



# Memorandum

**To:** ISO Board of Governors

**From:** Keith Casey, Vice President, Market and Infrastructure Development

**Date:** October 28, 2015

**Re:** Decision on interconnection process enhancements

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***This memorandum requires Board action.***

## EXECUTIVE SUMMARY

The ISO is pursuing several enhancements to the generator interconnection process as part of its continuous efforts in this area. The remaining two topics from this latest initiative, affected systems and time-in-queue limitations are presented here for Board decision. These two topics are:

1. Establishing a 60-day time limit for potentially affected system operators to respond affirmatively to ISO notification if they would like to be considered an identified affected system for a project in the ISO interconnection queue.
2. Establishing commercial viability criteria for projects to retain full deliverability status if they wish to remain in the interconnection queue beyond the established seven-year limits for cluster projects, or ten-year limits for serial projects.

Management recommends the following motion:

***Moved, that the ISO Board of Governors approves the proposed interconnection process enhancements, as described in the memorandum dated October 28, 2015; and***

***Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposed tariff change.***

## **DISCUSSION AND ANALYSIS**

The ISO currently has 264 active projects in the interconnection queue that have not achieved commercial operation. The queue continues to grow at a rapid pace because of California's aggressive clean energy policies, particularly California's goal of 50% renewable energy by 2030. Continuous improvement in the form of policy modifications and clarifications to the interconnection process are required in order to maintain the ISO's ability to manage the queue effectively. To that end, Management is seeking Board approval of the following items:

### **Affected systems:**

The 2014 stakeholder process to clarify affected system coordination resulted in Management's commitment to pursue the establishment of a timeframe for an electric system operator to identify itself as an affected system. That stakeholder process also resulted in Business Practice Manual revisions to provide ISO notification (rather than notification from the interconnection customers) to all potentially affected system operators. Once notified, potentially affected system operators must provide the ISO an affirmative response stating whether its system may be impacted by one of the identified generator interconnection projects. Once an affected system is identified, the ISO interconnection customer is required to resolve any issues with the affected system operator prior to initial synchronization. This generally consists of funding the affected system's study to see the impact on its system, and what mitigation the interconnection customer is responsible for, if any, prior to synchronization.

The ISO has no current tariff provision that would limit the time that a potentially affected system operator can respond to the ISO notification. Moreover, there is little to no guidance for the ISO where an affected system operator does not notify the ISO or impacted customers until very late in the interconnection process, which presents significant risk to developers. To resolve this issue, Management is proposing to incorporate a 60-day timeline for potentially affected system operators to affirmatively respond to the ISO notification. If a potentially affected system operator fails to provide an affirmative response (or responds that it is not affected), but then seeks to require mitigation later, the ISO will not delay initial synchronization or commercial operation of the generating facility unless it would present a legitimate reliability issue that the ISO can confirm. Instead, any required mitigation would be the responsibility of the affected system operator; and not the interconnection customer, participating transmission owner, or the ISO.

The ISO may recognize affected system operators beyond the time limit under very limited circumstances. Management worked with stakeholders to identify three such circumstances: (1) where the ISO failed to identify the potentially affected system in the first place; (2) if the interconnection customer modifies its project such that it would impact affected systems not previously affected; or (3) where a project transitions from a wholesale distribution access tariff to the ISO tariff. Under these circumstances, the

ISO will coordinate expeditiously with the interconnection customer and the affected system operator to determine if there are reliability issues that need to be mitigated.

**Time-in-queue limitations:**

Current tariff provisions allow projects in the cluster study process to remain in the interconnection queue for no more than seven years, and those in the serial study process for no more than ten years. However, both study processes allow for extensions beyond the 7- and 10-year limits where the ISO and the applicable participating transmission owner consent, such consent not to be unreasonably withheld. As such, lengthy extensions to projects that have already lingered in the queue have become common. These extensions can become problematic because the old projects often retain deliverability that is unavailable to later projects, and their latency frequently results in stale study reports.

