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RETI Draft Plenary Report - LS Power comments

Additional submitted attachment is included below.

Docket 15-RETI-02
RETI Draft Plenary Report (Dec 16, 2016)
LS Power Comments – January 10, 2017
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LS Power applauds the effort of all agencies in developing the Draft Plenary Report for RETI 2.0 as well as the work put forth in the three areas of input to the Plenary Report, the TTIG, ELUTG and WOPR. The documentation developed under the RETI framework will be critical in guiding California to meet its renewable energy and Greenhouse Gas goals in the coming years. We are encouraged that RETI 2.0 is not only exploring combinations of renewable resources within California, but is also looking at renewable options out of state and the transmission implications of those options.

LS Power has reviewed the Draft Plenary Report and offers responses to selected questions presented in the January 3 Plenary Group Presentation.

Goals & Resource Conclusions

Renewable Energy Needs

- *Is there a time dimension to when additional renewables are needed (e.g. existing contracts to mid-2020s) that should be noted?*

  Yes. While it is understandable that the RETI effort looks out to a specific point in time (specifically the step up to 50% RPS and 40% GHG reduction in 2030), it should be stressed that the interim goals at 2024 and 2027 are equally important to consider. The lead time for developing the resources and the associated transmission is long and varies depending on the nature and location of the resources and facilities. Therefore transmission and resource planning processes should look at the economics of incremental increases in 3 to 5 year intervals, and these processes should not be constrained to meeting a specific date with specific resources and facilities but rather at combinations of solutions with consideration for the earlier years and later years.

  Furthermore, in light of the federal tax credit phase outs for certain renewable resources, planners should also consider shorter term solutions that will provide long term benefits as well to take advantage of the economics offered by the federal tax credits, and specifically in the 2020-2023 window for wind generation projects. Shovel ready wind and transmission projects have a unique and limited opportunity to benefit from the available tax credits that can be passed to ratepayers if planning and procurement processes move expediently.

Renewable Resource Potential

- *Broad conclusions regarding the cost and value of renewable resources are noted. Are the conclusions accurate? Are more specific conclusions warranted? Are important renewable resource conclusions missing?*

  One additional conclusion that is supported by the Low Carbon Grid Study and other studies cited in the report is the cost effectiveness of out-of-state renewable resources plus transmission vs. in-state utility scale renewable resources.

TAFA Conclusions

Input Group Reports

- *Are the conclusions drawn from the reports the right ones? Are there conclusions that are missing?*

  Some additional conclusions can be drawn from the Western Outreach Project Report (WOPR) as described below. Most importantly there are a broad range of additional benefits (beyond delivery of renewables) associated with incremental expansion of the western grid outside of California that can bring near term cost savings to ratepayers related to resource diversity, economic dispatch, congestion relief and reliability.

Proposed Western Transmission Summary

- *Are the conclusions regarding western renewable resources, resource changes, export opportunities, and ~~existing~~ proposed transmission accurate and useful? Are there important conclusions missing?*

  The WOPR also addressed other grid benefits of increasing out-of-state AC transmission. For example, Section 4.4 of the WOPR addresses other benefits such as resource diversity, economic dispatch benefits, congestion relief and reliability benefits. As discussed on page 51 of the Plenary Report, it is important to conclude that the construction of new transmission in the West for the purposes of delivering renewable brings a broad range of benefits that can help offset the increased cost to consumers. Some of these benefits, as noted in the Low Carbon Grid Study referenced on page 23 of the Plenary Report, could be realized in the near term even before the new renewables are synched to the grid.

- *Are the metrics for comparing projects or combinations (MW capacity, cost per MW of capacity, contingent on existing system, import/export opportunities) useful? What other metrics from the WOPR report are most useful for high-level comparison?*

  The conclusions of the Western Outreach Project Report (WOPR) were based on the perspective of delivering bulk amounts of renewables into California. This included 12 different project scenarios in Table 2-3, three of which were focused on delivering 1,500 MW from Wyoming, Nevada, Utah and/or Idaho. Two of these three scenarios are not fully feasible from a deliverability point of view due to commercial constraints in the existing system. Other scenarios that could cost effectively deliver 700 to 1000 MW were not listed. In addition, the contingencies from Robinson Summit deserve a footnote similar to note 51 of the WOPR to acknowledge the availability of ~1000 MW of capacity rights to bring the CAISO delivery point to Robinson Summit if SWIP-North is constructed.

  Taking into account the above, the $/MW metric is misleading without consideration of the commercial constraints on the existing system, and without listing other potential solutions that deliver less than 1,500 MW. For example, if SWIP-North were listed as an independent project with delivery of up to 1,000[1] MW at an estimated $500 million, the cost metric at $0.5/MW would be an interesting addition to the table. SWIP-North has potential Import Opportunities for WY wind, NV geothermal, and NV solar, and potential Export Opportunities to NVE, PAC, IPCO, and BPA. In addition, with delivery from Midpoint to Harry Allen, a 500 mile path available for an estimated $500 million, a cost per mile metric would be useful and appropriate and is recommended for Table 2-3. We recommend that the report should be revised to include SWIP-North as an independent project as an additional scenario, as this scenario has several merits of its own. Recognizing that the purpose of the report is not to identify project winners and losers, since economic metrics are included some additional clarifications are in order to point out the

[1] 1000 MW of transmission capacity across SWIP North, ON LINE and Harry Allen Eldorado should allow for nameplate capacity greater than 1000 MW to attain Full Capacity Deliverability given the Deliverability Methodology CAISO uses to dispatch renewable generators below their name plate coincident with peak load.

limitations of Table 2-3. It would also be useful to include in the Plenary Report a restatement of Table 4 from the WOPR.

TAFA Conclusions

Potential constraints and conceptual mitigations:

- *Are the summary descriptions* of potential transmission constraints accurate?*

  Summary descriptions of potential transmission constraints are generally accurate, however we would like to point that other combinations have interesting merits and are worth exploring. One such area is the conclusion about no firm transmission availability across the California Oregon Intertie (COI) and the need for a new transmission upgrade worth $4 billion to deliver additional resources into California via the COI path. An interesting scenario to explore would be if a new transmission project was built that acts as a parallel path to COI, such as SWIP North, that may allow for a few hundred MW of additional transfers to California at a fraction of the cost for upgrading COI. In addition, a new transmission project such as SWIP North which provides a major interconnection between Idaho, Nevada and California (via ON Line and Harry Allen-Eldorado) also will be a parallel path to several other Paths reviewed for this report, namely Path 24, Path 76 and Path 52. As noted under the TAFA conclusions all these paths are limited in capacity with not much incremental capacity available for additional transfers. Again a major parallel path such as SWIP North should increase transmission capacity availability for these areas, at a fraction of the cost to upgrade each path.

Scenarios to inform resource and transmission planning:

- *Are the proposed conceptual scenarios tractable and would they be useful to study? What other conceptual scenarios (within RETI scope) would be useful to study? Which portfolio elements within scenarios would be most useful?*

  The Out of State Transmission Configurations recommendation makes sense for the reasons stated on page 52 of the Plenary Report. However, care should be taken in developing the scenarios to be studied for the reasons described above related to commercial constraints and circumstances that provide unique opportunities to enhance the existing system at incremental capital costs that are manageable.