

## 2023 Interconnection Process Enhancements

Track 3 Draft Final Proposal

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## **Executive Summary**

The ISO has completed the first portions of the Interconnection Process Enhancements 2023 stakeholder process following two tracks. Track 1 addressed the need to pause cluster 15 and postpone the opening of cluster 16 to allow time for broader reforms to take shape, and track 2 developed the broader transformational changes to the interconnection request intake and queue management process to apply to cluster 15 and beyond. As the track 2 working group and stakeholder process progressed, the ISO identified the need for a third track to identify opportunities to prioritize projects within a cluster to facilitate timely interconnection of resources, and to address changes to the Transmission Plan Deliverability (TPD) allocation methodology. With this draft final proposal, the ISO continues to explore these issues as track 3 of the Interconnection Process Enhancements 2023 initiative.

For a generation resource to provide resource adequacy (RA), it must have deliverability status, achieved through an allocation of TPD. That is the capability, measured in megawatts (MWs), of the California ISO-controlled grid—as modified by transmission upgrades and additions modeled or identified in the annual Transmission Plan—to support the interconnection with full or partial capacity deliverability status of additional generating facilities in a specified geographic or electrical area of the ISO-controlled grid. Because most off-takers require a project to be eligible for RA, the TPD allocation process is very important to project development. The ISO believes it is prudent to consider adjusting the TPD allocation process given recent changes to the interconnection process track 2 approval by the Federal Energy Regulatory Commission (FERC) and the ISO's compliance with FERC Order No. 2023.

Stakeholder comments from the most recent paper and prior working group meetings are reflected in this document. A number of the items explored during working group discussions will require solutions beyond track 3 of this initiative. The ISO will continue to coordinate with state and local regulatory authorities, participating transmission owners, and interconnection customers to address alignment between procurement and development of infrastructure and generation.

The ISO proposes the following modified or new concepts as a track 3 draft final proposal:

- 1. Additional detail on the proposed process for prioritization of projects within clusters, using existing short-circuit duty (SCD)/reliability headroom before reliability network upgrades (RNUs) are completed.
- 2. Modifications to the TPD allocation methodology to reorganize TPD allocation

groups and establish distinct timelines for seeking TPD allocations. The proposed groups are:

- Projects with a power purchase agreement (PPA);
- Cluster 14 and prior projects in commercial operation;
- Other projects. The ISO proposes this "conditional group," will receive TPD with fewer restrictions than present. The ISO also proposes retention of the current "Group D" allocation group as part of this conditional group.
- Refinements to a proposal to designate and allow long lead-time public policy projects to defer their first attempt to seek TPD to better align with unique procurement milestones.
- 4. Extending the Second Interconnection Financial Security Posting for cluster 14 parked projects to align with the new TPD allocation timeline.

The proposed revisions align with the strategic direction established by a December 2022 Memorandum of Understanding among the ISO, California Public Utilities Commission (CPUC), and California Energy Commission (CEC), and are part of a broader ongoing effort to tighten linkages among resource and transmission planning activities, interconnection processes, and resource procurement. Adjustments to the track 2 provisions will be addressed in a future interconnection process enhancements initiative, with ample time for stakeholder discussion prior to the cluster 16 interconnection request window. The ISO also will continue to work on interconnection reforms through its compliance with the landmark FERC Orders No. 2023 and 1920.

The process reforms described in greater detail in this paper are designed to accelerate progress toward execution of an interconnection agreement and commercial operation for the most viable and competitive projects in areas that align with local and state resource plans. The goal of the reforms is to onboard in a timely manner the generation and storage resources necessary to meet reliability and policy needs. The ISO looks forward to continuing to work with stakeholders to refine this proposal in the interest of deploying new resources to meet the grid's evolving needs.

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

## 1. Introduction and Background

With the release of this paper, the ISO continues track 3 of the Interconnection Process Enhancements 2023 initiative.

The ISO initially set out the Interconnection Process Enhancements 2023 stakeholder process to follow two tracks, with track 1 addressing the need to pause cluster 15 and postpone the opening of cluster 16 and track 2 addressing development of the broader transformational changes for cluster 15 and beyond.

On June 12, 2024 the ISO Board of Governors approved the 2023 Interconnection Process Enhancements (IPE) initiative track 2 final proposal, as clarified in the final revised addendum to the IPE track 2 final proposal. The final proposal was approved by FERC on September 30, 2024 and became effective October 1, 2024.

