

**Comments of GridLiance West LLC on
CAISO's 2018-2019 Transmission Planning Process Meeting on 2/14/19**

February 28, 2019

GridLiance West LLC (GLW) appreciates the opportunity to comment on the stakeholder meeting held on February 14, 2019, regarding CAISO's Draft Transmission Plan for the 2018-2019 Transmission Planning Process (TPP). GLW appreciates the detailed presentation that CAISO prepared for this stakeholder meeting and references specific slides from that presentation in these comments.

1. Request for Clarification of Generation Siting

GLW would appreciate if CAISO clarified some of what was presented regarding the 2018-2019 TPP Policy-Driven Assessment. Specifically, slide 8 of Mr. Barave's presentation describes a "modeling change" in production cost modeling simulations for Kramer – Inyokern and Southern Nevada resources. The CPUC's Reference System Plan identified Southern Nevada renewable resources as low cost. CAISO's presentation seems to say that it placed all of these resources at the Lugo 500 kV and Eldorado 500 kV stations when performing its production cost modeling.

The California Energy Commission (CEC) developed a specific siting of the Southern Nevada resources identified by the CPUC. Subsequently, it seems CAISO decided to move all these resources to the Eldorado 500 kV station. GLW would like clarification as to why CAISO did not perform production cost modeling using the CEC's siting.

During the February 14 presentation, CAISO indicated that local constraints will need further evaluation. With this being the case, GLW would like to understand if CAISO will perform a full production cost modeling study with resources mapped to GLW's system in accordance with the CPUC portfolio and CEC siting. If so, will this study include potential transmission upgrades? If not, how does CAISO anticipate defining the additional RESOLVE transmission limitations, or "nested constraints," to which it refers in the presentation (page 103 of the PDF). Further, GLW would expect CAISO would not only reflect the cost of needed transmission upgrades (those costs for which GLW believes are significantly overstated in CAISO's initial estimates (pages 86-87 of the PDF)) but also the related benefits of any transmission upgrades.

2. Request for Clarification Regarding CAISO's Decision to Reduce S. Nevada Capacity

GLW seeks additional clarification on slides 14-25 of Mr. Barave's presentation, "Southern CA snapshot assessment – Resource and dispatch assumptions in Eldorado, Mountain Pass, and Southern NV" (pages 77-88 of the PDF). In each mitigation option that CAISO studied for the CPUC's Reference System Plan, CAISO indicates a preference to reducing the Southern Nevada renewable capacity to 2,000 MW. Because CAISO indicated that a production cost modeling simulation was not conducted on this scenario, GLW seeks to understand the benefit in reducing the capacity vs. upgrading the network to accommodate the 3,006 MW capacity. GLW requests that CAISO provide further information about these trade-offs.

3. Request for Information on Stakeholder Input Process

Regarding CAISO's further collaboration with the CPUC on "nested constraints" and the CEC regarding mapping (page 103 of the PDF), GLW seeks further information about opportunities for stakeholders to be privy to those considerations or to offer any stakeholder feedback on the recommended approaches and outcomes. For example, GLW is aware of certain limited transmission system upgrades that produce meaningful production cost savings—in fact, far more in savings than the cost of the upgrades. With respect to the mapping with the CEC, GLW wishes to understand the process that ensures that transmission buildout tradeoffs are considered in conjunction with renewable buildout choices such that the solution is optimal, as opposed to, for example, strictly and artificially limiting resource development in certain areas by not "mapping" resources to such areas without consideration to other IRP-related buildout attributes.

4. Request for Information Regarding Additional Production Cost Modeling

CAISO's production cost simulation results captured in the slides (pages 121-128 of the PDF) reflect significant levels of congestion in the GLW/VEA system even when the portfolio resources are mapped to Eldorado and Lugo. Does CAISO plan to perform additional PCM studies to address this congestion? Assessing the costs and benefits of siting, or "mapping," IRP portfolio resources within GLW/VEA's system should be determined based on the congestion incremental to that which occurs in the GLW/VEA system when resources are not mapped to GLW/VEA. Does CAISO plan to perform such incremental analysis? If not, can CAISO please clarify how it will be able to conclude that siting within GLW/VEA's service would result in a higher cost IRP solution than siting in Southern Nevada but outside of GLW/VEA's service area?

5. Encouragement to Consider Land Constraints and Physical Congestion at Eldorado 500 kV

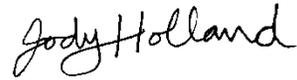
CAISO staff has indicated that mapping projects to the Eldorado 500 kV station instead of the GLW/VEA system will not only result in less congestion but will also result in less transmission being needed. GLW believes that further research and study by CAISO is needed before this assumption can be made. The fact is that there are significant land availability limitations and physical constraints that severely limit how much generation can be sited in that area and, therefore, economically interconnected to the Eldorado 500 kV substation. For one, much of the BLM land outside Boulder City has been designated by the BLM as either solar exclusion or solar variance by the BLM pursuant to the Solar PEIS. This land is either unavailable for solar development or, if available, would only be so following a lengthy, costly and uncertain permitting process. Within Boulder City, lands remaining for solar development are extremely limited, owing in large part to the Clark County administered Boulder City Conservation Easement, a vast swath of land set aside for the preservation of desert tortoise. Only one 1,100 acre parcel of Boulder City-owned land has been identified for near term future solar development, and that project area lies approximately one mile from the Sloan Canyon Switchyard, significantly closer than the project area is to any of the other interconnection point in the Eldorado Valley.

Further, there are constructability problems for new transmission (including generation interconnection facilities). There are many high voltage transmission lines running across the Eldorado Valley. Any new construction would require potentially dozens of line crossings—this increases costs and raises other concerns that should be considered. Constructing long transmission lines in the corridors to

reach the Eldorado 500 kV station from areas where land is available will significantly increase the cost of generation and ultimately the cost of renewable resources to serve California ratepayers. Unless CAISO considers this, GLW fears California will lose a clear opportunity to access the low-cost renewable resources available in the other parts of Southern Nevada.

We appreciate CAISO's consideration of these items.

Sincerely yours,

A handwritten signature in black ink that reads "Jody Holland". The signature is written in a cursive, flowing style.

Jody Holland
Vice President, Planning & Engineering