

BAMx Comments on 2013/2014 CAISO Transmission Planning Process **Renewable Portfolios**

The Bay Area Municipal Transmission Group (BAMx)¹ appreciates the opportunity to comment on the 2013/2014 ISO Transmission Plan Renewable Portfolios (Renewable Portfolios). We commend both Agencies for involving others in the process of selecting the Renewable Portfolios and encourage them to continue to look for ways to improve the engagement process. The comments and questions below address the Renewable Portfolios presented during the December 19, 2012, joint CPUC and CEC workshop.

Our comments cover the following two broad categories.

- I. **Policy Comments:** Selection of RPS portfolios and underlying assumptions;
- II. **Technical Comments:** Project selection criteria in the 33% RPS Calculator used to determine the generation resource mix in each portfolio.

I. Policy Comments:

In this section our comments are specific to the following three areas:

1. Need for Cost-Constrained Portfolio;
2. Need to Revise Renewable Net Short (RNS); and
3. Need to Update POU-planned/procured Renewable Generation.

1. Need for Cost-Constrained Portfolio

The renewable resource portfolios are being developed as an input to the CAISO transmission planning process and are considered by the CAISO in identifying policy-driven transmission projects². Our concern is that the scenarios may fail to identify the lowest-cost resource options, and may make unjustified assumptions that drive the need for additional and unnecessary transmission. Such failings could result in the addition of more than a billion dollars of transmission related costs without appropriate cost-effectiveness review. This outcome is particularly troubling in a context where transmission costs are growing exponentially.

To mitigate these concerns any responsible planning exercise must evaluate the cost of different alternatives in a way that is transparent to stakeholders. We believe that the most effective way to achieve this is to include a cost constrained scenario and use this scenario as the base case. In

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

² See CAISO Tariff Section 24.4.6.6, CAISO Business Practice Manual for the Transmission Planning Process Section 4.8.

the past, and in fact until May 2012, a cost-constrained scenario was presented and used as the base-case.³ However, the scenarios presented at the workshop did not include a cost constrained scenario.

To date, the CPUC staff has provided two rationales for not including the portfolio based on the cost-constrained scenario: 1) the model does not accurately estimate costs; and 2) the cost-constrained scenario would not differ significantly from the commercial interest scenario. Both arguments are highly unsatisfactory. First, models do not need to be highly accurate to provide general direction in terms of cost implications. Only when it becomes necessary to distinguish between two similar alternatives does greater accuracy become critical. When working with transmission in cost segments that are estimated in the hundreds of millions, even a high level model should be sufficiently accurate to perceive the difference. Otherwise it casts doubts about whether the model is sufficiently accurate to be used for any of the portfolios. Second, we fail to understand how a least-cost planning can be undertaken when the results of the models used for such planning are not used to estimate costs. At a minimum, the CPUC, the agency charged with assuring reasonable costs, should use models that allow it and stakeholders to assess and analyze the cost implications of different scenarios and choices. If the CPUC staff believes that the 33% RPS model used to develop the RPS scenarios estimates costs reasonably well in terms of relative cost of generation and transmission resources by technology and location (albeit not with complete accuracy), then they should utilize it to develop a cost-constrained scenario as they have done it in the past.

Moreover, the claim that a cost-constrained scenario and the commercial interest scenario have similar costs is simply not true. We have run numbers for a cost-constrained scenario and found that, in addition to obviating the need for additional transmission in the Kramer CREZ and Imperial CREZ (that will cost at least \$1.2 billion), a cost-constrained scenario would reduce total annual production costs by \$350 million. These differences are significant.

