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

June 2, 2011

The Bay Area Municipal Transmission Group[1] (BAMx) appreciates the opportunity to comment on the California Transmission Planning Group (CTPG) 2011 Work Plan presented to Stakeholders on May 19, 2011. We hope that our comments, as well as our recommended scenario, will be incorporated in the final CTPG 2011 work plan.

Overall CTPG 2011 Work Plan

BAMx applauds CTPG efforts in drafting the proposed 2011 work 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. We also support the CTPG's proposal of modeling the four (4) CPUC LTPP scenarios under the 2011 work plan.

Phase 1 Study Process and Assumptions

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

1. Perform Base Case Review;
2. Update Net Short;
3. Review Re-Dispatch Methodology; and
4. OTC Assumptions.

Perform Base Case Review

BAMx agrees with CTPG that verification of voltage profile, operating reserve levels, path load level as well as assessment/modification of the load levels modeled in the Base Cases need to be undertaken in the 2011 planning process. A critical task under the Base Case review, as identified by CTPG, is to determine the degree to which the base cases model "approved" transmission projects. Many of the other Base Case assumptions are technical in nature, but including any new non-existing projects in the Base Case should involve explicit Stakeholder

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

involvement. BAMx believes that only those projects, which have all 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.

For those transmission projects that do have all of the above approvals, but which are considered more likely to be needed than others and/or have been approved by a balancing area authority, such projects can be modeled as part of "sensitivity" cases, but should not be included in the Base Case. For example, a CAISO balancing authority transmission project approved under the CAISO LGIP process that does not have a CPCN/PTC and other required resource agency permits, should not be part of the Base Case. Two major reasons for this are:

1. To show a need for the project in the Base Case and showing the satisfaction of that need through the sensitivity case.
2. To allow non-CTPG members to propose alternative projects that satisfy the need identified in the Base Cases.

For instance, the CTPG may detect a violation of reliability criteria in the Base Case. The CTPG would then determine whether such violation(s) can be mitigated by transmission projects proposed by CTPG and non-CTPG members, and discuss the relative benefits of the alternative transmission projects that mitigate the reliability criteria violations.

Using this basic process should help obtain siting approval of the best projects and provide a more level playing field for non-CTPG (independent transmission developer) participation in meeting the State's renewable goals.

Update Renewable Net Short

Based on the May 19th presentation, we understand that CTPG is contemplating whether to use the latest CEC proposed Renewable Net Short (RNS) range or to use the older RNS used in the 2010 studies. BAMx strongly urges CTPG to use the latest CEC renewable net short range. CEC Staff now has representative RNS numbers as displayed in CTPG's May 19th presentation. This range of numbers shows how much uncertainty exists with this critical calculation. The impact of this uncertainty on needed transmission must be studied in some way. We understand there are limitations to the number of scenarios that CTPG can effectively study but the impact of this uncertainty clearly should be considered when deciding on the scope of studies for this year. Although it is not clear at this point how many load levels will be considered in these cases, we suggest studying the impact of this critical assumption is more important than studying

combinations of 1-in-10 year vs. 1-in-5 year load scenarios as was studied last year. If CTPG cannot study the impact of low and high RNS levels in the 2011 process due to resource limitations, we suggest that CTPG utilize the CEC's latest medium or most likely net short. The earlier RETI net short used by CTPG in the 2010 studies (equivalent to the CEC's updated highest net short book-end) is completely outdated.

Incorporate Production Cost Simulations Data in the Re-Dispatch Methodology

We applaud the CTPG's new approach for determining the appropriate re-dispatch of fossil fuel generation- essentially removing the arbitrary 70/30 allocation of in-State and out-of-State redispatch. However, CTPG has proposed to use a "manual" process to decrement fossil generation in a merit-order fashion (least economic reduced first) informed by a solicitation of information from others within the WECC footprint. We believe that a more sophisticated analysis using a security-constrained market simulation model (like that used by the CAISO in their 33% Comprehensive analysis to determine the total economic impact of various transmission additions under various dispatch criteria) would be the best way to determine a dispatch for the Base Cases. If resource limitations prevent such analysis, we suggest that CTPG use the results of the production cost studies from the past CAISO 33% Comprehensive analysis simulations to better inform the manual process now envisioned by CTPG.

