

## **BAMX Comments on the CAISO Draft 2014-15 Transmission Plan**

The Bay Area Municipal Transmission group (BAMx)<sup>1</sup> appreciates the opportunity to comment on the CAISO Draft 2014-15 Transmission Plan (Draft Plan). The comments and questions below address the multiple *Draft Transmission Plan* studies, findings and recommendations included in the CAISO Draft 2014-15 Transmission Plan dated February 2, 2014 and were subsequently discussed during the February 17<sup>th</sup> stakeholder meeting. We request that the CAISO address these issues in its Revised Transmission Plan expected in March 2015.

### **Introduction**

Many of the BAMx comments below are driven by a concern about the impact of the CAISO's proposed recommendations and decisions on the Transmission Access Charge (TAC) for load served from the CAISO grid. Substantial increases in the TAC have been felt by users of the CAISO grid and significant increases are still yet to come due to not only the Capacity projects in the current CAISO Transmission Plan but the significant non-capacity work (maintainence, compliance, automation, etc) being planned by the PTOs. As such, BAMx believes that it is important to include TAC forecasts as an integral part of the transmission plan. BAMx looks forward to reviewing the CAISO's updated TAC model that is expected to be incorporated into the Final Draft Transmission Plan.

### **San Francisco Peninsula Extreme Event Assessment and Recommendation**

In this Tranmsision Planning cycle the CAISO has advanced its methodology for assessing the risk and consequences of extreme events and third party actions on the electric infrastructure on the San Francisco Peninsula. BAMx commends the analysis that drilled down into the risks and, when coupled with an expected restoration time, was able to quantify the expected customer impacts. BAMx felt that the insight provided by the work completed by Quanta was very helpful in identifying the likely impacts due to postulated seismic events. The last work shared with stakeholders indicated that the limiting factor in service restoration following a major seismic event is the restoration of the 115 kV system within San Francisco. The seismic event analysis allowed the focus to be redirected from improving the ability to import power to the City gate to modernization of the existing infrastructure within the San Francisco Peninsula area by increasing the seismic withstand capability.

Although reasoning to focus on improvements to the internal 115kV network cables is clear from the work completed by Quanta, so far no analysis has been presented to stakeholders supporting what is the most cost effective method to achieve improvements in the performance of the 115kV network in the City. Furthermore, although these improvements have been characterized as PG&E capital maintenance items, they clearly will have a beneficial impact upon the ability to serve more load within the City. Unfortunately, no analysis has been shared with Stakeholders concerning what those impacts are and whether the proposed method of improving the network

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

is the most cost effective way of achieving the desired goals. All that has been presented to date is a summary of a PG&E capital maintenance program for such modernization that included a wide range of facility-by-facility costs, with the cost depending upon whether the equipment is upgraded or replaced. The CAISO should share their reasoning/assessment of alternatives before deciding to support a PG&E expenditure of potentially in excess of \$300 million. More specifically, BAMx believes the following items need to be investigated and results shared with Stakeholders before the CAISO endorses the proposal to upgrade the 115kV network:

- More information should be presented on how the decision has been/will be made as to which specific facilities will be modernized and whether equipment at these facilities is to be upgraded or replaced. Now that the analytic tools are in place, analyses similar to what has been performed should be conducted to determine the optimal plan.
- When PG&E has previously replaced cables in San Francisco for maintenance purposes, there was also a capacity benefit that was achievable. How has been/will the potential for increased capacity be considered when deciding on the proposed upgrades. As the reliability assessment identifies numerous 115 kV cable loading concerns in San Francisco, this may be an opportunity to address such issues provided the incremental cost is reasonable. Although the proposal as outlined may have some expected benefits in addressing these concerns, no analysis has been shared with stakeholders that this is the best way to accomplish both goals.

At the last Stakeholder meeting, there was no mention of a decision to propose system modifications to address risks due to “third party actions” nor was any analysis provided to indicate the best way to minimize potential impacts based upon these events. Therefore, the proposed Martin 230 kV bus extension project was a surprise, as it had not previously been identified in prior San Francisco Extreme Event Assessment reports. The proposal involves reconfiguring the existing 230 kV transmission terminating at Martin to provide one 230 kV path bypassing the Martin substation. However, there were no alternatives presented for this project. For example, the proposed project includes a 230 kV cross tie between Martin and the Martin extension station. Such a cross tie drives the need for a new station to accommodate the required switchgear. Such additional infrastructure is not explicitly needed to establish the bypass as described. In other words, there may be a less expensive way to solve the third party threat at Martin substation by just removing Jefferson-Marlin and one of the Martin-Embarcadero cables from the Martin bus and connecting them together without a new substation as is proposed. The analysis leading up this recommendation and any alternative methods to achieve the goals of reducing impacts due to third party actions should be shared with Stakeholders before the CAISO approves this project. In addition, a before-and-after assessment of risk and consequences associated with project should also be presented in a manner similar to what was prepared for the seismic study. BAMx requests that the CAISO take the time to share this analysis with stakeholders as well as provide other reasoning that leads it to recommend to the CAISO Board a \$ 129 million dollar Martin 230 kV bypass project.