³ In 2011, the CPUC submitted a cost-constrained scenario for use as a base case for the CAISO's 2011-2012 Transmission Planning Process. See June 6, 2011 letter from Julie Fitch to Keith Casey. Similarly, initially in March of 2012, in a letter from CPUC President Peevey, CPUC Commissioner Florio and CEC Chair Weisenmiller, the CPUC transmitted to the CAISO a cost-constrained scenario to be used as a reasonable base case in the 2012-2013 planning process. See March 12, 2012, Letter from President Peevey, Commissioner Florio and Chair Weisenmiller to Steve Berberich. Then, in May, the same representatives of the CPUC and CEC wrote a further letter to the CAISO indicating that a commercial-interest scenario³ should be used instead as the base case. See May 16, 2012, Letter from President Peevey, Commissioner Florio and Chair Weisenmiller to Steve Berberich. In their letter, President Peevey, Commissioner Florio and Chair Weisenmiller explained that this change was in response to comments by stakeholders during an April 2, 2012 CAISO 2012-2013 TPP stakeholder meeting, that the cost-constrained scenario does not "reflect the considerable steps developers and utilities have taken to pursue projects through power purchase agreements and licensing procedures." Any such efforts do not obviate the need to have cost continue to be a key consideration in a least-cost planning proceeding.

In sum, the CEC and CPUC must reinstate a cost-constrained scenario. The need for transparency in decision-making requires it. The state agencies require a cost-constrained scenario to undertake their respective responsibilities to ensure reasonable rates. Moreover, stakeholders are entitled to accurate and transparent information on the cost-consequences of different alternatives, which cannot be determined in the absence of a cost-constrained baseline.

2. Further Revise Renewable Net Short (RNS)

We applaud the CEC's decision to serve as the focal point for developing a revised RNS amount. We believe it is the proper agency in the State to accept the role of establishing a RNS number for others to use across agencies and in their studies, including those that determine future infrastructure needs.

The CEC staff's latest assumption for the mid-range CHP value is **7.2 TWh**.⁴ However, the CEC's latest RNS calculations provided to CPUC sets the incremental CHP value to **zero**. CEC Staff's lower bound of **0TWh** of incremental CHP represents the assumption that all new CHP generation will consist of wholesale CHP and will not affect the calculation of renewable net short. It appears especially inappropriate to apply this extreme assumption for the mid-case that was developed for the CPUC renewable portfolios. BAMx questions the reasonableness of this assumption. An October 2009 ICF Market Assessment Report PIER provided an inventory of existing CHP capacity, as well as estimates of technical and market potential for new CHP in California that took into account the AB 32 mandates and also an assumed CPUC CHP sponsored settlement agreement.⁵ This report indicated that a sizable amount of existing CHP is on the customer-side of the meter. It also projected nearly 50%-90% installed CHP capacity to be on the demand side in the future.

We also note that the assumption of **0 MW** of incremental CHP by 2020/22 is not consistent with Governor Brown's goal for **6,500 MW** of new CHP development within 20 years. In its report⁶, the CEC staff stated the following on the incremental CHP estimate.

“ With the pending approval of the settlement agreement by the CPUC, staff recommends using some of the outcomes presented for the All-In Case in the Market Assessment Report. Staff recommends using a 50/50 split assumption for the amount of CHP generation that is sold to the grid and what is consumed on site, consistent with the

⁴ See pages 20-21, in “Proposed Method to Calculate the Amount of New Renewable Generation Required to Comply with Policy Goals,” CEC-200-2011-001-SF, November 2011.

⁵ “Combined Heat and Power Market Assessment,” October 2009, CEC-500-2009-094-D

⁶ See footnote #8.

assumptions used in the CPUC Long-Term Procurement Proceeding, producing a CHP value of 7.2 TWh as a mid-range assumption for the renewable net short calculation. This value includes Governor Brown's goal for 6,500 MW of new CHP development within 20 years that is contained in the Clean Energy Jobs Plan."

We urge the CAISO to update the RNS by representing more realistic CHP estimates that are more realistic as well as consistent with CEC's own most recent estimates.

3. Update POU-planned and Procured Renewable Generation

We appreciate the CEC staff's efforts in capturing the POU-planned renewable generation and CPUC staff's diligence in modeling them in their 33% RPS calculator. There is only **466MW** of POU-planned renewable generation in the existing 33% RPS calculator. We believe that this amount does not include the most updated renewable projections of the POU that are planning for compliance with the 33% goal by 2020. We encourage the CEC Staff to continue to work with the POU's to obtain their latest plans and to work with the CPUC to update the RNS assumptions in the 33% RPS calculator.

