Bay Area Municipal Transmission Group's Comments on the RETI Phase 2B Draft Report

April 23, 2010

The Bay Area Municipal Transmission Group1 (BAMx) appreciates the opportunity to provide comments and questions to at the Renewable Energy Transmission Initiative (RETI) Phase 2B Draft report dated April 2010.

The Phase 2B draft report is a worthy addition to the excellent work completed by RETI to date. RETI continues to provide very important input into the decision-making process on how to achieve our State's energy policy goal of achieving a mix of 33% renewable energy in the statewide mix by 2020. BAMx plans to comment on the incremental improvements in Phase 2B and also provide our suggestions to future RETI efforts.

Updates to Economic Model and Technology Assumptions (RETI Phase 2B Report, Section 1.1)

RETI's efforts to continue to improve its cost of generator calculator are very important. We encourage RETI to continue to do so. We consider the flexibility of the cost calculator to easily determine the impacts due to changes to the input assumptions to be its most valuable attribute.

Renewable Distributed Energy Collaborative (Re-DEC) (RETI Phase 2B Report, Section 2.3.3)

The Phase 2B report generally describes the Re-DEC goal of identifying " challenges and potential solutions to high penetration of distributed generation ". It also states that "Re-DEC generally focuses on wholesale DG connected to the distribution system, on the utility side of the meter, and ranging in size from 1 to 5 MW." BAMx awaits any updated results from the CPUC Re-DEC efforts[2]. We would encourage RETI to further explore the key drivers to the development of DG with larger than 5MW installations closer to the load centers in California.

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

[2] See http://www.cpuc.ca.gov/PUC/energy/Renewables/Re-DEC.htm

Tradable Renewable Energy Credits (TRECs) (RETI Phase 2B Report, Section 2.3.4)

RETI recognizes that the use of TRECs could have a significant effect on the need for transmission for renewables. BAMx believes that this is the single most important improvement that RETI can make to the important body of work that it has created. RETI needs to use its body of professional advisors and very important analytical tools to study the impact of the use of TRECs on the need for and the selection of appropriate additions to the existing transmission grid. It stands to reason that the need to construct transmission will be reduced. But how much does will it be reduced? What are the limitations on other areas within WECC to accept the energy from local resources locally?

The uncertainty of the actual use and effectiveness of TRECs is a critical reason for RETI involvement, not the opposite. RETI's most important contribution in the past, and hopefully in the future, is to illustrate the effect of key parameters on the needs for and the location of new transmission. Therefore, RETI needs to turn its resources to studying the range of impacts due to the use of TRECs.

Rank Cost Overview (RETI Phase 2B Report, Section 3.1)

BAMx believes that RETI-developed Rank Cost method of comparing the relative economic merit of a given project/CREZ is an important tool to recognize the relative economics of resources sited in each CREZ and to determine how those economics change with varying assumptions. One such key component is the Integration Cost of renewables. Although RETI has made some qualitative assessment of this component in some cases[3], it indicates it has not quantified the range of impacts since the data on the integration costs is unavailable. BAMx encourages RETI to insert a range of values for this component to determine its impact upon the mixture and location of the most economic renewables. Although there is a large range of uncertainty associated with the integration costs, we believe that assuming zero cost as RETI has done so far should not be the solution. Whether RETI recognizes it or not, it is now predicting a zero cost of integration- a truly inappropriate assumption.

Incentives Assumptions (RETI Phase 2B Report, Section 3.3)

The apparent relative ease with which RETI could accommodate recent changes in the US tax incentives is an illustration of the strength of the cost of generation calculator developed by RETI. RETI was also able to illustrate the incremental impact of the tax incentives relative to the

[3] See section 7.4.4 *Sensitivity Analysis – Firmed and Shaped British Columbia Resource* in the Phase 2B Report.

prior assumptions. BAMX suggests RETI add discussion in this section on any "sunset" provisions that were involved on the most recent US legislation on tax incentives. RETI has illustrated the relative impact of eliminating incentives. It may be appropriate, depending upon the sunset provisions of existing law, to develop an intermediate case between the two extremes.

California CREZ Updates (RETI Phase 2B Report, Section 5.0)

BAMx applauds RETI efforts to consistently apply its expertise to the proper modeling of California CREZ's. We would encourage RETI to continue these efforts, and to apply its expertise to better understand why renewable scenarios based upon RETI ranking, LSE contracts, and queue position develop radically different renewable profiles. RETI should provide the broader community of interested parties its perspective on the root causes of the wide differences. BAMx finds such wide differences surprising.

Westlands Water District (RETI Phase 2B Report, Section 5.2.4)

BAMx aggress with RETI that Westlands Water District should be added as a new CREZ. BAMx would urge RETI to look for further unique circumstances that would justify adding any appropriate CREZ's. Has RETI considered how, in general, a local body that supports renewable development like Westlands is likely to be a driver of commercial interest? Is it true that the Lassen Municipal Utility District, with the support of local government, is taking important steps to encourage renewable development locally? Are there other examples?

Out-of-state Additions and Improvements (RETI Phase 2B Report, Section 6.0)

BAMx recognizes the substantial improvements RETI has made in representing out-of-state renewables. BAMx encourages RETI to continue its efforts to refine the analysis. We have not had the time to study the out-of-state transmission cost assumptions in detail. However, it appears, based upon the assumptions made so far, that the out-of-state resources would not be cost competitive relative to the in-state resources in meeting the current net-short.

This assessment leads BAMx to suggest that probably the most important improvement RETI can make in future studies is to evaluate methods of utilizing the out-of-state renewables to meet the 33% net short without building new out-of-state transmission. We previously pointed out (in comments to Section 2.3.4) that the analysis of TREC utilization was the key component of such an assessment. But BAMx suggest that other methods to utilize other methods to meet the RETI net short be evaluated. For example,

1. **Utilization of exiting transmission:** BAMx believes this concept deserves more attention. RETI assumed in its net short calculation that 2,116 GWh of generation was imported in 2009 on the existing transmission network. BAMx believes that there is an ability to import more renewables on the existing grid, especially if you consider the likely reduction of fossil fuel imports caused by restriction on coal production. The likelihood of having increased renewable imports beyond that which occurred in 2009 is high.
2. **Dynamic Transfer:** Pseudo ties and/or dynamic scheduling could also be important additions to the ability of California to rely on remote resources to meet its RPS goals.[4]

Thank you for the opportunity to comment and we look forward to continued participation in your open and transparent process.

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

[4] Interchange scheduling is fundamental to the implementation of dynamic transfers across inter-ties. See the CAISO's Dynamic Transfer Straw Proposal at http://www.caiso.com/2755/2755e7b852d20.pdf. It describes how interchange scheduling is accomplished currently, and the various types of schedules used including static hourly schedules, dynamic schedules and pseudo-ties.