

### **BAMx and CCSF Comments on CAISO 2013-2014 Transmission Study Plan**

The Bay Area Municipal Transmission Group (BAMx)<sup>1</sup> and the City and County of San Francisco (CCSF) appreciate the opportunity to comment on the CAISO Draft 2013-2014 Transmission Study Plan (Study Plan). The comments below respond to the Study Plan and the presentations made by the CAISO during the February 28, 2013 Stakeholder meeting. Most of our comments focus on issues that impact ratepayer costs. In the context of an exponential growth in transmission costs over the past decade, it is imperative that transmission assessments carefully consider the economic impact of all viable alternatives and seek low cost alternatives when these effectively meet reliability and policy needs.

Our comments cover the following eight (8) major topics:

1. In order to minimize ratepayer impacts, the CAISO should only include in its base cases those transmission projects that have been shown to be needed to economically meet State RPS goals and should explore low cost alternatives to meet system needs;
2. The CAISO should maximize transparency and provide to Stakeholders its High Voltage Transmission Access Charge (HV TAC) forecasting tool at the commencement of the 2013-2014 planning process rather than towards the end. In addition, the CAISO should develop and share with Stakeholders a low voltage transmission access charge forecasting tool;
3. The CAISO should include reasonable assumptions about demand response and incremental energy efficiency in its study cases;
4. The CAISO should undertake a long term assessment and stakeholder process of the San Francisco peninsula and Oakland/Alameda areas;
5. The CAISO should immediately begin a new stakeholder process to evaluate its deliverability criteria;
6. The CAISO should not assume the need to provide Resource Adequacy from intermittent resources in all resource portfolios;
7. The CAISO should explain its approach for allowing out-of-state renewables to provide Resource Adequacy; and
8. The CAISO should provide more data than it has in past annual planning processes and should reevaluate the economic benefit of major projects that can import power from out of state.

---

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

**1. In Order to Minimize Ratepayer Impacts, the CAISO Should Only include in its Base Cases Transmission Projects that Have Been Shown to be Needed to Economically meet State RPS Goals and Should Explore Low Cost Alternatives to Meet System Needs**

The CAISO must seek to minimize ratepayer impact as it plans for the transmission needed to achieve the State's policy goals, including the RPS. We recognize that the CAISO needs to interconnect renewables to meet State policy goals and FERC requirements, but it should determine the least-cost method of doing so.

The CAISO continues to include in its Base Cases, network upgrades identified during the Generator Interconnection process (GIP) that have not been shown to be economic or needed to meet the particular CPUC resource portfolio being assessed. The CAISO should model only those GIP-driven network upgrades (NU)<sup>2</sup> that have been shown to be "needed" to achieve the specific CPUC resource portfolio being assessed.

The CAISO has already taken steps in this direction. For example, GIP-driven NUs such as, the *Llano-Kramer 500 kV*, *Kramer Inyokern 230 kV*, *Bishop-Inyokern 230 kV* lines were not found to be needed in any of the four CPUC resource portfolios, and therefore were not modeled in the 2010-11 transmission plan. Similarly, the CAISO did not model the *Lugo-Pisgah 500kV* transmission project in the Base Cases for the 2012-13 planning cycle. However, CAISO proposes to model in the 2013-2014 Base Cases, NUs that have not been shown to be economic, such as the *Coolwater-Lugo 230kV* and the *West of Devers Reconductoring*, even when it is assessing a CPUC resource portfolio that does not trigger a need for the project. These NUs should only be included in an assessment of a CPUC resource portfolio if it is needed to mitigate deficiencies that exist to deliver the renewables represented in that specific portfolio. This approach would provide important information to State siting authorities and Stakeholders in proceedings on proposed new GIP-driven projects that have never received CAISO Board approval and have not been subjected to any cost effectiveness criteria.