OTC Assumptions

BAMx appreciates the CTPG's efforts in compiling and reporting of the once-through cooling (OTC) compliance options and implementation plans as submitted to the State Water Resources Control Board (SWRCB). We suggest that the CTPG analysis, at minimum, be informed by the technical analysis performed under the CEC 2011 IEPR/ARB AB 1318 joint efforts.[2] We suggest that CTPG also report on these efforts in its next Stakeholder meeting. We also suggest that any proposed scope of work to be performed by CTPG should occur only after consideration of the CEC 2011 IEPR/ARB AB 1318 joint efforts. Due to timing issues, if this assessment cannot be incorporated in the CTPG's 2011 plan, then it should be deferred until the next planning cycle.

[2] See ***AB 1318: Assessment of Electrical System Reliability Needs in the South Coast Air Basin and Recommendations for Meeting Those Needs***, CEC 2011 IEPR / ARB AB 1318 Joint Workshop on Offset Challenges for Fossil Power Plants in Southern CA, February 15, 2011.

2011 Proposed Scenarios

Four CPUC Scenarios

We support the four CPUC scenarios proposed by CTPG to be evaluated in the 2011 planning process, conditional on the level of assumed transmission infrastructure. As mentioned earlier, we do not believe the CTPG should include unpermitted transmission in these scenarios unless they are identified as needed. For instance, in the development of the CPUC LTPP scenarios, the CPUC added transmission incremental to the existing transmission and minor upgrades only if it is identified to be needed to meet 33% RPS in those specific scenarios. In other words, CTPG should implement the CPUC scenarios exactly the way modeled by the CPUC.

Additional BAMx "Maximum Utilization of Existing Transmission" Scenario

BAMx recommends that CTPG incorporate an additional scenario that assumes maximum utilization of existing transmission. This scenario will entail no significant transmission additions. It will include only those renewable resources that can be connected to existing transmission and currently approved new transmission. Only minor transmission upgrades would be allowed in this scenario. In Table A below, we provide a list of transmission projects that should be modeled in this scenario. The in-State minor transmission upgrades can be added only to the extent that the total combined cost (associated renewable generation plus transmission) is lower than other renewable options including imports and renewables that can be connected to existing transmission. We suggest that CTPG use the same method to develop this scenario that it uses for the others such as the E3/CPUC 33% RPS calculator or any other spreadsheet-based tool to model the amount, location and cost of renewables in this portfolio.

Table A: Transmission Upgrades included in the "Maximum Utilization of Existing Transmission" Scenario.

Upgrades with Key Regulatory Approvals and Environmental Permits	Upgrades without Key Regulatory Approvals and Environmental Permits

– Tehachapi Segments 1-3
– Tehachapi Segments 4-11
– Sunrise Powerlink project
– Valley-Colorado River
– Eldorado-Ivanpah
	– Reliability Upgrades approved in the CAISO 2010-11 Transmission Plan
	– Mirage – Devers: Path 42 (Policy-Driven upgrade)
	– Minor upgrades only if combined cost of generation and transmission is found to be cost-effective.
	  ○ West of Devers;
	  ○ Carrizo-Midway;
	  ○ South Contra Costa; and
	  ○ Borden-Gregg.

This scenario will be unique in minimizing the risk of stranded transmission investment. It will be different from other scenarios such as the CPUC's cost-constrained scenario. For instance, unlike these two scenarios, the *Maximum Utilization of Existing Transmission* scenario will add renewable resources from Pacific Northwest only to the extent that they do not trigger additional transmission upgrades to the Pacific Northwest import ties. Once the Pacific Northwest resources are included (assuming that they are the most cost effective), this scenario will add imports from the Southwest and/or based upon total costs under the constraint of no new major transmission. We believe that this scenario would effectively provide a level playing field for non-PTO independent transmission.

If CTPG finds this idea workable, we are able and willing to work with CTPG to develop additional details associated with this scenario.

Additional Two Scenarios

If adequate resources are available in this study cycle, in addition to the five scenarios cited above, BAMx recommends that two additional scenarios proposed by CTPG should be studied.

- Pacific Northwest High Potential Corridor; and
- Northwest Nevada High Potential Corridor.

However, we believe that resources added to these scenarios should utilize the E3/CPUC calculator that was used to develop the four (4) CPUC scenarios and for the BAMx proposed Maximum Utilization of Existing Transmission scenario.

Stakeholder Input

CTPG should develop the generation and transmission resources needed in each of the study scenarios and review them with Stakeholders at the July 1st meeting before performing the load flow analysis.

Thank you for the opportunity to comment and we look forward to continued public Stakeholder participation.

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