Accordingly, Management proposes that interconnection customers with projects that have full capacity deliverability status and have delivery network upgrades or reliability upgrades be required to meet and maintain commercial viability criteria in order to retain their deliverability status beyond the 7- and 10-year thresholds. If they fail to meet these criteria but wish to remain in queue, they will be converted to energy only deliverability status.

The commercial viability criteria proposed is consistent with the criteria already in place for the transmission plan deliverability retention process, and includes:

- Having applied for the necessary governmental permits or authorizations;
- Having an executed power purchase agreement, attesting that the generating facilities will be balance-sheet financed, or otherwise receiving a binding commitment of project financing;
- Demonstrating site exclusivity for 100% of the property in lieu of a deposit;
- Having executed a generator interconnection agreement; and
- That generator interconnection agreement is in good standing.

The ISO will perform an annual review to verify that interconnection customers beyond the 7- and 10-year thresholds have maintained their commercial viability. If a delay beyond the thresholds is the result of a participating transmission owner-requested delay, the generating facility will not be subject to the commercial viability criteria. Moreover, if the sole reason a generating facility does not meet the commercial viability criteria is due to the lack of a power purchase agreement, that project will be granted a one-year extension to obtain a power purchase agreement before it may be converted to energy only deliverability status.

## **POSITIONS OF THE PARTIES**

The ISO conducted several rounds of stakeholder interaction on these topics, including a combined issue paper and straw proposal, a revised straw proposal, a draft final proposal, and a revised draft final proposal. Stakeholders were able to provide comments at each phase. A summary of the process is included in the attached stakeholder matrix.

All stakeholders generally support both proposals, however the Large-scale Solar Association (“LSA”) does so with some reservations. With regard to affected systems, LSA believes that the ISO should require identified affected systems to describe how they are impacted in their 60-day declarations so that interconnection customers can begin to consider potential solutions on their own. It is unlikely at the time of the 60-day declaration that an affected system would have study work completed that would enable it to describe impacts and instead, the identification would be based on an educated understanding of its’ system. LSA also would like limitations on affected systems’ rights to require mitigation if they are allowed to identify as an affected system late when the late identification is due to an interconnection customer’s request to modify its project. Management disagrees. An affected system can only make decisions based on project information provided to it. If an interconnection customer changes its project, an affected system that did not previously identify itself should be told of the project changes and that affected system operator should not be held responsible for mitigation on its system if the need for that mitigation is the result of a choice made by an interconnection customer.

With regard to time-in-queue, LSA is concerned that if a portion of a project is already online and a later phase is converted to energy only deliverability status, a conversion of the entire project to partial capacity deliverability status could jeopardize its power purchase agreement. Management disagrees. The CPUC determines qualifying capacity on a resource ID basis and therefore projects in this position can have multiple resource IDs for a single project, which provides a market resource configuration option that alleviates this concern. LSA also proposed a formal dispute resolution process when there are issues with the application of the commercial viability criteria. Because the tariff and the generation interconnection agreements already have a dispute resolution process, Management believes that the existing process should be used for all disputes.

In the case where a project is determined not to meet the commercially viable criteria and has reliability upgrades but no deliverability network upgrades, LSA asserts that the project’s deliverability network upgrade should not be taken away. Management disagrees. Given California’s renewable and environmental goals, interconnection customers should not be able to retain deliverability when they have not demonstrated their commercial viability. Additionally, LSA is concerned that network upgrades that are under construction or already in service may become unnecessary when a project converts to energy only. The current ISO reassessment process considers network upgrades that are in service as operational in transmission planning study base cases.

Network upgrades that are in permitting, design or under construction, but are not yet in service, are evaluated in the reassessment process to determine if they are still needed given changes in projects including withdrawals, downsizing and deliverability status. As such, Management does not share LSA's concerns.

## **CONCLUSION**

Management recommends that the Board approve the two changes proposed in this memorandum. These changes are generally supported by stakeholders and were refined to address many of their comments and concerns provided throughout the stakeholder process. The proposed modifications will greatly improve the ISO's ability to administer the generation interconnection queue more efficiently as we move closer to meeting California's ambitious renewable energy and environmental goals.