BAMX Comments on the CAISO Draft 2011-12 Transmission Plan

The Bay Area Municipal Transmission group (BAMx)[1] appreciates the opportunity to comment on the Draft CAISO 2011-12 Transmission Plan (Draft Plan) dated January 31, 2012, which was discussed during the Stakeholder meeting on February 7, 2012. The comments and questions below address both the Draft Plan and the February 7th Stakeholder meeting. We hope that the CAISO addresses these issues in its Final 2011-12 Transmission Plan.

Stakeholder Input

BAMx appreciates the enormous amount of CAISO staff effort in performing several comprehensive studies in a timely fashion. In the Draft Plan, the CAISO has identified 29 reliability projects adding up to $647 million that are candidates for approval under the Transmission Planning process (TPP). The CAISO has used the term "ISO Determination" in the Draft Plan as well as in the February 7th Stakeholder meeting in reference to these candidate transmission projects. We assume the CAISO means that this is a tentative determination subject to additional Stakeholder input. Otherwise, we should not be wasting our time on comments. Instead, we suggest the CAISO use the term "Initial Determination," as presumably such determination is not finalized in the Final Transmission Plan without Stakeholder input per the CAISO tariff Section 24.4.10.

City of Palo Alto (CPAU) would specifically like to thank the CAISO for continuing to work with CPAU, PG&E and other stakeholders to evaluate a proposal that best addresses the Ravenswood/Palo Alto/Cooley Landing reliability issues in the most cost-effective manner.

Transmission Infrastructure Assumptions under Base Cases

We have observed from the CAISO 2011-12 transmission analyses that several LGIP-driven transmission projects such as, the Pisgah-Lugo 500kV project showed very little utilization across multiple TPP portfolios.[2] We do not believe the CAISO should have included LGIP driven upgrades that have not been approved by the CPUC in the Base Cases. BAMx had made these comments during the development of the 2011-12 transmission study plan. If the current base case assumptions show a need for the LGIP upgrade that could be used as justification in the permitting process for the line. Therefore, BAMx urges the CAISO to also reconsider its decision to include the LGIP-driven transmission in its 33% Comprehensive transmission plan.

During the February 7th Stakeholder meeting, the CAISO indicated that they do not plan to model the Lugo-Pisgah 500kV transmission project in the Base Cases for the 2012-13 planning cycle. We strongly support the CAISO's decision to eliminate this LGIP-driven transmission project from its Base Case and in the TPP portfolios. The CAISO should also eliminate the

[1] BAMx consists of Alameda Municipal Power, City of Palo Alto Utilities, and City of Santa Clara, Silicon Valley Power.
[2] See Section *4.6 Production Cost Simulation and Utilization Analysis* in the Draft Plan.

remaining LGIP-driven upgrades from the Base Case and identify the ones that are required as mitigation for reliability issues on the CAISO grid without them.

Separate Stakeholder Process for Midway – Gregg – Tesla 500 kV Project

At the February 7th meeting the CAISO indicated that the Midway – Gregg – Tesla 500 kV project will be analyzed in the ISO 2012/2013 transmission planning cycle in a "comprehensive" manner. We urge the CAISO to establish a separate stakeholder process that is similar to the C3ETP project process conducted in 2009 to study this project rather than incorporating the Midway – Gregg – Tesla 500 kV project into the 2012/13 transmission planning process. We believe that Stakeholders should be actively involved in establishing the assumptions used for the study of this large-scale transmission project.

Reliability-Driven Transmission Project Needs & Recommendations

In the Draft Plan, the CAISO has determined the need to approve twenty-nine (29) transmission projects with a combined capital cost of $647M. Information required to evaluate these projects including the scope, capital cost details, justification for approval and alternatives is missing or incomplete in the Draft Plan. The CAISO February 7th presentation material was significantly more informative in this regard. We suggest that the CAISO include more detailed information as recommended above on these projects in the Final Plan.

We had requested access to the request window applications under our confidentiality agreement with the CAISO. However, to date the CAISO has refused to post this information on its secured website. An open and transparent transmission planning process is predicated on the ability of stakeholders to have access to the information that is being used by the CAISO in its decision making process. Timely access to this information is critical for stakeholders to provide meaningful input to the Draft Plan ahead of a CAISO decision.

During the Feb 7th Stakeholder meeting, the CAISO had presented certain Benefit-Cost Ratio (BCR) calculations for the projects such as, the Cressey-North Merced 115 kV line while discussing the ten reliability-driven transmission projects recommended for approval in the San Joaquin area. The CAISO indicated a willingness to share these calculations, however we have not received them as yet. We believe that performing such BCR calculations to compare various mitigation measures to resolve reliability issues is a valuable addition to the planning process. We encourage this type of assessment, but request that the CAISO share its methodology so that assumptions can be vetted with Stakeholders.

