

Comments of Large-scale Solar Association on the
Draft RETI Phase 2A Report
July 2009

The RETI workgroups are to be commended for their extensive and valuable work on the Draft Phase 2A Report, particularly in the way in which they identified transmission line segments so as to reduce environmental impacts. The categorization of the lines into Collector, Foundational and Delivery is useful in understanding the functional purpose of the potential transmission line segments, and in the overall planning effort.

The Draft Phase 2A Report falls short, however, in not including a recommendation to move forward with specific line upgrades. Section 3.9 of the report, which is to identify the recommended phase development of the line groups, was unfortunately deferred. The balancing of energy access, economic factors, environmental concern and timing is a difficult and subjective task. Stakeholders must have an opportunity to comment on this critical element of the report before it is finalized. For example, the energy access metric should be biased to favor areas with active project development rather than treat proxy projects with equal weight.

We further note that greater clarity is needed in how these results will move into the planning processes and be treated in the CAISO annual expansion plan and the Large Generator Interconnection Process (LGIP), both as to the Transmission Cluster analyses and those of future clusters.

Conceptual Transmission Planning

- **Incorporate fundamental interstate transmission issues into RETI:** The draft report treats all projects not defined as foundation or delivery lines as collector projects. Many of these projects are major interstate transmission lines that are being upgraded along existing corridors and would serve to deliver substantial quantities of out-of-state renewable energy. These lines will have an increasingly major impact on the reliability of CAISO's transmission grid, particularly as the need to balance intermittent renewable, both across technologies and across differing resource areas, grows in importance. These projects should be characterized as interstate facilities and not collector facilities, and RETI must not consider California as an electrical island, which it has never been and will never be, but as part of an inseparable electrical network with its adjacent neighbors.
- **Clarification of Multi-Function of Transmission Lines and Appropriate Allocation to Overall Transmission Needs vs. RPS 33% Needs.** The Collector/Foundational/Delivery categorization, while very useful at a high concept level, is also in some ways a potentially misleading simplification. Some collector lines, for example, are multi-

functional in that they also would improve inter-area transfers. Such multi-function lines should not be solely attributed to the 33% RPS goal, as upgrades into these areas are likely in any event to accommodate retirement of generation (particularly once-through cooling generation) and general load growth.

- **Invest in the transmission infrastructure we already have:** we strongly support RETI's preference to "look[] first for situations where existing lines could simply be reconducted or upgraded with new towers, and then for situations where new lines could be added in parallel to existing lines," as a means to reduce environmental impact. Withing the RETI's conceptual transmission planning, there is room for greater recognition of the value, in terms of reduced permitting, siting, and capital costs, as well as of the shorter project development timelines, of upgrading existing transmission lines and substations instead of building new lines. To this end, RETI's conceptual planning should more clearly identify economic benefits of this hierarchy. We also recommend consideration of conversion of existing AC lines to DC lines in appropriate circumstances.
- **Plan upgrades with the future in mind:** In areas with significant renewable energy potential (ex: CREZs) where network upgrades are needed to bring increments of generation on-line, the conceptual transmission plan should support a policy of 'future-sizing' upgrades to allow for more generation to flow into the upgraded facility. (ex: if a substation needs to be upgraded to 230 kV to accommodate some quantity of new generation in the near term, but is located in a location where there is significant potential for more generation to be built, the conceptual transmission plan should provide guidance to upgrade to facility to 500 kV, thereby reducing the need for future upgrades as more generation comes online).
- **Inform the CPUC and CAISO's near term planning:** Currently, the scope of RETI's transmission planning does not explicitly include the 2009 through 2014 timeframes. Given that significant transmission infrastructure investments will need to be made in this near term period to enable the new renewable generation to come on line that is needed to meet 2010 RPS requirements, RETI should provide recommendations to the CPUC, CA IOUs, CA POUs and the CAISO about areas where upgrades should be considered as well as policies and processes to streamline and prioritize these upgrades.
- **Support the ARRA:** Through the conceptual planning process, RETI should consider policy recommendations that address the transmission needs of renewable generation projects that could begin construction within the timelines outlined in the American Recovery and Reinvestment Act of 2009 (ARRA). One such recommendation could be the identification and ranking of line segments based on their potential to deliver energy from projects that have applied for Loan Guarantees from the Department of Energy. This type of ranking would give decision makers at the CPUC, the CAISO and the CA IOUs and POUs a clear sense of which transmission upgrades are most likely to benefit from ARRA funding.

CREZ

- **CREZ rankings should account for the status of project within their boundaries:** Given that one of the goals of RETI is to support California's RPS program, CREZ rankings should take into account the progress individual projects have made in their permitting and siting processes and that are "shovel-ready". In this way, CREZs can be ranked based the timeline and likelihood that renewable generation will be built, thereby allowing policy makers to prioritize transmission investments that will support projects that will be built in the near-term that support the RPS program's 20% by 2010 goals.
- **Out-of-state resources that interconnect to in-state balancing authorities must be treated appropriately.** Out-of-state resources that would interconnect directly to California balancing area authorities appear to be improperly treated as all other out-of-state resources, subjected to proxy costs for delivering to California and to import limitations, when in fact they would be treated identically, from a transmission perspective, to resources in adjacent portions of California within CREZs. If out-of-state resources adjacent to California CREZs that would interconnect directly to California balancing area authorities are not included within the potential of the CREZs, the megawatt value of the CREZ, and the transmission planned to deliver energy from the CREZ, will be distorted to the detriment of both transmission planning and California's RPS goals, and to the disservice of RETI. Those resources should either be incorporated within the adjacent California CREZs, or given special treatment.
- **RETI CREZ rankings should better reflect transmission ease and certainty.** The RETI Phase 2A report recognizes, in its transmission sections, the likely development of line segments that are linked to transmission lines that have been approved. Similarly, the transmission sections recognize the hierarchy in preference between new transmission build-outs, upgrades and reconductoring, with reference to whether these activities occur within utilized or approved transmission corridors. The CREZ rankings must better incorporate this new transmission assessment information, as the likelihood and timing of generation development is highly dependent on the nature of the transmission solution.