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

March 31, 2010

The Bay Area Municipal Transmission Group[1] (BAMx) appreciates the presentation made by the California Transmission Planning Group (CTPG) on March 24, 2010. This appears to be an attempt to get early Stakeholder comment with respect to issues that should be covered in Phase 3. CTPG is to be commended for this attempt. It appears to be reflective of the openness of your process evident in 2010. However, it is very difficult to comment on what should follow Phase 2 without having access to the Phase 2 findings. More importantly, the March 24th slide presentation lacked many details. We believe the problem of not having information from Phase 2 before Phase 3 is started is driven by the unrealistic time frame set up for CTPG efforts. Nonetheless, we are appreciative of the opportunity to provide comments and questions and will do our best to be responsive to the material presented at the CTPG Study Stakeholder conference call dated March 24, 2010.

Net Short Amounts and Scenarios

BAMx encourages CTPG to focus on developing several combinations of transmission projects under different scenarios as a way of defining a set of "least regrets" projects. All the CTPG Phase 2 scenarios use the same net short in 2020, i.e., 52,764 GWh. Phase 1 used the earlier (higher) RETI amount of 59,710 GWh. However, given the level of uncertainty tied to the calculation of net short, BAMx believes that CTPG needs to put some effort into defining transmission projects needed for lower levels of "net short". For example, the latest RETI net short which assumes the latest "incremental efficiency" and "distributed generation" outlook, results in a reduced net short of 36,926 GWh. BAMx recommends that additional scenarios be developed to meet this lower net short amount and even a smaller net short amount, say 18-19,000 GWh, that could result from assuming additional imports of renewable generation that utilize existing transmission and/or assuming significant amounts of Tradable Renewable Energy Credits (T-REC) and/or more State led incentive programs for Energy Efficiency, CHP, distributed renewables, and private generation.

The RETI net short "reference case" amount of 52,764 GWh adopted in the proposed CTPG Phase 2 does not assume any level of T-RECs or any other program that does not exist now to meet the future net short in 2020. The current RETI estimate in the "reference" case assumes

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

38,174 GWh of existing renewable generation by December 31, 2009. The RETI February 22, 2010 paper describes how uncertain its projections are and how they are subject to change based upon ongoing work That same RETI discussion paper acknowledges that not all of the factors, which determine the RETI net short value, have been evaluated by the CEC or other agencies. For instance, changes to the CEC demand forecast, which might reasonably be expected but are not included in approved plans, are not considered in any CTPG net short scenarios. We believe that several enhancements such as, increased renewable imports that utilize existing transmission, additional energy efficiency, incremental private CHP, increased distributed generation and the expected heavy use of T-RECs by 2020, could dramatically reduce the transmission needed. We believe that the level and type of transmission needed in these reduced net short scenarios would be significantly different from the ones developed from multiple scenarios at the higher level of net short need of 52,764 GWh. It is incumbent upon CTPG to develop cases with smaller net short amounts if it hopes to bracket its study results based on a range of reasonable assumptions.

Generation Re-Dispatch

BAMx would like to see more attention put into the decision on which generators are reduced to match the increased output of the renewable generators for various peak and off-peak load flow studies being analyzed. We see the uncertainty of that aspect reflected in the scenario descriptions, but we have not found a detailed description of how such “dispatch patterns” will be developed.

Furthermore, CTPG has indicated that Phase 2 would continue to employ a 70/30 constraint in the reduction of fossil generation and that other ratios might be investigated in Phase 3. RETI recognized the inadequacy of their “shift factor” approach to define a transmission system to meet the reliability needs of the grid. However, it appears that CTPG continues to devote all its current efforts in Phase 2 to studying in detail the need to define a transmission system for a few peak and off-peak hours while using a relatively crude approach to determining generation curtailment to accommodate new renewables. This approach does not adequately capture how the grid will be dispatched for optimal economics, how that dispatch could change to relieve criteria violations for those peak hours, and what the economic impact of such changes might be over the course of many years. For instance, terms like “carbon-based dispatch” are not very descriptive of what will be assumed. One way to get away from arbitrary ratios and make the process more transparent to stakeholders would be for CTPG to assume that the entire WECC grid would be dispatched based upon economics assuming a carbon tax of “X” for the peak hour of the study.

BAMx encourages CTPG to utilize the marginal operating cost method to reduce the output of fossil generation without employing arbitrary in-State and out-of-State splits. Either use the method of assuming some level of carbon tax adder or use some other transparent methodology to recognize the likelihood of regulations to limit carbon releases to the atmosphere. More sophisticated analysis using tools like a security-constrained market simulation model to determine the total economic impact of various transmission additions under various dispatch criteria may not be achievable at this time, but CTPG needs to remind stakeholders of the need for such studies.

CTPG continues to refer to a set of studies that would study the impact of achieving another State environmental goal -- reducing reliance upon existing generation using once through cooling (Case OTC). However, no detail has yet been provided which would describe the methodology to study the impact on the transmission system to achieve this goal and how CTPG might be able to separate the incremental impact of achieving this goal in addition to and/or instead of achieving the goal of 33% renewables by 2020.

Need for Additional Scenarios

BAMx appreciates the two additional "Northern" and "Desert Southwest" scenarios as proposed by CTPG under the Phase 2 study plan. BAMx also supports the development of the "Owens Valley Portfolio" scenario. BAMx considers them as a step in the right direction, but as we have indicated earlier, these three scenarios might not be sufficient in demonstrating how to minimize the level of "needed" transmission. In our comments dated February 10th, we had included a list of candidate assumptions for renewable resource development scenarios that would make efficient use of existing transmission facilities and minimize new transmission costs and environmental impacts. It is unclear to us how much attention is being placed on developing a scenario that minimizes transmission costs for a given level of "net short". We think the CTPG should explicitly develop a minimal transmission scenario and/or identify how they made sure that the transmission assumed in each scenario was developed with a "least cost" criterion in mind.

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