



# Memorandum

**To:** ISO Board of Governors

**From:** Neil Millar, Vice President Infrastructure and Operations Planning

**Date:** December 9, 2021

**Re:** **Decision on interconnection contract management enhancements**

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**This memorandum requires Board action.**

## EXECUTIVE SUMMARY

A number of generator interconnection contract-related enhancements have been identified that update or clarify existing requirements or provide additional flexibility to generating resources. These proposals were developed through a stakeholder initiative to address these opportunities. This interconnection contract management enhancements initiative is part of California Independent System Operator Corporation's ongoing commitment to a continuous process improvement. The initiative included eight distinct proposals where Management seeks approval:

1. Implementing a new *pro forma* study agreement for when the ISO is an affected system;
2. Clarifying rights for customers to retain interconnection service rights, consistent with deliverability retention rights
3. Adjusting the timeline for the ISO to tender a repower study plan to interconnection customers
4. Clarifying tariff language between repowers and modifications;
5. Increasing a project's capability to align their commercial operation date with an executed power purchase agreement
6. Allowing projects the opportunity to be studied and convert to 100% storage
7. Aligning older "serial" project processes with current "cluster" processes
8. Revising the effective date of generator interconnection study process agreement

These proposals will clarify generator interconnection rules and enhance study processes for interconnection customers and stakeholders.

***Moved, that the ISO Board of Governors approves the proposed interconnection contract management enhancements, as described in the memorandum dated December 9, 2021; 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 proposal, including any filings that implement the overarching initiative policy but contain discrete revisions to incorporate Commission guidance in any initial ruling on the proposed tariff amendment.***

## **DISCUSSION AND ANALYSIS**

The intent of this initiative is to clarify rules and policies related to generator interconnection contracts and study processes governed by those contracts and provide administrative improvements. Management's specific proposals are as follows:

### **1. Implement the ISO as an Affected System Agreement**

More frequently, the ISO is becoming an affected system impacted by generator interconnections in other balancing authority areas. As such, the ISO needs a defined process for conducting affected system studies and mitigating impacts on the ISO grid. Management proposes to collect a study deposit and execute a *pro forma* study agreement to begin an affected system study assessment. This will allow participating transmission owners and the ISO to study external generators' impact on the ISO grid, and more effectively determine whether any facilities or network upgrades are required to mitigate any impact on the reliability of the grid.

### **2. Retention of Interconnection Service**

A generating facility's participating generator agreement and net scheduled participating generator agreement require a participating generator to notify the ISO of changes to the technical information in the agreements that need to be documented. Mothballing, retiring, and repowering are included in that requirement. The ISO has already developed policies on how mothballed and repowering generators may retain deliverability for a temporary period. To retain deliverability, the generator must be in the interconnection study process within three years of operation, or, if the repowering scenario was chosen, the generator must have received an approval to repower and be actively engaged in construction of the replacement generation.

To be transparent and clear to interconnection customers, Management proposes to clarify that the same rules that apply to retaining deliverability also apply to the interconnection customer's other rights under its contracts. As such, if interconnection customers wish to retain their interconnection capacity and remain in ISO study base cases, they must follow the retention rules for deliverability.

### **3. Repower Study Plan Timeline to Tender to Interconnection Customers**

Currently, the ISO tariff provides that the ISO will issue a draft study plan to the interconnection customer within 10 business days of receipt of the affidavit requesting

repowering. Due to the complexity of the data received, and the desire to provide a meaningful and useful study plan, reviewing and validating the technical data generally takes longer than 10 days. To be transparent on the actual time required to produce meaningful study plans, Management proposes to adjust the timeline from 10 days to 30 calendar days from when the request is deemed valid.

#### **4. Clarify Repower Language in Section 25**

Section 25 of the ISO tariff sets forth who must submit an interconnection request and when. It generally speaks to new generators and capacity expansions. To remove ambiguity, Management proposes to expressly clarify the study process and applicable procedures for repowering generators. Specifically, the ISO proposes to call out repowering as a study process where the total generating capability and electrical characteristics of an online or retiring generator remain substantially unchanged. Besides the proposals in this memo, the ISO does not propose any policy or procedure changes to the repowering process. This proposal merely makes the existing policy express regarding whether repowering generators must submit a modification/repowering request or a new interconnection request.