During the track 2 stakeholder process, several new issues were identified relating to the relationship between projects in the interconnection queue and project procurement. Recognizing that while the IPE 2023 track 2 proposals would apply to cluster 15 and later clusters, the issue remained regarding how to revise the TPD allocation methodology and manage the unprecedented volume of cluster 14 and earlier queued projects. With track 2 reforms now in place, the ISO turns its attention to these important issues. In track 3, the ISO is developing reforms that will encourage continued progress toward commercial operation dates and reward active and advanced projects with deliverability in a timely manner. This is a substantial task and one that the ISO hopes to improve through continued feedback from stakeholders.

The ISO is committed to bringing new, approved, 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. The State of California is experiencing heightened levels of competition for new generation, as evidenced by the swelling of the ISO's interconnection queue in clusters 14 and 15. The ISO has approved many new transmission projects in the last two transmission planning process cycles and is committed to facilitating their on-time completion. But many of these projects will take 8-10 years to complete. Available transmission capacity on the system is finite, which limits the amount of TPD the ISO can allocate to assure generators they can deliver to load during stressed system conditions.

## 1.1. Track 3 Working Group Meetings

Recognizing the dynamic planning, procurement, and project development landscape, the ISO convened stakeholder working groups to discuss TPD modifications in August and September of 2024.

The working groups were convened to address three categories of issues regarding project development and TPD Allocation timelines:

- 1. TPD allocation issues for projects with long lead-time or delayed Deliverability Network Upgrades (DNUs) approved in the ISO Transmission Planning Process (TPP).
- 2. TPD allocation issues for projects with long lead-time or delayed Reliability Network Upgrades (RNUs) where the RNU only moves forward if funded by the projects needing the RNU.
- TPD allocation issues for long lead-time resources that meet the defined resource policy goals of local regulatory authorities for specific technologies and project locations.

Working group discussions helped the ISO better understand some of the inherent challenges described in the scenarios above, but also clarified that a number of these challenges extend beyond the TPD allocation process. Solutions will therefore also need to extend beyond track 3 of this initiative. The ISO looks forward to ongoing coordination with the CPUC and Local Regulatory Authorities (LRAs) to better align procurement and interconnection milestones. The CPUC's Reliable and Clean Power Procurement Program (RCPPP) will further inform the ISO's efforts to better align planning, procurement, interconnection, and deliverability awards and retention to address some of the challenges discussed in working group meetings.

Further coordination with participating transmission owners (PTOs) to maintain development timelines for network upgrades and transmission development will be critical to bringing new resources online when needed to meet policy and reliability objectives. To this end, the ISO will continue to provide transparency on the status of network upgrades and transmission development through the Transmission Development Forum, which the ISO convenes twice a year.

## 1.2. Scope of the Track 3 Draft Final Proposal

The ISO now proposes to advance the following concepts in this track 3 draft final proposal:

- Streamlining interconnection of projects currently in the by prioritizing the use of existing reliability headroom before all RNUs are completed;
- Modifications to the TPD allocation process;
- · Considerations for certain long lead-time generation resources seeking TPD; and
- Adjustment to the Second Interconnection Financial Security Posting for Cluster
   14 Parked Projects

Section 2 of this paper provides additional detail on a proposal for intra-cluster prioritization of projects seeking to use existing short-circuit duty (SCD)/reliability network upgrade (RNU) headroom before RNUs are completed. Section 3 of this paper describes elements related to modifying the TPD allocation and retention processes, considering the earlier discussions and iterations including comments received throughout the IPE initiative on this matter. Section 4 proposes additional detail and definition around special considerations for long lead-time resources. Section 5 proposes an adjustment to the Second Interconnection Financial Security Posting for Cluster 14 Parked Projects. Sections 6 and 7 outline next steps for the initiative and approvals.

The ISO anticipates that track 3, like earlier tracks, will result in tariff changes. The ISO plans for these proposed tariff changes to go only to the ISO Board of Governors and not to the Western Energy Markets Governing Body because the changes apply to the ISO-controlled grid and the ISO is not proposing changes to real-time market rules. The ISO anticipates this will continue to be the case independent of potential outcomes of the West-wide Governance Pathways initiative.