Furthermore, have you accounted for POU-procured DG as part of the overall procured-DG of 1,319MW that is assumed in order to develop the RNS? If so, please identify the level of POU-procured DG generation. If not, please update the RNS amounts to reflect the POU-procured generation.

II. Technical Comments

BAMx is concerned that, in the latest version of the 33% RPS calculator that was posted on December 12, 2012 (RPSCalculator_2007_v4_12-12-12 or the "Latest Calculator"), Out-of-State (OOS) renewables are constrained in a manner that has not been explained or justified. The Latest Calculator allows for a category of "Out-of-State RECs" only for the following four states/zones (*u - SupplyCurve_byBundle* tab): Arizona, Nevada C, the Northwest and Alberta. However, last year's 33% RPS calculator (RPSCalculator_2007_v15_forCAISO) allowed the "Out-of-State RECs" category (w/ zero transmission cost) along with option of "New Tx - Segment 1" for several other states/zones including New Mexico, Montana, Colorado, Wyoming, etc. See Tables 1 and 2 in Attachment 1. The Latest Calculator shows resource bundles from some of the additional states/zones, but indicates that these require additional new transmission, and hence does not select them because of the added cost.⁷ The Energy Division (ED) has not

⁷ The *j - GenericProjData* tab, shows that none of the projects belonging to these states (NM, WY, MT, etc.) are eligible for Out-of-State RECs. Why is this so and why were the generic projects in NM with Resource IDs

explained why the resource bundles from these zones cannot be accommodated on the existing transmission. BAMx wants to ensure that certain OOS renewable resources are not selected because they are not erroneously considered ineligible for Out-of-State RECs.

BAMx appreciates the opportunity to comment on the development of Renewable Portfolios for the CAISO 2013/2014 Transmission Plan and acknowledges the significant effort of CPUC, CEC and the CAISO staff to develop the proposed portfolios.

If you have any questions concerning these comments, please contact Pushkar Waglé (888-634-3339 and pushkarwagle@flynnrci.com).

E3_005, E3_016, E3_017, E3_027, and E3_028 eligible for Out-of-State RECs in the last year's calculator, but not in the latest calculator?

ATTACHMENT 1

Table 1: OOS Zones with and without Selected RPS Resources in the December 2012 Version

Type ID	Origin Zone	Resource Type	Selected?
6	Arizona	Out-of-State RECs	Yes
6	Nevada C	Out-of-State RECs	Yes
6	Alberta	Out-of-State RECs	Yes
6	Northwest	Out-of-State RECs	Yes
1	Nevada C	New Tx - Segment 1	No
1	Baja	New Tx - Segment 1	No
1	Arizona	New Tx - Segment 1	No
1	Wyoming	New Tx - Segment 1	No
1	New Mexico	New Tx - Segment 1	No
1	Montana	New Tx - Segment 1	No
1	Utah-Southern Idaho	New Tx - Segment 1	No
1	British Columbia	New Tx - Segment 1	No
1	Nevada N	New Tx - Segment 1	No
1	Northwest	New Tx - Segment 1	No

Table 2: OOS Zones with and without Selected RPS Resources in the June 2011 Version

Type ID	Origin Zone	Resource Type	Selected?
6	British Columbia	Out-of-State RECs	Yes
6	Montana	Out-of-State RECs	Yes
6	Wyoming	Out-of-State RECs	Yes
6	Utah-Southern Idaho	Out-of-State RECs	Yes
6	New Mexico	Out-of-State RECs	Yes
6	Colorado	Out-of-State RECs	Yes
6	Northwest	Out-of-State RECs	Yes
6	Arizona	Out-of-State RECs	Yes
6	Alberta	Out-of-State RECs	Yes
6	Nevada C	Out-of-State RECs	Yes
1	Baja	New Tx - Segment 1	No
1	Nevada N	New Tx - Segment 1	No
1	Wyoming	New Tx - Segment 1	No
1	New Mexico	New Tx - Segment 1	No
1	Arizona	New Tx - Segment 1	No
1	Nevada C	New Tx - Segment 1	No
1	Montana	New Tx - Segment 1	No
1	Utah-Southern Idaho	New Tx - Segment 1	No
1	British Columbia	New Tx - Segment 1	No
1	Northwest	New Tx - Segment 1	No