

**Generation Deliverability Assessment Methodology**

Submitted by	Company	Date Submitted
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PG&E provides the following comments to the Deliverability Assessment Methodology Revisions, based on the Draft Final Proposal published September 27, 2019 and stakeholder call held on October 4, 2019. In general, PG&E supports the CAISO’s proposal to modify its deliverability assessment methodology. Our comments can be summarized as follows:

- The CAISO should identify a process to mitigate anticipated congestion in a timely fashion.
- The CAISO should evaluate the impact to energy revenues for existing resources and Locational Marginal Prices (LMP) due to increased congestion.
- The option to self-schedule with the Off-Peak Deliverability Status (OPDS) is an insufficient incentive for generators to fund the associated upgrades.

**PG&E requests that the CAISO identify a process, including a stakeholder initiative, to ensure that the CAISO’s economic planning studies are robust enough to mitigate anticipated congestion in a timely fashion.** The current economic study approach requires building and bringing new resources on-line, incurring several years of economic inefficiencies under varying conditions in order to create a historical congestion record, and then allowing the CAISO to evaluate and approve new economic projects in the Transmission Planning Process (TPP). The CAISO should consider revisions to their processes that would evaluate congested facilities identified in the interconnection process and how to accelerate the development of transmission solutions before incurring years of economic inefficiencies before pursuing solutions.

**PG&E believes that the CAISO should consider the value and impact of this deliverability modification to existing Power Purchase Agreements (PPA).** The revisions to the deliverability methodology recognize the lower reliability benefit of solar resources to the peak need that occurs later in the day. This will allow more solar resources to interconnect with fewer upgrades and is expected to increase congestion. This does not consider the impact to existing PPAs. Existing resources that have funded deliverability upgrades to support their interconnection will be subject to increased curtailment and lower energy prices. Many PPAs have contractual provisions to compensate generators for lost revenues associated with economic curtailments but this should be used as a complementary mechanism rather than a primary option. The impact to the overall value of existing PPAs that were based on anticipated energy market revenues and forecasted LMPs should not be ignored.

**PG&E supports the CAISO conducting Off-Peak Deliverability Studies (OPDS) to inform generators of their curtailment risk. However, the opportunity to obtain the option of self-scheduling in the market after funding the upgrade costs is an insufficient incentive.** The OPDS resources will be given the option of self-scheduling in both the day-ahead and real-time markets. The OPDS status is intended to encourage resources to site their facilities in locations that have minimal upgrades and lower curtailment risk. However, PG&E is uncertain that the economic benefits of self-scheduling will be a sufficient incentive to fund the cost of transmission upgrades. The CAISO acknowledges within its paper that the goal of this new approach “should result in fewer self-schedules and more economic bids for market efficiency” during over-supply conditions that incents resources to reduce production when prices begin to fall. Resources that obtain the option to self-schedule will reduce curtailment risk and this will conflict with the need to curtail during the increased likelihood of low prices during over-supply conditions. Self-scheduling into low price or into a negative LMP is not a viable solution.