

Bay Area Municipal Transmission Group's Comments on the 2011 CTPG Draft Study Plan

August 5, 2011

The Bay Area Municipal Transmission Group¹ (BAMx) appreciates the opportunity to comment on the Phase II Transmission Planning Studies under the 2011 California Transmission Planning Group (CTPG) Draft Study Plan (Draft Plan) posted on the CTPG website dated July 15, 2011 and presented during the stakeholder meetings dated July 25-July 26, 2011. We hope that our comments, as well as our recommended scenario, will be incorporated in the final CTPG 2011 Study Plan.

Overall CTPG 2011 Study Plan

BAMx applauds CTPG efforts in developing the proposed 2011 Draft Study plan, and we recognize CTPG's commitment to involve Stakeholders in their process. We are delighted that CTPG has proposed changes in two key assumptions that BAMx requested throughout last year, namely, updating the renewable net short and changing the In-State and Out-of-State (OOS) fossil-fired generation re-dispatch methodology.

Phase 1 Study Process and Assumptions

CTPG has identified several key assumptions under the Phase 1 Study Process. BAMx provides comments on the following three assumptions.

1. Planned Transmission Projects;
2. Net Short Estimate; and
3. Existing Renewable Generation.

Planned Transmission Projects

In our earlier comments BAMx suggested to the CTPG that only those projects that have all of the following approvals, or are under construction, should be modeled in the Base Cases.

1. Balancing Area Authority Approval;
2. CPUC CPCN/PTC Approval, if applicable; and
3. Other resource agency approvals such as, Army Corps of Engineers and BLM permits, and environmental reviews under NEPA or CEQA, if applicable.

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

We are disappointed that the CTPG proposes to model all the transmission projects approved by the CAISO in the Draft plan even though they lack regulatory approval.

Renewable Net Short Estimate

BAMx is pleased that the CTPG has decided to use the latest CEC Renewable Net Short (RNS) numbers. However, we strongly disagree with CPTG's proposal to limit its analysis utilizing only the High range of the RNS. We understand there are limitations to the number of scenarios that CTPG can effectively study, but the impact of the uncertainty of the RNS level clearly should be considered when deciding on the scope of studies for this year. If CTPG cannot study the impact of all three RNS levels in the 2011 process due to resource limitations, we believe utilizing the Low range would be consistent with the desire of CTPG to develop a "least regrets" analysis of needed transmission. Although use of the medium RNS range would not be consistent with the "least regrets" study approach, it would clearly be better than utilizing the High range. Utilizing the High range is clearly inappropriate because it will unnecessarily overstate the need for transmission and therefore potentially will result in the inefficient use of costly new transmission resources.

Existing Renewable Generation

We support CTPG's efforts in working closely with the CEC staff in modeling all the existing renewable generation that is expected to be online by the end of 2011. CTPG has indicated that they could neither verify the 5.8 TWh of Out-of-State (OOS) renewable generation utilized within California nor the 4.6 TWh of in-State renewable generation that is expected to be in-service by the end of 2011. We support CTPG's decision to assume these resources and to adjust the net short accordingly. In Tables 5 & 7 of the Draft Plan, the CTPG has included the number and amount (capacity) of "Load Netted" units. We think it would be easier to keep track of all the renewable generation shown if you would show the generation. However, we agree that the load netting should provide the same load flow results. Results for the dynamic studies may differ depending on how the load and generation are represented. At a minimum, CTPG should describe and document the load netting process so Stakeholders utilizing the CTPG cases can fully understand the location and amounts of "Load Netted" units. Please also describe the "Load Netted" process with examples in the next revision of the Draft Plan.

2011 Proposed Scenarios

BAMx believes that the key role of the CTPG is not only to identify the need for new transmission, but also to inform stakeholders about alternative methods of achieving the State's renewable goals. To achieve this objective, it is critical to assess the capability of the existing transmission infrastructure without having to rely on new transmission. This would be extremely

important information for generation developers. This element is not incorporated in any of the nine (9) scenarios proposed by the CTPG. In this section of our comments, we address how CTPG could consider additional scenarios and make certain changes to the proposed scenarios to make them more useful and informative.

Although the information gained in the Out-of-State (OOS) stress scenarios proposed to be studied may provide useful information as to what transmission might help alleviate deficiencies driven by the OOS scenario assumptions, there are many new developments that make it less likely that any new major Out-of-State transmission is needed to serve California load prior to 2020. These new developments include, (i) several “approved” in-State projects, (ii) the likely reduction in RNS, (iii) the adoption of a State goal of 12,000 MW of distributed renewable generation, and (iv) the appearance of more than 70,000 MW of renewables in CAISO Cluster Studies. This leads to a conclusion that it is more important to inform Stakeholders of how much renewables can be imported into California using the existing system.