In addition to the projects already discussed, we understand that the CAISO is considering the following three projects for approval.

1. New Drum-Placer 115 kV Line;
2. Kern PP 230 kV Area reinforcement; and
3. Morro Bay-Mesa 230 kV Line Project

We suggest that the CAISO withhold approval of the above-mentioned three projects in this year's planning cycle and consider evaluating them in the 2012/2013 planning cycle for the following three reasons.

1. The stakeholders have not had any opportunity to weigh-in on these projects;
2. The project needs are based on Category C issues, and for Category B issues, these projects are not needed in the near future;
3. These project are highly capital intensive (above $100 million each)

In Table A below we have included comments on some of the selected projects that the CAISO has determined are needed. We hope that the CAISO considers these comments favorably and responds accordingly in the Final Plan.

BAMx appreciates the opportunity to comment on the CAISO 2011-12 Transmission Plan and acknowledges the significant effort of the CAISO staff to develop the plan so far.

If you have any questions concerning these comments, please contact Barry Flynn (888-634-7516 and brflynn@flynnrci.com) or Pushkar Wagle (888-634-3339 and pushkarwagle@flynnrci.com).

BAMx comments dated February 28, 2012
Submitted by email to: regionaltransmission@caiso.com

Table A: Selected Reliability-driven Transmission Projects Under 2011-12 Transmision Plan

Project Name	Service Area	In-Service Date	Cost	CAISO Justification for the Project Need	BAMx Comments/Need for further Investigation
Borden 230 kV Voltage Support	San Joaquin Valley	2019	$15-20M	PG&E Request Window (RW) application indicates an NERC category B outage of the Borden-Gregg 230kV line causes low voltages at Borden and Storey starting in 2019. The ISO will work with PG&E to ensure that the operating procedures are in place in the interim.	Given the typical lead-time of 2-3 years, we question the need to approve these projects in the 2011-12 transmission plan. We believe these type of projects with short mitigation and extended need date should be categorized separately. The current preferred option(s) for mitigation should be identified for these projects along with a current estimated date that CAISO approval will be sought. This is a good transmission planning practice even if we were not experiencing an environment of having hundreds of interconnecting generators, some with short lead times, altering the performance of the grid. In today's regime of constantly shifting generator connection patterns, it is even more important that irrevocable decisions are not made prematurely.
New Bridgeville - Garberville No.2 115 kV Line	Humboldt	2018	$55-65M	Overload on the Bridgeville - Garberville 60 kV line that is expected under normal conditions in 2021 and under multiple category C contingencies starting in 2012 is proposed to be mitigated by a transmission upgrade that would construct a new Bridgeville- Garberville 115 kV transmission line. This upgrade will also solve voltage concerns in the Bridgeville area.	
Reedley 70 kV Reinforcement	San Joaquin Valley	2017	$7-10M	A line outage of the Reedley-Dinuba 70 kV line is expected to cause overloads of the Reedley-Orosi and Dinuba-Orosi 70 kV lines in 2017.	
Cressey - North Merced 115 kV Li...	San Joaquin Valley	2016	$7-10M	This project has a benefit- cost ratio (BCR) of 1.03 and was more cost-effective than all the other possible alternatives. The CAISO	How was the BCR calculated? Please elaborate. Please provide more details on the alternative solutions

Project Name	Service Area	In-Service Date	Cost	CAISO Justification for the Project Need	BAMx Comments/Need for further Investigation
Geyser #3 - Cloverdale 115 kV Line Switch Upgrades	North Bay/North Coast	May-16	$1-3M	Category B issues in 2016 and category C in 2012. PG&E RW indicated that this overload occurs due to the addition of renewable generation in the area. If this generator will not be online as proposed, the proposed project will no longer be necessary. The ISO indicates that this geothermal project is on hold and approves the project to address only category C issues.	Provide more details on the alternative solutions including SPS.
Kern PP 115 kV Area Reinforcement	San Joaquin Valley	May-16	$40-65M	PG&E RW application indicates that six 115 kV lines all experience overloads between 120% and 220% for 12 or more category B and category C outages, with overloads occurring in 2012 and beyond.	The CAISO does not provide adequate information on the project scope in the Draft Plan. Please include more information on the alternatives listed in the PG&E RW presentation and the CAISO February 7th presentation.
Rio Oso Area 230 kV Voltage Support	Central Valley	May-16	$35-45M	During the summer peak period, the extremely long lines contribute to large voltage drops between the generation and the increasing loads.	The CAISO does not provide adequate explanation in the Draft Plan for why they have determined that this project is needed to mitigate the voltage issues identified in the area. Please do so in the Final Plan.