

Memorandum

To: ISO Board of Governors
From: Neil Millar, Vice President, Transmission Planning and Infrastructure Development
Date: March 19, 2025
Re: **Decision on interconnection process enhancements – track 3**

This memorandum requires ISO Board of Governors action.

EXECUTIVE SUMMARY

Management requests the ISO Board of Governors' approval of the interconnection process changes developed in track 3 of the 2023 interconnection process enhancements initiative.

The 2023 interconnection process enhancements (IPE) initiative is a multi-year stakeholder engagement effort to reform the interconnection process. Track 1 of the initiative addressed the need to pause clusters 14 and 15 and postpone the opening of cluster 16 to allow time for broader reforms to take shape. Track 2 developed the broader transformational changes to the interconnection request intake and queue management process to apply to cluster 15 and beyond. During the track 2 working group and stakeholder process, the ISO recognized the need for a third track focusing on deliverability. This track 3 reform effort creates opportunities to facilitate timely interconnection of certain resources within a cluster, to address changes to the transmission plan deliverability allocation process, and to clearly define long lead-time resources for which deliverability may be reserved. The ISO proposes these interconnection reforms as track 3 of the interconnection process enhancements 2023 initiative:

1. Prioritization of projects within clusters using existing system interconnection capacity and short-circuit duty reliability headroom, to connect as many projects as possible before all reliability network upgrades are completed.
2. Modifications to the deliverability allocation methodology to streamline deliverability allocation groups, provide increased certainty to off-takers, and establish distinct and certain timelines for interconnection customers seeking deliverability allocations.
 - a. Extension of the second interconnection financial security posting for parked cluster 14 projects to reflect recent changes to the deliverability

allocation schedule announced in a market notice in October 2024.¹ This extension will allow customers to obtain the results of the deliverability allocation process before making their second posting.

3. Additional transparency with stakeholders regarding the ISO's coordination with local regulatory authorities to identify long lead-time resources for which the ISO reserves transmission plan deliverability in the transmission planning process.

The proposed revisions in track 3 support the strategic direction established by the December 2022 Memorandum of Understanding between the ISO, California Public Utilities Commission, and California Energy Commission. They are also part of a broader ongoing effort to align resource and transmission planning activities, interconnection processes, and resource procurement.²

Management recommends the following motion.

Moved, that the ISO Board of Governors approves the proposed track 3 interconnection process enhancements, as described in the memorandum dated March 19, 2025; 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 track 3 interconnection process reforms seek to manage the unprecedented volume of cluster 14 and earlier-queued interconnection requests by providing an accelerated process toward commercial operation for qualifying projects and enhancing allocation of deliverability capacity to facilitate procurement of new resource capacity in a timely manner.

The ISO is committed to bringing new and necessary transmission resources into service as soon as possible to ensure reliability and an affordable pathway to decarbonization. The pace of generation development and procurement, however, must align with transmission development. California is experiencing heightened levels of competition for new generation, as evidenced by the swelling of the ISO's interconnection queue in clusters 14 (2022) and 15 (2023). The ISO has approved many new transmission projects in the last two transmission planning process cycles. While the ISO is committed to facilitating the on-time completion of these projects, many of them will take 8-10 years to complete. Transmission capacity on the system is finite, which limits the amount of deliverability the ISO can allocate to enable generators to

¹ <https://www.caiso.com/notices/interconnection-process-enhancements-2023-change-in-allocation-schedule-for-transmission-plan-deliverability-for-the-2025-allocation-year>

² <https://www.caiso.com/Documents/ISO-CEC-and-CPUC-Memorandum-of-Understanding-Dec-2022.pdf>

deliver to load during stressed system conditions. In this track of the initiative, the ISO seeks to allocate deliverability in an efficient and equitable manner to projects demonstrating high commercial viability and alignment with resource plans.

Intra-cluster prioritization process

The ISO is proposing a new process to allocate headroom that is not dependent on waiting for long lead-time reliability network upgrades. The high volume of interconnection requests submitted in cluster 14 triggered a large number of network upgrades that will take many years to complete. The in-service dates for the affected resources will need to reflect the time to complete the long lead-time network upgrades. We anticipate many of the resources could interconnect without triggering the reliability network upgrades. Thus there is an opportunity within a particular cluster to award deliverability prior to completion of certain network upgrades, as the existing system may be able to accommodate some projects in an area.

To address this issue, the ISO proposes a reliability allocation process to allow some of the resources in the cluster responsible for triggering reliability network upgrades to interconnect one by one until just before triggering the need for the long lead-time network upgrades. The ISO will determine which resources interconnect by scoring eligible projects in a manner similar to the process for allocating deliverability.