## 2. Streamlining Interconnection of Projects In-Queue

In the course of the track 2 stakeholder process, several issues emerged related to the unprecedented volume of cluster 14 and earlier queued projects. These projects have received final interconnection study results but are behind major network upgrades driven by the excessive number of interconnection projects that moved into the current phase 2 study process. The ISO seeks to address these residual issues, which were not the subject of the transformative track 2 proposal, in track 3. It is imperative that the industry continue to move forward with timely resource interconnections. While the ISO works to implement the track 2 changes, these additional reforms are needed—even if only in the transition—to keep resources in those clusters moving forward as effectively as possible. These topics were introduced in the July 8, 2024 straw proposal for Track 3B and have been refined throughout this initiative.

#### 2.1 Intra-Cluster Prioritization

## **Background**

The cluster 14 Phase II report identified several long construction-time short-circuit mitigation projects (e.g., circuit breaker replacements with higher short circuit interrupting capacity that require more than five years to complete). It is likely that the need for some of these mitigation projects will be eliminated as natural attrition results in project withdrawals from the queue. However, it could take many years for enough generators to withdraw from the queue, and until that happens, the in-service dates for the affected generation projects will need to reflect the time it will take to complete the short circuit mitigation.

The ISO expects that many of the generation projects could interconnect without triggering the need for the short-circuit mitigation. In other words, the existing system may be able to accommodate some, but not all of the similarly queued projects in an area. Normally such headroom would be allocated by cluster, from earlier to later; but cluster 14 alone is greater than the headroom available. As such, the ISO proposes a new process to allocate the initial, finite headroom. In the previous consolidated revised straw proposal, the ISO proposed an allocation process to allow generators to interconnect up to an amount that would not trigger the need for the long lead-time short-circuit mitigation. The process would be similar to the TPD allocation process.

#### Stakeholder feedback and discussion

Nearly all stakeholders generally supported this proposal, with some offering various modifications.

Including more than just short circuit mitigation projects

Several stakeholders encouraged the ISO to consider establishing this process more generically so that any long-construction upgrade could be evaluated for some projects to come online before those upgrades' completion.

The ISO observes that short circuit mitigation projects are the most prevalent type of long lead-time mitigation projects identified in cluster 14<sup>2</sup>. However, there are some long lead-time reliability network upgrades that are not driven by excessive short circuit

<sup>&</sup>lt;sup>2</sup> The ISO also notes that it already offers several options for projects to come online to some extent before all of their assigned network upgrades, including the limited operation study, operation for markets, energy only operation, and phased construction.

currently in cluster 14 and earlier clusters. Including those upgrades would require an entirely different study, as well as coordination of those studies and the different groups of engineers doing them. This may extend the timeline needed for the process. However, there are potential additional benefits from including all types of long lead-time reliability network upgrades in the proposed process, so the ISO has incorporated this change in the proposal.

#### An ongoing process available to both existing and future clusters

Stakeholders acknowledged that the long lead-time project issue is particularly acute with cluster 14, but they also pointed out that it could be an ongoing problem and may affect future clusters. They also noted that projects selected to advance before the completion of the upgrade could withdraw and be replaced by other delayed queue projects.

The ISO expects that future clusters will be much smaller than cluster 14. However, because cluster 14 and earlier cluster projects will still be in the queue for some time, the ISO agrees that long lead-time upgrades could still be triggered due to excessive numbers of projects in the queue. However, if the process were to be an ongoing process, the threshold for which short circuit mitigation projects would be evaluated needs to be reconsidered to balance the need for this proposal and the additional workload and complexity that would add to the process.

#### Affidavit information

Some stakeholders asked for clarification of the timing and details of the affidavit process. Some suggested expediting the timing. Some agreed with the ISO proposal to use the same affidavit information for this proposal that is used for TPD allocation. The ISO continues to support the idea of using the same affidavit information for this proposal as the affidavit information that is used for TPD allocation. The ISO agrees with the stakeholder comment that implementing a secondary process could become onerous. The next affidavit process and TPD allocation process is going to occur as soon as possible and will be coordinated with other study processes<sup>3</sup>.

A stakeholder requested that the ISO expedite this intra-cluster prioritization proposal. The ISO is moving forward on this process as expeditiously as possible, with an intent to seek Board Approval as early as March 27; after that, FERC approval will be required. Cluster 15 studies will begin in June and be completed in November.

<sup>&</sup>lt;sup>3</sup> The 2025 TPD allocation process requests are currently scheduled to be due September 1, 2025.