In addition, in the Study Plan, the CAISO staff has indicated that they would, in coordination with Participating TOs and other Market Participants, consider lower cost alternatives to the construction of transmission additions or upgrades, such as, demand-side management, interruptible loads and storage facilities. This approach is critical, and has become all the more

---

<sup>2</sup> These NUs are neither approved by the CAISO Board of Governors nor permitted by the CPUC. However, they are part of the 2012/2013 CAISO Transmission Plan Supporting Renewable Energy Goals. See Table 1 of CAISO 2012/13 Draft Transmission Plan dated February 1, 2013.

important as transmission costs continue to escalate. Nonetheless, the CAISO has made similar claims in the past but has never seriously considered these low cost alternatives.

For example, in the 2012-13 transmission plan, the CAISO assessed installation of a total of 650 MVAR of dynamic reactive support (i.e., static VAR compensator or synchronous condensers) in the vicinity of SONGS and at the Talega or San Luis Rey Substations in order to provide compensation. The CAISO undertook reliability studies to identify the sufficiency of MVAR dynamic reactive support to maintain reliability. However, the CAISO did not study any alternatives to achieve the needed compensation. MVAR dynamic reactive support is not the only way to provide compensation; for example, compensation needs can be met in certain cases with lower cost regular or fast-switched capacitors. Thus, the CAISO should describe the compensation needs, by location, and consider competitive proposals to address the needs. At a minimum, the CAISO should perform a separate reactive power optimization study to select the least-cost method of providing compensation.

We note also that in the past PG&E has provided a benefit-cost analysis for certain reliability transmission upgrades. BAMx and CCSF support such assessments to justify transmission investment. We request that the CAISO and PTOs develop similar assessments in the 2013-14 transmission planning cycle for transmission investments intended to avoid the loss of load for Category C events.

**2. The CAISO Should Maximize Transparency and Promptly Provide to Stakeholders its HV TAC Forecasting Tool. In addition, the CAISO Should Consider Developing and Sharing with Stakeholders a Low Voltage Transmission Access Charge Forecasting Tool.**

BAMx and CCSF appreciate that the CAISO has developed a HV TAC forecasting tool. The tool will help the CAISO and Stakeholders understand the cost implications of different transmission planning scenarios. The tool helps to illustrate how much transmission costs are increasing and how transmission costs are no longer a small portion of consumer electricity costs. In the 2012-13 transmission planning cycle, the CAISO provided its HV TAC projections at the end of the cycle. We urge the CAISO to provide to Stakeholders early in the 2013-14 transmission planning cycle both its projections of the HV TAC and the HV TAC forecasting tool itself. In this way, Stakeholders can themselves assess and verify the CAISO's results.

In addition, we have observed that the PG&E area specific Low Voltage Transmission Access Charge (LV TAC) has gone up recently and is expected to increase further due to new capital and maintenance projects. We urge the CAISO to develop a LV TAC forecasting tool and to

provide both its LV TAC projections as well as the tool itself as part of the 2013-14 planning cycle.

### **3. The CAISO Should Include Reasonable Assumptions about Demand Response and Incremental Energy Efficiency in its Study Cases.**

BAMx and CCSF support the CAISO's proposal to incorporate incremental uncommitted energy savings in its transmission planning scenarios with the CEC's energy demand forecast. However, without adequate justification, the CAISO has proposed using the CEC's "Low Savings" scenario identified in the Energy Efficiency (EE) adjustments.<sup>3</sup> The *CPUC/CEC's resource portfolios Base Case and Alternative Renewable Resource Portfolios* recommended that the CAISO employ, in the 2013-2014 Transmission Planning Process<sup>4</sup>, the Renewable Net Short (RNS) amounts that are based on the "Mid-Savings" incremental EE assumptions.<sup>5</sup> Therefore for consistency, the CAISO should instead use the "Mid-Savings" incremental EE.

The CAISO has not provided an adequate justification for using the "Low-Savings" scenario. The CAISO has argued that it will use the "Low-Savings" incremental EE because the CEC does not provide specific location predictions for EE. However, CEC staff has indicated to CCSF/BAMx consultants that it has developed the ability to allocate incremental EE amounts at the bus-level as part of their AB1318 efforts. BAMx and CCSF strongly urge the CAISO to coordinate their modeling of incremental EE efforts with the CEC staff in order to model the "Mid-Savings" incremental EE scenario.

