



# GOLDEN STATE CLEAN ENERGY

May 16, 2019

Golden State Clean Energy (GSCE) provides the following comments on the CAISO's generation deliverability assessment methodology issue paper dated April 24, 2019 and the stakeholder call held on May 2, 2019.

## **I. Introduction**

GSCE is a renewable energy developer that is currently developing the Westlands Solar Park, a 20,000+ acre and 2,700 MW master planned renewable energy park located in the only competitive renewable energy zone in the Central Valley, which is in the southern part of the Westlands Water District. GSCE has been an active participant in the CAISO interconnection process under the Westlands Solar Park name and we currently have over 1,000 MW of generation projects in the CAISO queue proceeding to commercial operation.

We appreciate the CAISO starting this stakeholder initiative in response to the many comments filed by stakeholders after the CAISO proposed a new generation deliverability assessment methodology last year. In light of stakeholder comments, the CAISO initiated this more comprehensive review. GSCE urges the CAISO to continue to provide the opportunity for stakeholders and the CAISO to fully understand the consequences of any proposal emerging from this initiative before any decision is finalized. We believe that additional analysis needs to be conducted to support the understanding of the impacts of the shift in methodology and to mitigate the adverse impacts.

GSCE believes this initiative should proceed cautiously because there are significant negative consequences that could result from the CAISO's proposed change in its deliverability assessment methodology. GSCE appreciates the complexity of simultaneously managing system planning with a shifting peak while incorporating new resources into the grid. We also understand that the CAISO is using a methodology that has remained unchanged for several years. However, it is unclear to us exactly what problem the CAISO is trying to solve and how the system is helped with the proposed changes to the deliverability assessment methodology.

Before the CAISO proceeds to implement the changes, we believe stakeholders should clearly understand the CAISO's reasons for making the changes and why the CAISO believes that these changes help make the grid more reliable.

The consequences associated with congestion and curtailment also need to be thoroughly explored before any changes are made to the current methodology. The CAISO notes in its issue paper that increased congestion and curtailment are expected to result from this shift in methodology, and it is not clear to us why this choice is a reasonable trade off.

We believe that the potential impacts on renewable generation project developers who have already made significant investment in transmission upgrades to support the State's GHG reduction goals could be severe. It is important to design any change in the CAISO methodology to avoid causing harm to renewable generators that are key to achieving the renewables portfolio standard and GHG reduction targets.

## **II. Comments**

As noted above, GSCE believes this initiative should proceed cautiously. This initiative is one piece of a larger picture that fits together to support the State's development of a renewable portfolio to meet its GHG reduction goals. There are a number of areas where we believe analysis, examples and scenarios would support stakeholders' understanding of the consequences of the proposed change in deliverability allocation methodology.

### Understanding congestion and curtailment

The CAISO notes that transmission constraints and curtailment would result from the shift in deliverability methodology for existing and future projects in the queue. We request that the CAISO provide more detailed information for stakeholders to understand these congestion and curtailment impacts. It would be valuable for the CAISO to provide information illustrating these impacts by resource zone, season and time of day, as well as by year, making assumptions for generation and transmission build out and using sensitivities to test those assumptions. We also believe the CAISO should analyze the impact on carbon reduction under different scenarios, including where increased curtailment means fewer hours of production for renewable resources.

### Timelines for solution

The CAISO discusses the possibility that its transmission planning process (TPP) could be relied upon for solutions to the curtailment and congestion caused by the shift in deliverability methodology. However, if the consequences of increased congestion and curtailment are not managed up front, developers may experience years of severe curtailment and congestion before a transmission solution is developed. And it is not clear that the CAISO's current transmission planning methodology would result in finding new transmission solutions are needed. We urge the CAISO to develop a plan to mitigate the impact on congestion and curtailment so the solution is in place at the time the new interconnecting generator comes on