Processing the information needed for scoring in September and subsequently performing the analysis after the Cluster study is the earliest achievable schedule.

#### Allocation priority

One stakeholder proposed that priority should be given to generators with the lowest short circuit contribution so that a greater number of projects can come online earlier. The ISO may consider this proposal, but believes that using the TPD affidavit information is a better indicator of which projects will actually come online on schedule than using the short-circuit contribution. The short circuit contribution can be used as a tie-breaker, if needed.

One stakeholder suggested a process that allows projects to come online under provisional interconnection service in case projects are delayed. Projects interconnected under provisional service must accept operational constraints the ISO may need to impose to maintain reliability. Operational constraints can be managed using a maximum set point on resource output. The ISO response is that there is no framework for mitigating short circuit constraints in the operating horizon.

Two stakeholders proposed more detailed scoring metrics based on engineering design completion and status of procuring equipment without project specificity. One stakeholder argued that having a gen-tie or a substation already built or in advanced development would show that the generation is more likely to be built sooner. The ISO response is that the permitting status of the generation and the other metrics in the TPD allocation process are sufficient indicators of the likelihood of the generation being built sooner.

One stakeholder commented that deliverability upgrade schedules should not prohibit participation in this process. The ISO has modified the proposal to consider deliverability upgrade status and schedules in the scoring process rather than prohibiting participation.

One stakeholder proposed that this process not be limited to upgrades with an estimated time to construct of more than five years, and that serve as the sole reason for delaying the in-service date of multiple generation projects by more than three years. Instead they proposed that the process should include any Network Upgrades where potential headroom is available. The ISO response is the process needs to be manageable and should not include every RNU. Especially because the process will be ongoing. The ISO has modified the proposal to reduce the number of years to four and two instead of five and three. Limited operations study

One stakeholder asked for clarification regarding generation projects selected as not needing to wait for a long lead-time short circuit mitigation project and suggested a

limited operation study would not be required for that generation project to become operational prior to the upgrade going into service. In addition, one PTO proposed that a limited operations study should still be required. The ISO confirms that a limited operation study would not be required as long as there is 3% of margin (e.g., short circuit current less than 97% of the breaker capability or bus load flow less than 97 of its rating). However, if there is not adequate margin, then a limited operations study would be required. Margin is necessary to accommodate impacts from CPUC Rule 21 projects, FERC Wholesale Distribution Access Tariff (WDAT) projects that are studied outside of the cluster study process, and base case changes that could result in increasing the short circuit duty and exceeding the short circuit interrupting capability of the circuit breakers. The ISO also notes that interconnection customers may always elect to request a limited operation study within the timeframe for doing so. Stakeholders should refer to the track 2 final proposal, which discussed limited operation studies in depth.

In addition, if a limited operations study is still needed because there is less than 3% margin, the LGIA would continue to reflect a COD that allows enough time for the long-lead time upgrade to be completed. On the other hand, if there is at least 3% margin then the COD in the LGIA would be changed to the new earlier in-service date.

#### Additional requirements for projects selected

One stakeholder suggested that projects that benefit from this process should not be allowed to suspend or request a COD extension through the modification process. These projects must sign a GIA within a reasonable amount of time, such as four months after completion of the prioritization study. Another stakeholder opposed the suggestion to not allow projects benefiting from this process to suspend or request a COD extension through the modification process, due to the inherent uncertainties associated with the development of a project. That stakeholder suggested instead that the ISO impose a condition for any project delaying its COD beyond what is enabled by its secured headroom, to release that headroom, with the ability to participate in the next intra-cluster prioritization cycle, which would take into account its updated COD. The ISO believes that customers that receive a prioritization will be the projects with the highest ranking after considering the TPD allocation scoring metrics, so the ISO expects these customers will move forward in a timely manner.

#### Logistics of the reliability analysis

One PTO asked for clarification on whether the evaluation would be performed using short circuit results from the reassessment study and other available information, and how impacts from Rule 21 projects, WDAT projects, and base case changes would be considered. The ISO responds that the PTOs could use existing study results as much

as possible to simplify any additional analysis that is needed, and short circuit duty margin could be set aside to ensure that changes from Rule 21 projects, WDAT projects and other base case changes would not cause reliability issues. The ISO and PTOs could coordinate their study processes to allow consistency.