#### **5. Projects to Align Commercial Operation Dates with Power Purchase Agreements**

Interconnection customers may seek a transmission plan deliverability allocation annually by submitting an affidavit as part of one of seven groups defined in Appendix DD to the ISO tariff. "Group three" allows projects to seek a deliverability allocation by claiming they are proceeding without a power purchase agreement and, with certain criteria and limitations, will finance and construct the project in an efficient and timely manner. One limitation of projects that receive an allocation in group three is that they are prohibited from extending their commercial operation date. However, the ISO tariff also allows interconnection customers to extend their commercial operation date to conform to their power purchase agreements. As such, if a group three interconnection customer later receives a power purchase agreement, it is ambiguous whether it can extend its commercial operation date to conform to the power purchase agreement. Because projects with power purchase agreements are at little risk of withdrawing from the queue or hoarding deliverability, Management proposes to allow group three projects to extend their commercial operation dates to align with executed and approved power purchase agreements.

#### **6. Project Conversion to 100% Storage**

Although converting generating units to storage generally does not substantially affect the electrical characteristics of the generating facility, interconnection customers currently are prohibited from completely converting from one generating technology to storage. This policy was initially developed before storage was common and was intended to avoid restudies and impacts on the queue. Over time, the ISO studied a number of partial conversions to storage, and generally has seen little need to change initial study results or potential impacts on the queue. The ISO also has seen few cases

where this would change if the conversion was total. Based on the ISO's experience, Management proposes to allow projects to request an evaluation to 100% conversion to storage using the modification or repower request, as applicable. Interconnection customers requesting such modifications still must meet the requirements of those study processes. For example, they cannot negatively impact the cost or timing of other projects among other requirements and the electrical characteristics must remain substantially unchanged. The ISO is merely lifting the blanket prohibition on requesting complete conversions for study and approval. If approved, projects may convert some or all of their project's capacity to storage. If the request is not approved based on existing modification criteria, the interconnection customer could still submit a new interconnection request or request a partial conversion.

## **7. Appendix U Updates**

Appendix U to the ISO tariff provides the interconnection procedures for serial projects (interconnection requests received prior to 2008). Appendix U has a unique process for requesting modifications prior to achieving commercial operation. With the relatively small number of serial projects in the queue and the existing modification procedures currently being used for the cluster process, Management proposes to revise the modification rules for serial customers such that any future modifications will be based on the modification rules for all other interconnection customers in queue. By removing this inconsistency, the language applicable to serial projects would result in the same modification process for all material modification assessments. This is practical and would make modifications easier to accommodate.

Additionally, Appendix U was predicated on a serial process, and requires the ISO to notify these few remaining customers of any change that may require a serial restudy report for that customer based on earlier customers' withdrawals or modifications. Today such changes would simply be reflected in the annual reassessment. Management proposes to revise Appendix U to reflect withdrawals and other customers' modifications through the annual reassessment, similar to other interconnection customers. This change will be practical and reduce administrative burden for the customers, the ISO, and transmission owners.

## **8. Generator Study Agreement Effective Date**

Currently, the effective date of the generator interconnection study process agreement is the date it is *submitted* to the ISO. However, the ISO requires specific documentation and information to be provided in order for the interconnection request package to be deemed complete. Not all interconnection requests become complete, and therefore, the study agreement should not become effective (as the request will not be studied and any study deposits will be refunded in full). Management proposes to update the effective date of the study agreement to be the date that the interconnection request package is *deemed complete* and moves to the validation process. This will clarify the effectiveness of the agreement and conform the study agreement to the interconnection request review process.

## **POSITIONS OF THE PARTIES**

Management completed the issue paper/draft proposal, draft final proposal, and final proposal stakeholder outreach phases and posted the final proposal on November 10, 2021, and hosted a final stakeholder call on November 17, 2021. Stakeholders generally supported or did not oppose these proposals.

## **CONCLUSION**

Management recommends that the Board approve this proposal. These changes are generally supported by stakeholders and were refined through a stakeholder process that addressed stakeholder comments and concerns. The proposed modifications improve the effectiveness of the interconnection and contract-related processes, improve transparency, and clarify existing policies. The proposed modifications will continue to improve the ISO's generator interconnection and contract procedures to help California and the West to interconnect new generation, add storage devices, and meet public policy goals while protecting ratepayers from undue costs.