## **North East Kern Voltage Conversion**

BAMx continues to be concerned about the recommendation to approve this project. BAMx provided extensive comments following the September 2014 stakeholder meeting where this project was first presented.<sup>2</sup> BAMx does not believe that the CAISO has presented any meaningful response to its earlier comments, which makes it difficult to continue a dialogue regarding the proposed project. BAMx earlier comments generally fell into three categories:

1. Identifying potentially lower cost alternatives to address the identified criteria violations.
2. Questioning the inclusion in the scope a change in the method of service for some stations from radials to network loops without applying the decision matrix laid out in Section II.5 of the CAISO Planning Standards.<sup>3</sup>
3. Converting of three different 115 kV stations each to a breaker-and-a-half (BAAH) configuration. While providing greater reliability and operating flexibility, this design is also more costly, especially when the entire station must be rebuilt rather than simply expanded to add the necessary line terminations.<sup>4</sup>

In response to the first concern, it was stated during the February 17th stakeholder meeting that the full scope was needed to accommodate the potential shut down of 500 MW of Qualifying Facility (QF) generation in the area. This number far exceeds the amount of generation in the area of study. It remains unclear what that comment is supposed to convey. If the generation assumed to be retired in the study is part of a larger plan to replace QF generation with transmission, the economics of this option should be studied. However, such changes were not included in the 2014-15 Unified Planning Assumptions and Study Plan nor in the base cases. And no such assessment has been made for the assumed retirements within the study area. Arbitrarily assuming these QF generation plants will retire despite being less than 40 years old seems to violate the rule of thumb used by the CAISO contained in the study plan for this 2014-2015 TPP. As such, stakeholders have not been given an opportunity to understand how such loss of local generation impacts local reliability. There is no evidence presented that options of replacing these expiring QF contracts or pursuing Preferred Resources in their place was a consideration. BAMx is concerned that justifying a project based on new generation assumptions that are not included in the Study Plan nor fully shared with stakeholders violates the integrity of the process.

The other two areas of concern were not addressed in either the CAISO response matrix nor in response to direct questions at the stakeholder meeting. These additions to the project scope

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<sup>2</sup> For details, see BAMx Comments on the 2014-15 Transmission Planning Process Preliminary Reliability Assessment Results and PTO Request Window Submissions, dated October 9, 2014 (<http://www.caiso.com/Documents/BAMxComments2014-2015TPPStakeholderMeetingPreliminaryReliabilityResultsPTOProposedSolutions.pdf>)

<sup>3</sup> The current mitigation is to operate some station in a radial configuration. There should be a justification as to why this is acceptable as all or part of a long-term solution.

<sup>4</sup> With a couple of exceptions (for which we are not aware of any justification), rebuilding sub-transmission stations to a BAAH design has been used in high-density urban areas. The cost of rebuilding an existing Valley station where load densities are lower needs further justification.

represent additional costs to the project and ultimately transmission users and should be separately justified rather than allowed to free-ride on reliability project to address violations of the Planning Standard.

With further study of information that is available concerning this project and having received no meaningful response to our earlier concerns, we conclude the following:

1. There does not appear to be a need to terminate the line converted to 115kV at Kern Oil Substation. This extra termination also appears to be the driver for including the conversion of Kern Oil substation to a breaker and a half scheme).
2. It is not very clear, but it appears that the reconductoring of the Kern Oil-Lerdo Jct. 115kV line, which was part of the PG&E request window application, is not included in the CAISO's proposed scope for this project. This is a reasonable reduction in scope, but since it did not result in any change in estimated costs, we cannot be sure whether it was deleted.

This major project is proposed to be completed in 2022. We would like to suggest the CAISO take another year to study the details of this proposal, including the alternatives of solving some of the reliability issues with contracting for existing generation capacity and developing preferred resources.

### **Treatment of Preferred Resources**

BAMx is highly supportive of the major strides made by the CAISO in the 2013-2014 Transmission Plan in identifying the likely impact of preferred resources on the transmission grid in the LA Basin and San Diego area following the shut down of SONGS. While the CAISO continued this important work in the current plan, it has not expanded beyond its original limited geographic area. For example, we have not found any evidence of preferred resources being considered as the mitigation solutions considered by the CAISO in the PG&E area. We encourage full recognition by the CAISO of the ability of funded preferred resources to offset the need for transmission and to support the further development of these resources when their expected benefits, including offsetting the need for additional transmission projects, exceeds their expected ratepayer costs.

### **San Luis Transmission Project**

At the February 17<sup>th</sup> stakeholder meeting, there were comments by a proponent of the San Luis Transmission Project (SLTP) advocating that participation in the project be included in the 2014-2015 Transmission Plan. Participation was characterized as a fleeting opportunity to right size the project to facilitate a fifty percent renewable energy goal. BAMx supports the CAISO's position that it is premature for the CAISO to include the SLTP in the Transmission Plan as a policy driven upgrade. There are numerous questions concerning the state policy in this area including the options for meeting increased renewable energy target, how such a transmission project would fit into a system-wide plan and, not least of which, how joint participation in such a

project would be structured. BAMx supports consideration of how state policies for increased renewable generation may impact the long term transmission plan in a future planning cycle, including how cost signals can be made available to policy makers so that total consumer costs of any such policies can be minimized.

BAMx appreciates the opportunity to comment on the CAISO Draft 2014-15 Transmission Plan. BAMx would also like to acknowledge the significant effort of the CAISO staff to develop the Draft Plan, 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 Barry Flynn (888-634-7516 and [brflynn@flynnrci.com](mailto:brflynn@flynnrci.com)) or Robert Jenkins (888-634-0777 and [robertjenkins@flynnrci.com](mailto:robertjenkins@flynnrci.com)) or Pushkar Wagle (888-634-3339 and [pushkarwagle@flynnrci.com](mailto:pushkarwagle@flynnrci.com)).