#### Other clarifications on the process

Stakeholders requested clarifications on several other items. The ISO clarifies that the generation projects in the cluster that is currently triggering the need for the RNU will need to go through the prioritization process. Generation projects in earlier clusters already have a higher priority than later clusters.

Interconnection customers already have the necessary information in their study reports to know which upgrades would go through the process. The ISO and PTOs would probably require about one month after the proposal is approved to identify the upgrades that would be considered.

The forms providing information necessary for the scoring process will be due at the same time as the TPD allocation request forms, and once the study has been completed, a study report will be posted.

Similar to the TPD allocation process, the intra-cluster prioritization studies will be funded by an additional study deposit of \$50,000 provided by each interconnection customer participating in the study.

Long lead-time precursor network upgrades also can be considered in the process.

## **Proposal**

The ISO proposes a reliability allocation process to allow some of the generators in a cluster that is responsible for triggering a reliability network upgrade to interconnect up to an amount that would not trigger the need for the long lead-time short-circuit mitigation or other long lead-time reliability network upgrades. The process would be similar to the TPD allocation process and would occur in September 2025.

For example, short circuit duty RNUs identified in the cluster 14 Phase II report with an estimated time to construct of more than four years, and that serve as the sole reason4 for delaying the in-service date of multiple generation projects by more than two years,

<sup>&</sup>lt;sup>4</sup> For example if a generation project has to wait three years for a transmission upgrade needed for an RNU, reliability PNU, or Interconnection Facility and has to wait four years for a different long lead time upgrade, then the long-lead time upgrade is only creating a 1 year delay for that generation project.

would be considered in this process. The RNUs to be considered would be identified by the ISO and PTOs and posted on the ISO website. Using the same example, cluster 14 generation projects could then submit forms with similar information to those submitted for the TPD allocation process. Table 1 below shows the same scoring data that are proposed for the TPD allocation process. However, the ISO proposes an additional column to include scoring data based on TPD allocation status and associated deliverability network upgrade status. For the intra-cluster priority, the highest sum of the scores from each of four columns would establish the priority.

Table 1. Revised TPD allocation scoring for intra-cluster priority

Points (select one per category)	Permitting	Power Purchase Agreement Status	GIA Status	Deliverability Upgrade Status (proposed for intra- cluster prioritization)
10	Has Final government permit to construct, or Has authorization to construct with a qualifying exemption <sup>5</sup>	Off-taker is procuring the capacity to meet its own RA obligation, or the Interconnection Customer is a Load Serving Entity serving its own Load	The Interconnection Customer has provided payment and security to the Participating TO <sup>6</sup>	Full Capacity Deliverability Status Allocated project not waiting for any transmission upgrades needed for deliverability or Energy Only Deliverability Status (EODS) project
7		Has an executed PPA	The Participating TO has received written authorization to proceed with construction from the Interconnection Customer <sup>7</sup>	
5	Draft Environmental Report w/no significant impact that cannot be mitigated			
3	Data adequate		Has provided to the ISO the required GIA Deposit <sup>8</sup>	Full Capacity Deliverability Status Allocated project waiting for a transmission upgrade needed for deliverability
1	Applied			
0				Full Capacity Deliverability Status Requested project

Tied projects for the same General Reliability Network upgrade (GRNU) headroom

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<sup>&</sup>lt;sup>6</sup> In accordance with Article 5.6.4 of the LGIA (Appendix LL). Performance of these obligations under SGIA (Appendix MM) shall be as defined in Article 5.6.4 of Appendix LL (LGIA).

would be settled based on SCD contribution, or flow impact, with the least contribution winning the tie. For Interconnection Reliability Network Upgrades (IRNUs), tied projects would be settled based on the largest MW size. The 2025 TPD allocation process requests are currently scheduled to be due September 1, 2025. Those cluster 14 generation projects would also provide funding for the necessary studies. The ISO would rank those projects as described above, and provide those rankings to the PTOs so they could perform an assessment to allow the highest ranking projects to come online prior to completion of the upgrade. The PTOs could use existing study results as much as possible to simplify any additional analysis needed, and short circuit duty and loading margin could be set aside to ensure that changes from Rule 21 projects, WDAT projects and other base case changes would not cause reliability issues. The ISO and PTOs could coordinate their study processes to allow consistency. Remaining projects would have to wait for the remaining assigned RNUs to be completed and placed in service. Cost responsibility for the upgrades would not be affected by this process.