For the purposes of this intra-cluster prioritization process, eligible long lead-time reliability network upgrades, including upgrades approved in the transmission planning process, would need to have an estimated time to construct of four or more years and serve as the sole reason for delaying the in-service date of multiple generation projects by two or more years. Resources in the cluster that trigger the need for the long lead-time reliability network upgrades would be eligible to compete for any available transmission capacity that exists prior to the upgrade actually being completed.

- The eligible reliability network upgrades will be posted on the ISO website. Eligible participating interconnection customers will submit forms with similar information to those submitted for the deliverability allocation process, but with additional scoring data based on deliverability allocation status and associated deliverability network upgrade status.
- The ISO would score and rank those projects to identify projects farthest along in the development process. The ISO would then provide those rankings to the participating transmission owners so they could perform an assessment to allow the highest ranking projects to come online prior to completion of the long lead-time reliability network upgrade.³

Modifications to Transmission Plan Deliverability Allocations

To facilitate interconnection of the most viable projects, the ISO proposes to streamline the allocation of transmission plan deliverability from the four allocation groups in the

³ Not to be confused with the interconnection request intake scoring process approved by the Board and FERC last Fall.

current tariff to three. The ISO now allocates deliverability in these four allocation groups: (A) interconnection customers with executed power purchase agreements (PPAs) or load-serving entities serving their own load; (B) interconnection customers actively negotiating a PPA or on an active shortlist; (C) interconnection customers that have achieved commercial operation for the capacity seeking deliverability; and (D) active projects that agree to specific retention criteria. The proposal removes the “Group B” category of customers negotiating PPAs or shortlisted, and replaces “Group D” with the conditional group. The modified groups are as follows:

1. **PPA group:** First priority will be given to projects with a PPA that meets the existing PPA eligibility requirements.
2. **Commercial Operation group:** Second priority will be given to eligible energy only projects in commercial operation. This group is only available to projects in clusters 14 and prior that are energy only. Cluster 15 and later projects that entered the queue as energy only are not eligible to seek deliverability allocations.
3. **Conditional group:** This group is similar to the current group D, but without the restrictions that currently prevent Group D projects from delaying or suspending their project for any reason. Any queued projects without a PPA will be included in the conditional group. Conditional allocations must be retained in the following deliverability allocation cycle with an executed PPA. If not retained, projects can again seek an allocation if the project’s cluster is eligible.

The modifications provide a simplified 2-step deliverability track for all projects where all eligible projects without a PPA would automatically be processed for an allocation through the conditional group. This helps simplify the allocation and retention process and maximizes competition for PPAs, making the bilateral procurement process the primary method for determining the value and viability of projects.

Cluster 14 and earlier projects will continue to be governed by the current groupings and rules, with the only changes coming into effect in the 2027 deliverability allocation cycle.⁴ Additional modifications to the deliverability allocation process include:

- Beginning with cluster 15, the ISO will no longer convert projects to energy only if they seek but fail to receive deliverability. Going forward, projects that have exhausted their three opportunities to receive deliverability will be withdrawn. The current practice of allowing projects to convert to energy only after failing to obtain a PPA as a deliverable project has resulted in an excess of unviable projects in the queue.
- The 2025 allocation cycle will be the last opportunity for cluster 14 and prior energy only projects to seek an allocation through either the current PPA or shortlist allocations groups. This will enable energy only projects to proceed

⁴ Changes in 2027 include the removal of the shortlist allocation group (group B) and removal of group D restrictions. In other words, groups A, B, C, or D will be available only in 2025 for clusters 14 and earlier, and any projects that receive group B or group D allocations in 2025 must retain it with a PPA in 2027 or the project will be converted to energy only.

through the deliverability allocation procedures based on the current rules. Cluster 14 and prior energy only projects will continue to be eligible to seek an allocation through the commercial operation group.

- Projects with a PPA during their cluster's interconnection facilities study may seek an allocation through the PPA group. The conditional group would not be open to projects until after the cluster's interconnection facilities study is complete.
- Deliverability scoring criteria will no longer consider criteria related to site exclusivity, to align with FERC Order No. 2023, or shortlisting. The ISO proposes a new category based on the level of progression through the generator interconnection agreement process.
- Deliverability transfers from cluster 15 and later clusters to earlier queued projects will be prohibited. Intra-cluster transfers will be permitted for cluster 15 and later projects in the deliverability study group, following existing rules. Deliverability transfers from cluster 14 and earlier to cluster 15 will be permitted, with the receiving customer maintaining the requirements and obligations of the transferring project. Finally, the ISO proposes to clarify that energy only projects may not submit a PPA requiring deliverability unless they are using it to seek deliverability.

Adjustment to the second interconnection financial security posting for parked cluster 14 projects

To align with the revised deliverability allocation process and recent changes to the allocation schedule, the ISO proposes to adjust the second interconnection financial security posting deadline for cluster 14 parked projects to May 29, 2026; sixty days after the deliverability allocation results are published. This gives the ISO a month to send out any adjusted interconnection financial security posting amounts, if needed, and provides the interconnection customer additional time after receiving adjusted amounts to decide whether to post additional security or withdraw. This is consistent with past schedules.