Further, during the February 28<sup>th</sup> Stakeholder meeting, the CAISO indicated that it would not model the CPUC's expected demand response (DR) programs in local capacity areas. Instead the CAISO will consider DR one of the many potential mitigation measures available to address constraints in its reliability, policy-driven and economic studies. The CAISO does not adequately justify why it fails to model expected DR programs in local capacity areas. The CAISO should consult with relevant regulatory and industry sources prior to finalizing the 2013-14 transmission plan study cases and jointly agree on reasonable assumptions on DR that should be incorporated into the cases.

---

<sup>3</sup> **Source:** Estimates of Incremental Uncommitted Energy Savings Relative to the California Energy Demand Forecast 2012-2022, dated September 14, 2012.

<sup>4</sup> Joint Agency Letter to CAISO dated February 7, 2013.

<sup>5</sup> See Section VIII. Base Scenario in the assigned commissioner's ruling setting forth standardized planning scenarios for comment, Rulemaking 12-03-014, September 20, 2012.

We also encourage the CAISO to look at other regions such as PJM that have experience with extensive DR programs.<sup>6</sup> We support the CAISO's plan to work with the CPUC, LSEs, and POU's to address the controllability and flexibility attributes of the DR resources. However, we request the CAISO to make that assessment as transparent as possible to have meaningful Stakeholder participation.

#### **4. The CAISO Should Undertake a Long Term Assessment of the San Francisco Peninsula and Oakland/Alameda Area**

In 2009, CCSF proposed the *Newark –Alameda Point-Potrero* project to improve the reliability of the San Francisco peninsula and the Alameda/Oakland transmission systems by establishing a transmission connection between San Francisco and the East Bay and minimizing San Francisco's reliance on the Peninsula transmission lines and the Martin substation. Last year, PG&E proposed a Moraga-Potrero 230kV project with a similar objective.

The CAISO has proposed to undertake a long-term assessment of the San Francisco peninsula as part of the 2013-2014 transmission planning process. BAMx and CCSF support such an assessment and intend to participate actively in the process. We urge the CAISO to develop a separate stakeholder process to address this issue.

In addition, or potentially in combination with the San Francisco study, a long-term assessment of the East Bay transmission system is needed. Over the past several planning cycles, there has been a patchwork of small, incremental improvements to the East Bay transmission system. A long-term vision is required to put such upgrades in context.

#### **5. The CAISO Should Immediately Begin a New Stakeholder Process to Evaluate the Deliverability Criteria**

The CAISO plans to follow the same methodology as used in GIP to perform deliverability assessments in the 2013-14 transmission planning cycle. As BAMx, CCSF and other key Stakeholders such as the CPUC Energy Division have indicated in their comments on the 2012-13 Draft Transmission Plan, renewable resource deliverability has been driving substantive transmission additions even though the modeled RPS portfolios are based on "Energy" not "Capacity Delivery." An example of over restrictive deliverability criteria is representation of a wind generator at half its maximum output when its potential Resource Adequacy (RA) credit is

---

<sup>6</sup> See the presentation "PJM Capacity Market Overview," by Andrew Ott, Senior Vice President, Markets, PJM, Long-Term Resource Adequacy Summit, dated February 26, 2013.

only 10% of its maximum output. This can result in approval of a transmission upgrade to ensure deliverability at 50% of the maximum output under a very restrictive level C outage criteria when the resource can only be sold or counted for RA at 10% of maximum output.

As BAMx and CCSF have indicated several times in their past comments, the CAISO's deliverability assessment process needs to be reformed. A Stakeholder initiative to review the deliverability assessment should begin immediately. There is no State policy to prioritize Resource Adequacy acquisition from renewable generation needed to meet the RPS. Thus, it is incorrect to justify transmission elements as policy driven, based upon the application of the deliverability criteria to all RPS renewable projects. To allow Stakeholders to better assess the transmission planning scenarios, the CAISO should also make it clear in the studies of the various portfolios, which upgrades are needed to meet the energy based RPS goal.

