

Bay Area Municipal Transmission Group's Comments on the CTPG Phase 3 Draft Study Plan and Phase 2 Study Results

April 28, 2010

The Bay Area Municipal Transmission Group¹ (BAMx) appreciates the presentation made by the California Transmission Planning Group (CTPG) during the stakeholder meeting on April 20, 2010. We very much appreciate the openness of your process so far this year. Below we include a few questions and comments on the Phase 3 Draft Study Plan and Phase 2 study report posted at the CTPG website dated April 19, 2010.

Reliability Criteria

BAMx recognizes the need for the CTPG's decision to not conduct certain analyses as part of the Phase 3 study efforts. These analyses include:

1. A deliverability analysis to determine the necessary improvements and operating methodology for delivery of renewables to fulfill Resource Adequacy eligibility, and to provide integration capability for variable generation renewables, such as pumped storage or other methods; and
2. An analysis of potential transmission needs- mitigation methods that may be provided by transmission line protection control systems.

CTPG also states the following:

Cases A, B, and F may also identify certain Category C reliability criteria violations and that further study is required to identify suitable mitigation, such as controlled load drop and/or generator tripping, for these conditions. However, the CTPG has decided it will not evaluate the feasibility of such operation measures.

Although BAMx recognizes the need to defer such analysis, we encourage CTPG to continue to point out that such analysis needs to be completed before any decisions can be made to construct the alternatives studied to date.

Net Short Input Assumptions

CTPG has indicated that in Phase 3, it will use the same "net short" estimate used in

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

Phase 2 for all scenarios, i.e., 52,764 GWh. Given the level of uncertainty tied to the calculation of net short, BAMx believes that CTPG needs to develop additional scenarios in the future that assume 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. A lower level of net short 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. However, we recognize the need for Phase 3 studies to be consistent with Phase 1 and 2 studies with respect to the net short calculation, leaving other assumptions for later studies.

Renewable Generation Portfolios

Please provide your rationale for continuing to utilize the Generation Interconnection Queue Portfolio in the Phase 3 study. We support the CTPG’s decision to also run a RETI-developed “Best CREZ” portfolio in Phase 3. In particular, we support the inclusion of Westlands and Solano as high priority low environmental impact CREZs for renewable development.

Generation Re-Dispatch

CTPG has indicated that in Phase 3, the CTPG would continue to utilize the 70/30 in-state/out-of-state generation re-dispatch approach for most scenarios. So far, CTPG has not provided any justification to continue to use this assumption. We are encouraged that CTPG has proposed to test the sensitivity of this assumption by utilizing an “out-of-state” re-dispatch method in Phase 3. We believe that this method is more appropriate than using the arbitrary in-state/out-of-state generation re-dispatch ratios. We do not understand why CTPG infers that this scenario, which assumes a more competitive market for generation capacity across the WECC footprint, is declared less likely and treated only as a sensitivity scenario.

CTPG in section 6.2 of the Draft Phase 3 study plan states the following:

Phase 3 will investigate removing the in/out of state constraint for the fuel type method, permitting the decrement of fossil generation across WECC based on minimizing carbon footprint for electricity production. CTPG recognizes that minimizing the carbon footprint requires a WECC wide approach. For example, a national carbon tax would apply equally to all fossil generation plants in the United States. If the carbon tax was sufficiently high, coal fired generation would cost more than other types of fossil generation and imposing an in/out of state constraint on the amount of coal fired generation that is decremented in response to the addition of renewable generation would not be coherent under a national carbon tax.

We endorse CTPG recognizing the above in its analysis. It appears that in Phase 3, CTPG will continue to follow the approach of decrementing generation based on fossil fuel type as a proxy for reduction by carbon footprint rather than using either emission rates or a carbon tax approach. While we recognize that the emission rates approach cannot be implemented in a short amount of time given the unavailability of such data, we believe that the carbon tax approach can be realistically implemented by deploying an Optimal Power Flow (OPF) model with a WECC footprint. We encourage this type of study in future efforts.

CTPG has reported upon a set of studies in Phase 2 that analyzes the impact of achieving another State environmental goal -- reducing reliance upon existing generation using once-through-cooling (Case OTC). They have concluded based upon those studies that achieving the State OTC goals could be studied separately from the goal of achieving the 33% renewable goal. That conclusion was not apparent from the studies.

Transmission Needs Alternative Analysis

BAMx has not made any efforts thus far to identify potential alternative transmission project (s) that might fulfill the specified transmission needs identified in the Phase 2 Study report. We endorse CTPG requesting Stakeholders to submit alternatives. Given the lack of access to CTPG load flow cases, and the short time to respond, BAMx will not be able to participate in this opportunity at this time. We encourage CTPG to encourage such suggestions in its further work.

CTPG has done a commendable job in analyzing multiple scenarios in its work to date. We believe CTPG needs to provide access to the power flow cases to allow stakeholders to better understand the results of their studies to date and in the future. We therefore request CTPG to provide all the power flow cases used to develop the thirteen scenarios modeled in the Phase 2 study.

Grid configuration

In Section 2.2 of the Phase 3 Study Plan, the CTPG states the following:

Cases A, B, and F include those transmission additions that are in the WECC 2019 Heavy Summer seed case as well as certain transmission elements that will allow for the interconnection of new renewable resources. Case A, B, and F assume that major upgrades are built including Midpoint-Devers-Valley, Tehachapi Segments 1-11, the Barren Ridge/Haskell Canyon/Rinaldi upgrades, upgrades in the Owens Valley.

Please describe the status for those upgrades described as without Key Regulatory Approvals and Environmental Permits that are added in all scenarios. Please explain why it is a reasonable assumption to include these upgrades in all scenarios and what effect the lack of construction of these upgrades would have on CTPG's results.

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 Wagle (888-634-3339 and pushkarwagle@flynnrci.com)