as such differences may affect the CAISO's evaluation of the Interregional Transmission Project;
- (b) will provide stakeholders an opportunity to participate in the CAISO's activities under this Section 24.18.3.2 in accordance with its regional transmission planning process;
- (c) will notify the other Relevant Planning Regions if the CAISO determines that the Interregional Transmission Project will not meet any of its regional transmission needs; thereafter the CAISO has no obligation under this Section 24.18.3.2 to participate in the joint evaluation of the Interregional Transmission Project; and

- (d) will determine under its regional transmission planning process if such Interregional Transmission Project is a more cost effective or efficient solution to one or more of the CAISO's regional transmission needs.

For each Interregional Transmission Project that meets the requirements of Section 24.18.4.1, the CAISO (if it is a Relevant Planning Region):

- (a) will seek to resolve with the other Relevant Planning Regions any differences relating to Interregional Transmission Project data or to information specific to other Relevant Planning Regions insofar as such differences may affect the CAISO's analysis;
- (b) will provide stakeholders an opportunity to participate in the CAISO's activities under this Section 24.18.4.2 in accordance with its regional transmission planning process;<sup>6</sup>
- (c) will determine its regional benefits, stated in dollars, resulting from an Interregional Transmission Project; in making such determination of its regional benefits in the CAISO's region, the CAISO will use its regional cost allocation methodology, as applied to Interregional Transmission Projects;
- (d) will calculate its assigned pro rata share of the projected costs of the Interregional Transmission Project, stated in a specific dollar amount, equal to its share of the total benefits identified by the Relevant Planning Regions multiplied by the projected costs of the Interregional Transmission Project;
- (e) will share with the other Relevant Planning Regions information regarding what its regional cost allocation would be if it were to select the Interregional Transmission Projects in its regional transmission plan for purposes of Interregional Cost Allocation; the CAISO may use such information to identify its total share of the projected costs of the Interregional Transmission Projects to be assigned to the CAISO in order to determine whether the Interregional Transmission Project is a more cost effective or efficient solution to a transmission need in the CAISO region;
- (f) will determine whether to select the Interregional Transmission Project in its regional transmission plan for purposes of Interregional Cost Allocation, based on its regional transmission planning process; and
- (g) will endeavor to perform its Interregional Cost Allocation activities pursuant to this Section 24.18.4.2 in the same general time frame as its joint evaluation activities pursuant to Section 24.18.3.2.

While stakeholders have been invited to the "big tent" meetings encompassing all the regions, the above language envisions that the CAISO will under go a CAISO assessment of project need and benefits. It is not clear from the Study Plan when this work would be done and vetted with stakeholders on a timeline that meets the Interregional Evaluation Process timeline. BAMx is concerned that any such valuation be conducted in a transparent manner with opportunity for stakeholder review and input during both the development of the evaluation assumptions as well as the evaluation results.

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<sup>6</sup> Section 24.18.4.2 addresses the Interregional Cost Allocation Process

BAMx appreciates the opportunity to comment on the draft CAISO 2017-18 TPP Study Plan. BAMx would also like to acknowledge the significant effort of the CAISO staff to develop the plan to date, as well as the staff's willingness to work with the stakeholders in the process to more fully develop it. We hope to work with the CAISO staff to continue to improve and enhance its capabilities.

If you have any questions concerning these comments, please contact Kathleen Hughes ([khughes@SantaClaraCA.gov](mailto:khughes@SantaClaraCA.gov) or (408) 615-6632).