**6. The CAISO Should not Assume the Need to Provide Resource Adequacy from Intermittent Resources in All Resource Portfolios**

Currently the CAISO BAA has a system capacity surplus, i.e., nearly 144% planning reserve margin, well in excess of the required 115-17% planning margin.<sup>7</sup> Despite this excess supply, California will be building local as well as flexible resources to accommodate the development of increasing intermittent resources. Given this likely outcome, it is inappropriate to assume that all the intermittent renewable resources contained in each resource portfolio will be deliverable and therefore justify “policy-driven” transmission. Using this approach, the CAISO is in essence, building transmission to allow renewables to provide RA without undertaking the supporting cost-benefit analysis needed to demonstrate that it is economically justified, potentially maximizing costs to ratepayers. Instead, the CAISO should pursue an integrated approach that seeks to ensure grid reliability and renewable resource development at the lowest possible cost to ratepayers.

**7. The CAISO Should Explain its Methodology to Allow Out-of-State Resources, Including Renewables, to Provide Resource Adequacy.**

BAMx and CCSF support finding ways for out-of-state (OOS) resources including renewables to count towards RA requirements. As the CAISO has indicated in the Study Plan, the current rules do not provide a means for resources outside the CAISO to obtain RA deliverability status. However, the CAISO has indicated that it will address this concern.

---

<sup>7</sup> Source: “Briefing Paper: A Review of Current Issues with Long-Term Resource Adequacy,” CPUC Energy Division, February 20, 2013.

Suppliers from areas outside the ISO that are rich in renewable energy potential and have been included in the ISO's 33% supply portfolios have raised concerns that they will be unable to develop their projects if they are unable to offer RA capacity to their potential LSE buyers. To address these concerns, the CAISO has proposed a RA deliverability study approach in the Study Plan that is different from the one they have implemented in the past.<sup>8</sup> The CAISO needs to elaborate on this proposed study approach, as it is not clearly described in the Study Plan. It is particularly unclear how the CAISO expects to blend the import allocation proposal that relies on RA allocations to LSE's, with the existing in-State approach that assigns RA capacity to generators.

Furthermore, BAMx and CCSF propose that such a study approach should be assessed in the Stakeholder process that reviews the deliverability criteria. It is therefore even more important that this Stakeholder initiative begin immediately so that its results can be incorporated into the 2013-14 transmission plan.

**8. The CAISO Should Provide More Data than it Has in Past Annual Planning Processes and Reevaluate the Economic Benefit of Major Projects That Can Import Power from Out of State.**

We appreciate the comprehensive study approach outlined in the Study Plan to perform the Economic Planning Studies. However, in the 2013-14 transmission planning cycle, we request the CAISO to provide more data and information than they have provided in the past. Such data should include, but not be limited to, identifying the level and location of renewable curtailments with and without the identified but not yet approved Delivery Network Upgrades under the multiple RPS portfolios identified in the production cost studies. This information and data is needed for Stakeholders to adequately participate in and assess the planning process.

Further, in its comments on the Draft 2012-13 Transmission Plan, BAMx cited several reasons for the CAISO to delay approval of economically driven projects with benefits that fluctuate dramatically from year to year while it continues its study of their potential benefits, including certain projects that can import power from other States, such as the *Delany – Colorado River 500 kV line* project. Both BAMx and CCSF encourage the CAISO to take a fresh look at projects whose benefits seem to vary greatly from one annual transmission plan to the next. We especially see a need to evaluate how much of their benefits are dependent on the completion of other projects whose construction is uncertain.

---

<sup>8</sup> See Section 3.1.2 of the CAISO Draft 2013-14 Study Plan.



BAMx and CCSF appreciate the opportunity to comment on the CAISO 2013-2014 Transmission Study Plan and acknowledge the significant effort of the CAISO staff to develop the Study Plan.

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