line. In addition, we suggest that the CAISO initiate reforms to its TPP so that those reforms are implemented at the same time as any change in the deliverability methodology. These changes need to be made in tandem if one process is to rely on the other for mitigating adverse impacts. As part of this review of the TPP, the CAISO should revisit the triggers for a transmission solution under the TPP. The CAISO notes on page 17 of the issue paper that the project would need to have a PPA and be permitted or already constructed before its delivery-related transmission costs may be identified in the TPP. The CAISO should consider modifying its requirements to include all projects that have entered the construction phase. Once that occurs, the project will have posted the full interconnection financial security and should be considered sufficiently viable. With the alternatives offered to projects in the interconnection process to proceed without a PPA, having a PPA should not be used as a prerequisite for consideration in the TPP process. How the TPP will interact with this initiative and timing considerations of the TPP and corresponding build out should be further detailed in this initiative.

#### Coordination with CPUC processes and timelines

The CAISO should provide more information about how this process will dovetail with planning needed to meet new procurement under the California Public Utilities Commission's Integrated Resource Planning proceeding. In addition, the CAISO should provide more clarity on how the ELCC process fits with the CAISO methodology and what the implications are for a project's net qualifying capacity.

#### Understanding tradeoffs

This initiative has the potential to reduce network upgrade costs for some generators, but we believe more should be done to understand the tradeoffs associated with potentially underutilized generation facilities and the cost of curtailment. Does additional curtailment of renewables lead to more thermal dispatch? How do the anticipated savings in costs associated with transmission upgrades match up against the potential reduction in achieving GHG reduction targets? It appears that we are already seeing a reduction in the value of the Energy Imbalance Market to reduce curtailments and believe it is worth evaluating whether this trend could be mitigated with strategic transmission investments.

#### Reliability

GSCE appreciates that it is prudent to avoid transmission build outs that would be underutilized. However, we question the tradeoff and costs to reliability if not building network upgrades means managing with more curtailment. GSCE would like more information regarding the connection between the upgrades triggered under the current methodology and curtailment—how much curtailment are we avoiding by continuing to build network upgrades? Further, with the CAISO's request that solar generation facilities improve their response to dispatch and curtailment instructions, is the CAISO concerned about triggering more reliance on curtailment? Finally, it is not clear to GSCE how the proposed change in methodology actually supports a more reliable grid, and GSCE would appreciate the CAISO elaborating on why it believes it is making the grid more reliable with these proposed changes.

### **III. Response to the CAISO's questions**

As a final point in GSCE's comments, we would like to respond directly to the two questions the CAISO posed in its paper and presentation.

*(1) Should additional studies be added to the interconnection study process to meet the objective of avoiding excessive curtailment?*

Yes. The CAISO has indicated that curtailment will result if it changes its deliverability methodology as proposed, and we are very concerned about the impacts on renewable developers that have already invested significant sums in upgrades for deliverability. We suggest that the CAISO perform studies to identify impacts on solar generation during the hours when solar production is at its highest levels, such as the hours of 10 or 11 through 2 p.m. In addition, the CAISO should evaluate whether all interconnecting projects, whether they request FCDS or Energy Only, should be evaluated for their potential to cause excessive congestion or curtailment.

*(2) If such studies are performed in the interconnection study process, then should the identified delivery network upgrades be required to be funded by the generator owner for its generation project to obtain FCDS?*

Probably, but GSCE believes this subject should be discussed further. The arguments in support of new interconnecting generators retaining the obligation to fund upgrades to mitigate for curtailment and congestion include the value of queue management and maintaining the equity between new and earlier interconnection customers where earlier customers funded significant upgrades to the transmission grid. Since transmission upgrades provide for general grid reliability, the cost reimbursements are justified.

### **IV. Conclusion**

GSCE appreciates the CAISO establishing a stakeholder process to examine these issues and carefully consider the broader policy consequences and impacts on renewable generation developers. We urge the CAISO to thoroughly explore these issues and provide detailed information that will allow market participants, regulators and policymakers to understand and evaluate the impacts and develop steps to mitigate them.

Respectfully,

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