Special considerations for interconnection of long lead-time resources

The ISO currently has authority to reserve transmission capacity to fulfill the public policies addressed in the transmission planning process. For example, the ISO has reserved capacity for certain long lead-time resources, and has done so in previous transmission planning cycles. Stakeholders have asked for more transparency around the reservation process in this initiative. Going forward, the ISO also will provide more regular transparency around deliverability reservations resulting from policy guidance of the local regulatory authorities, to be articulated in the ISO's transmission planning process and approved each year in the transmission plan.

To designate and communicate deliverability reservations transparently, the ISO proposes the following process:

1. The transmission planning process will specify what types of resources can be eligible for reserved deliverability, namely, the resources that support the public policies requiring new transmission.
2. Within each recurring transmission planning process initiative, local regulatory authorities may review the standards and provide the ISO a list of specific qualifying resources eligible to compete for reserved deliverability.
 - For example, the ISO expects that the California Public Utilities Commission will provide its list as part of its decision conveying transmission plan scenarios before the transmission planning process commences.
 - The complete list of qualifying resources will be subject to stakeholder comment in the transmission planning process
3. The ISO Board-approved transmission plan will include a description of the qualifying long lead-time resources for each long lead-time policy upgrade, specific to that transmission plan, and informing future clusters.

The ISO will only reserve deliverability consistent with, and not to exceed, what is included in the approved local regulatory authorities' resource portfolios, submitted to the ISO in the most recent transmission planning process. To the extent interconnection customers seek deliverability beyond what is approved and reserved in the portfolio, they will have to compete for the excess, based on the deliverability allocation scoring process.

This process can provide specificity and transparency regarding the amount of transmission capacity reserved for future long lead-time resource deliverability, and will help the ISO articulate which resources are eligible to enter the interconnection queue with long lead-time resource points.

The ISO only will release reserved deliverability after formal cancellation of an associated policy-driven transmission project or if the generation or storage resource is later removed from the local regulatory authorities' portfolio (and is not added to another local regulatory authority portfolio in the same timeframe), with formal written decision by the local regulatory authority whose portfolio originally included the resource. The ISO would provide information regarding potential releases of reserved deliverability to stakeholders in the transmission planning process, for approval by the ISO Board of Governors in the annual Transmission Plan.

POSITIONS OF THE PARTIES

A large majority of stakeholders supported the intra-cluster prioritization proposal and the modifications to the deliverability allocation process, and appreciated the additional transparency around deliverability reservations going forward.

A small number of resource developers opposed the intra-cluster prioritization proposal. Because they suggested alternatives that would have either delayed the ISO's ability to move forward with this process or resulted in earlier clustered projects having to wait for upgrades they are not currently dependent on, the ISO declines to adopt the alternatives.

Some stakeholders expressed opposition to not allowing energy only projects in cluster 15 and beyond to seek deliverability allocations once they reach commercial operation. The ISO notes that FERC already approved this issue as just and reasonable in the ISO's track 2 interconnection process enhancement reforms. It is critical that the ISO prevent interconnection customers from bypassing the scoring of projects seeking deliverability by entering the queue as an energy only project, only to obtain deliverability once online.

Several stakeholders expressed concerns with the target due dates noted for deliverability affidavits in the final proposal, with many developers noting that shortening the window for deliverability affidavits can have significant implications for commercial timelines. The ISO understands this and posted a market notice on March 18, 2025, clarifying the new dates for deliverability affidavits, which seek to minimize impacts on stakeholders.

A number of stakeholders expressed concerns with the ISO's current practice of reserving transmission plan deliverability for specific resources, suggesting that this interferes with timely interconnection of the most ready and viable resources. The ISO clarifies that it currently has authority to reserve deliverability for long lead-time resources. Reservations of deliverability enable the ISO and local reliability authorities to ensure that transmission intended for a specific need is ultimately used to deliver the intended resource. The process proposed in track 3 enhances transparency by establishing a process for clear communication with local regulatory authorities about which resources require deliverability reservations.

CONCLUSION

Management recommends approval of these track 3 reforms. They are designed to accelerate commercial operation for the most viable and competitive projects in areas that align with local and state resource plans. The reforms will enable the ISO to continue to onboard the generation and storage resources necessary to meet reliability and policy needs, in a timely and equitable manner.

The ISO is committed to continuously monitoring and improving its interconnection processes and policies and plans to open a new interconnection process enhancements initiative later this year. This new initiative will review interconnection data and stakeholder feedback from cluster 15 (2024) and explore additional considerations for long lead-time generation and storage resources prior to opening cluster 16 in October 2026.