Responses to CTPG’s Questions on BAMx proposed “Maximum Utilization of Existing Transmission” Scenario

In our earlier comments, BAMx had recommended that CTPG incorporate an additional scenario that assumes maximum utilization of existing transmission. Below we include our response to some of the concerns/questions raised by the CTPG regarding this BAMx proposed scenario.

The BAMx scenario is envisioned to have no significant transmission additions. It would include only those renewable resources that can be connected to existing transmission and currently approved new transmission. CTPG had indicated a concern that regarding this condition that only those renewable resources “that can be connected to existing transmission and currently approved new transmission” are eligible to be included would appear to exclude no renewable generator since any generator could be physically “connected” to the existing grid. BAMx recommends that the CTPG should consider any renewable generator that is in the generator interconnection queue (Clusters 1 through 4) that does not require any new transmission. A similar assumption should be made for non-CAISO areas. BAMx is willing to further refine this concept for “no new transmission” and help the CTPG model it based on several specific criteria that could be applied to “filter” renewable generation such as, generation cost, State policy goal, etc.

BAMx’s proposed scenario involves an economic ranking that requires an estimate of the transmission costs that would be associated with each renewable resource. The CTPG was unclear how BAMx proposes to estimate these transmission costs in the absence of any technical studies that may identify reliability criteria violations for which new transmission infrastructure would provide mitigation. As a first step, the CTPG should utilize the E3/CPUC calculator or

similar methodology to economically rank the generation resources based on combined G&T costs. Upon modeling the renewable generation selected by the calculator, the technical studies can confirm whether the existing and additional economic transmission assumed to be needed in this scenario is deemed sufficient. This could be an iterative process that ensures that the final set of renewable generation and associated transmission (new projects or reliability measures), if any, would minimize the overall cost while ensuring the network reliability.

The CTPG had expressed concern that BAMx had not proposed how to define the cut-off point in the economic ranking beyond which renewable resources would not be included. BAMx believes that the RNS level would dictate the amount of renewable resources modeled in this scenario.

We recognize that the BAMx proposed scenario is unique in assessing the capability of existing/approved transmission in meeting the State RPS target. CTPG could request CPUC Staff assistance in developing this scenario. If such assistance is unavailable, BAMx is willing to work with CTPG to develop additional details associated with this scenario.

[CPUC Scenarios](#)

We suggest that in addition to the CPUC Public Policy scenario, i.e., *Cost-constrained* scenario, the CTPG should also study the CPUC *Environmentally-constrained* scenario. The latter is the only scenario that comes close to addressing the State's 12,000 MW Distributed Generation (DG) goal, which is a key part of Governor Brown's vision of the future and which all State regulatory agencies are working hard to achieve.² Selecting the *Environmentally-constrained* scenario as the Base Case is clearly the most appropriate from the standpoint of consistency with the State's energy goals because it is closest to correlating with the State's DG goal.

BAMx does not believe that the CTPG has modeled the CPUC *Cost-constrained* scenario accurately as far as the *Discounted Core* generation is concerned. The CPUC/E3 calculator provides first priority to the *Discounted Core* generation. However, it alters the *Discounted Core* to the extent it triggers additional significant transmission related costs that would overall make it economically inefficient. For instance, the Kramer and Pisgah CREZs have discounted core generation of 250MW (584GWh) and 500MW (1,169GWh), respectively. However, the CPUC *Cost-constrained* scenario restricts them to 62MW and 275MW, respectively to avoid any new significant transmission network upgrades. The CTPG does not implement the CPUC approach in this regard. Instead it assumes the entire *Discounted Core* generation in these CREZs as given. We encourage the CTPG to work with the CPUC staff in revising its modeling of the *Discounted*

² See California Clean Energy Future presentation, "Overview and Metric Review" IEPR Committee, Joint Agency Workshop dated July 6, 2011.

Core renewable generation in the CPUC Public Policy scenario accordingly and in adding an *Environmentally-constrained* or DG scenario as recommended above.

