

Comments of GridLiance West LLC on  
CAISO's Draft 2019-2020 Study Plan

March 14, 2019

GridLiance West LLC (GLW) appreciates the opportunity to comment on the stakeholder meeting held on February 28, 2019, regarding CAISO's Draft Transmission Plan for the 2019-2020 Transmission Planning Process (TPP). GLW appreciates the detailed presentation that CAISO prepared for this stakeholder meeting. GLW raises herein a number of questions and other items of consideration for the CAISO's consideration.

**1. Request for Clarification of Generation Assumptions in Base Cases**

Under Section 3.7, Generation Assumptions, of the 2019-2020 Draft Study Plan, in the "2-5-year Planning Cases", CAISO describes the base cases to be used for the TPP study. Additionally, the CPUC portfolio that was recently released shows the increase in renewable generation starting in 2022. Regarding generation assumptions, the draft study plan (page 23) states:

Contracted renewable generation with all permitting and necessary transmission approved and expected to be in-service within 5-years may also be modeled in the relevant cases. The CPUC's Reliability Base Portfolio and ISO's interconnection agreement status will be utilized as criteria for modeling specific generation. For 2024, generation from the CPUC Default Portfolio described below will be used, *as necessary*. Given the data availability, generic dynamic data may be used for this future generation.

GridLiance West requests that CAISO confirm whether it will model the CPUC's portfolio generation in the 2024 (year 5) base case as well as the 2029 (year 10) base case. GridLiance West believes this would be beneficial and strongly encourages CAISO to do so. If CAISO does not intend to include the portfolio in the 2024 case, GridLiance West requests an explanation why CAISO has declined to do so.

**2. Request for Clarification Regarding the 2019 Portfolio Allocations to Substations**

The most recent CPUC portfolio being considered for study in the CAISO's 2019-2020 TPP indicates there are only 702 MW mapped to GLW's 230 kV system.

In the previous year's CPUC portfolio, the 3,006 MW that was mapped to Southern NV had 2,680 MW of generation mapped to the VEA/GLW service territory and 326 MW mapped to Eldorado. In this year's CPUC portfolio, most of the Southern Nevada portfolio is mapped to Eldorado (specifically, 2,304 MW). According to the 2019 IRP Portfolio Allocations to Substations, the CPUC has indicated that the 2,304 MW allocation "likely exceeds the amount of solar development that would occur near El Dorado." The spreadsheet also mentions that there are approximately 42,260 acres of land designated as Variance Areas by the BLM potentially for solar development and approximately 5,950 MW of solar photovoltaic that could be developed on this land. The subject 42,260 acres of land falls in GLW/VEA territory along the 230 kV system. GridLiance West has also conducted modeling in the CPUC's Integrated Resource Planning (IRP) proceeding showing that siting these resources in the GLW/VEA service territory is cost-effective and actually saves ratepayers money after accounting for production cost benefits and capital cost savings to offset the increased congestion and cost of transmission system upgrades. In light of these modeling results, GridLiance West requests further background and explanation regarding why CAISO mapped

2,304 MW to the Eldorado Substation and not to the GLW/VEA 230 kV system.

GridLiance West also requests that CAISO identify any specific analyses upon which the 700 MW transmission capability for the VEA/GLW area was based. CAISO has generally suggested that these capabilities come from sources such as interconnection studies. GridLiance West is not aware of any particular study that supports this limitation. Having access to the study or studies upon which this limit is based will assist GridLiance West and other stakeholders in understanding the limitation(s) and will aid in discussions with the CEC and CPUC as they pertain to future IRP cycles.

Additionally, in the “2019 IRP Portfolio Allocations to Substations” spreadsheet, there is indication that the incremental upgrade cost for the additional 350 MW FCDS capacity would be \$275MM. GridLiance West believes that it could construct related upgrades at a lower cost. Please explain how the incremental upgrade cost was derived.

### **3. Request for Information on Stakeholder Input Process**

GridLiance West recently identified concerns regarding the lack of adequate coordination between CAISO, the CPUC, and the CEC in comments submitted March 5 in the IRP proceeding. GridLiance West encourages CAISO to actively seek solutions to these concerns to ensure that stakeholders are not unintentionally prejudiced or disadvantaged throughout each agency's various processes. To that end, GridLiance West requests CAISO identify opportunities to engage its stakeholders on these issues and to allow stakeholders to submit feedback on CAISO's recommended approaches and outcomes. For example, as mentioned above, GridLiance West 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. These upgrades also allow a generation portfolio consistent with the CPUC's work in identifying low cost resources. With respect to the mapping with the CEC, GridLiance West 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. 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. GridLiance West believes that this conclusion is incorrect, and that further research and study by CAISO is needed before this assumption can be made. The fact is, 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 Programmatic Environmental Impact Statement (PEIS). This land is either unavailable for solar development or, if available, would only be so following a lengthy, costly and uncertain permitting process. The CPUC has placed resources in Southern Nevada because it has correctly identified those resources as low cost. By siting too much at Eldorado, CAISO is moving away from the fundamental assumptions that underpin the CPUC's plan.

In contrast to the Eldorado solution, there are cost and permitting advantages at Sloan Canyon Switchyard. From a cost perspective, there is better accessibility and the physical construction of the

transmission interconnection will be of a less complicated design. Additionally, Sloan Canyon Switchyard is located adjacent to the BLM corridor and any interconnections routed from the North will reduce distances by at least 3 miles and require significantly fewer transmission corridor crossings. Therefore, obtaining permits for this construction will reduce both time and cost for a Sloan Canyon solution as compared with Eldorado.

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. Boulder City has indicated that it will give preference in the RFP for the new 1,100 acre solar facility to developers that indicated that they will interconnect through Sloan Canyon Switchyard, because of the ease, proximity and reduced contribution to congestion that will result from interconnection at Sloan over any other substation in the Eldorado Valley. The fact is that significantly more public and private land is available in Nye County – proximate to GridLiance West’s transmission lines – for solar development than is available in the Southern Eldorado Valley and throughout Clark County, the area best suited to interconnection at the Eldorado Substation.

Further, there are constructability problems for new transmission (including generation interconnection facilities) near the Eldorado Substation. 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 Substation 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, GridLiance West fears California will lose a clear opportunity to access the low-cost renewable resources available in the other parts of Southern Nevada. Given the location of the Sloan Switchyard, it is not similarly impacted by these constraints as is the Eldorado Substation.

We appreciate CAISO’s consideration of these items.

Sincerely yours,



Jody Holland

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