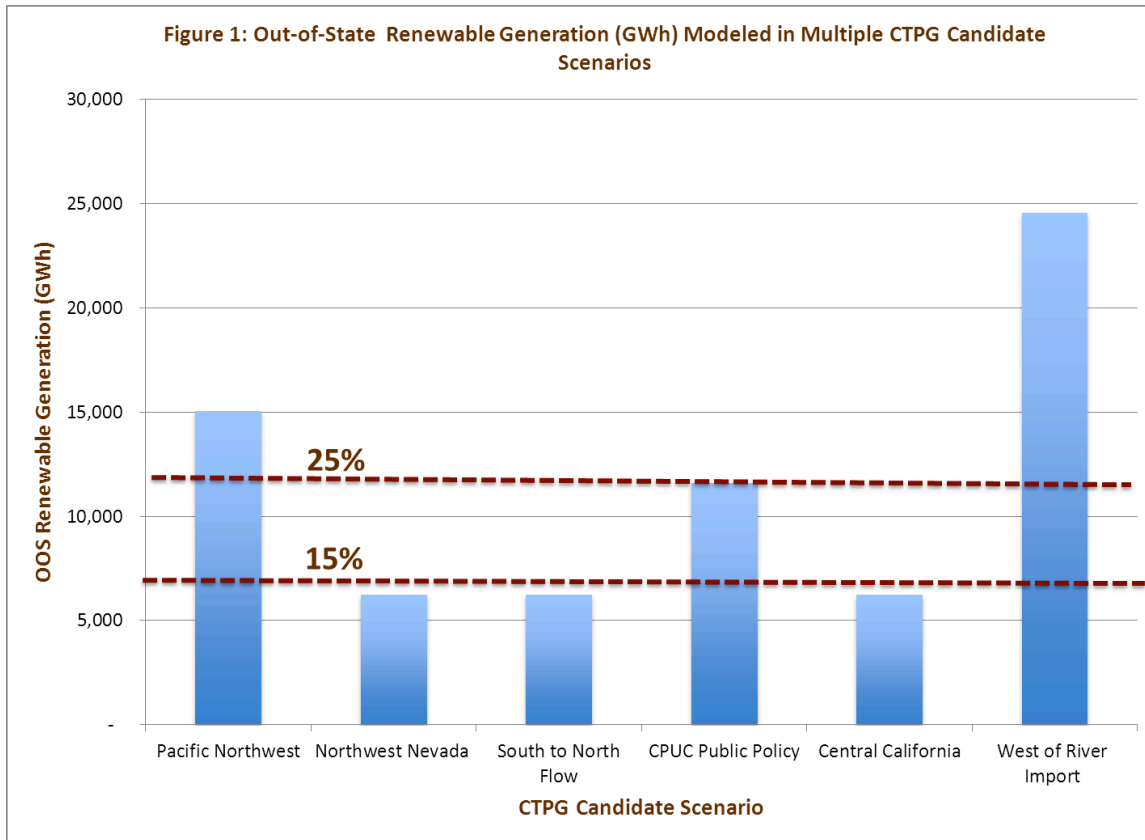
Use of RETI Best CA CREZ Criterion

The CTPG has decided to employ the RETI Best CREZ renewable project amounts, except in the case of the CPUC Public Policy scenario (See Table 16 of the Draft Plan). The RETI Best CREZ criterion relies on outdated cost and environmental scores, and has no consideration for utilizing existing and approved transmission in each CREZ. The CPUC has put significant effort into updating the cost, as well as environmental information, originally developed by RETI. CTPG should take advantage of those efforts. The use of RETI Best CREZ criterion ends up adding renewable generation projects that require new transmission. For instance, under the proposed CTPG approach, the Kramer CREZ had a relatively small amount (584 GWh as shown in Table 22: *Central California Scenario Renewable Dispatch*) of renewable generation in the *Discounted Core*. In order to fill the “net short” the CTPG has identified a significant amount (1,775 GWh) of additional renewable projects under the RETI Best CREZ criterion from Kramer rather than relying on additional potential resources within CREZs such as Westlands, San Diego South, Tehachapi or Palm Springs, which are already selected by CTPG under the *Discounted Core* criterion for the *Central California* scenario. Each of these CREZs has additional renewable resources under the generation interconnection queue that exceed the amounts identified in this scenario. Furthermore, the renewable projects from the Tehachapi CREZ were artificially restricted to 8,612GWh, while the RETI Best CREZ approach indicated that Tehachapi CREZ was ranked higher than Kramer CREZ based on both the economic and environmental scores. We strongly urge CTPG to incorporate renewable generation in CREZs that utilize existing/approved transmission infrastructure based on the CAISO generation interconnection queue data.

Address the Restrictions on the Out-of-State (OOS) Resources

Although claimed otherwise, it appears that the CTPG has not taken into account the restrictions on the amount of OOS resources that can be counted as part of the State’s 33% RPS goal per the interconnection provisions of SBx1-2. The CPUC *Public Policy* scenario assumes that approximately 25% of the 2020 RPS target is met with OOS resources. However, as shown in Figure 1 below, the amount of OOS generation assumed in the CTPG Pacific Northwest and the CTPG West of River Import scenarios clearly exceeds such limit (25% dotted line). If the location of assumed OOS resources in the proposed Scenarios is not subject to the legislated restriction, CTPG should explain why this RPS procurement restriction is not taken into consideration. Furthermore, the CTPG needs to consider that a subset of the OOS resources, say 10%, will be counted to be unbundled Renewable Energy Credits (RECs). This would mean that only 15% of the RPS net short needs to be physically delivered from OOS in the form of

“bundled” RECs. Please document how the CTPG’s rationale regarding how the CTPG Pacific Northwest and the CTPG West of River Import scenarios would comply with SBx1-2.



Thank you for the opportunity to comment and we look forward to continued public Stakeholder participation. We continue to appreciate your dedication to considering Stakeholder comments.

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