# 2.2 Modifications to the Priority for Awarding Interim Deliverability Background

When multiple generation projects behind a common transmission constraint become operational before all required delivery network upgrades are in service, available deliverability is allocated on an interim basis for the following operational year. Currently, earlier queued projects have a higher priority than later queued projects. An issue arises when, for example, a battery facility is added to an existing queue position through the MMA process and inherits the queue priority of the original project, thereby jumping ahead of a later queued project already established in the interconnection process for years before the battery facility was added. In the revised straw proposal, the ISO proposed prioritizing interim deliverability allocations based on the date the generating unit received the TPD allocation rather than its interconnection request date.

### Stakeholder feedback and discussion

Although some stakeholders supported the ISO's proposal, most stakeholders expressed concern with changing the current priority because they have already made

<sup>&</sup>lt;sup>6</sup> In accordance with Article 5.6.4 of the LGIA (Appendix LL). Performance of these obligations under SGIA (Appendix MM) shall be as defined in Article 5.6.4 of Appendix LL (LGIA).

<sup>&</sup>lt;sup>7</sup> In accordance with Article 5.6.3 of the LGIA (Appendix LL). Performance of these obligations under SGIA (Appendix MM) shall be as defined in Article 5.6.3 of Appendix LL (LGIA).

<sup>&</sup>lt;sup>8</sup> In accordance with Appendix KK, Section 13.3.

business decisions based on the existing priority order. Many of these stakeholders expressed the possibility of supporting the ISO proposal as long as all current projects were grandfathered in under the existing priority. One stakeholder argued that the ISO proposal was focused on a specific situation.

The ISO proposal was primarily focused on the large number of battery facility additions that have occurred under the MMA process over the last several years. Going forward, the ISO believes the number of battery facility additions through the MMA process will be substantially fewer than in the recent past. Unlike in the past, there are not expected to be any batch MMA processes or rotating blackouts going forward that will trigger a large number of such battery additions through the MMA process. The ISO also believes that legacy arrangements and grandfathering different priorities would create undue complexity in the interim deliverability allocation process, given its temporary nature.

Some stakeholders reiterated their previous comments that the ISO should establish a multi-year interim deliverability process. In the original version of the 2024 TPD Allocation Report, the ISO identified an opportunity where long-term interim deliverability would likely be available. However, instead of establishing a long-term interim deliverability process, the ISO allocated the deliverability that would be available at an earlier time as FCDS-based on the scores in the 2024 TPD allocation process. The ISO does not think it is likely that there will be sufficient information to predict when allocated deliverability will go unused for multiple years, except in situations like the one identified in the revised 2024 TPD Allocation Report. One stakeholder agreed that it is not possible to say with certainty how much multi-year interim deliverability will be available and when, but stated that this is not a reason to drop the proposal. That stakeholder encouraged the ISO to implement a framework for multi-year interim deliverability, at least on a trial basis. If after multiple studies there is no interim deliverability available, the ISO could then eliminate this provision. The ISO believes that deliverability is allocated only when there is a high level of certainty that the resource will be deliverable when it is needed for resource adequacy. If a high level of certainty is not possible, as the stakeholder agreed, then multi-year interim deliverability should not be allocated.

## **Proposal**

Based on stakeholder comments, the ISO is no longer proposing to modify the priority for allocating interim deliverability. For the reasons described above, the ISO also is not proposing a framework where current generation projects under development would have a different priority framework than future generators. Therefore, the current interim

deliverability allocation priority framework described in the BPM would remain for all current and future generation projects.

## 3. Modifications to Transmission Plan Deliverability Allocations

## **Background**

Because most off-takers require a project to be eligible to meet their resource adequacy (RA) obligations, the TPD allocation process is very important to project developers. The CPUC resource portfolios and Local Regulatory Authority (LRA) resource plans designate the specific resource types and capacity to be developed, which the TPP uses to determine the transmission projects necessary to support those specific new resource requirements. This can result in the LRA designating an area for significant resource development that would not typically be the focus of large transmission expansion due to the relatively lower load levels and low load growth of the area. When such an area becomes the focus of significant generation development due to an emerging generation technology or an opportunity for resource diversity, a large transmission project may be needed to support the emerging need. In these circumstances, the basis for the transmission project is to serve the specific public policy requirement that requires the technologies in the portfolio. In other words, the transmission project would not be needed but for the LRA need identifying the technology at the specific location.

In the current environment of accelerated targets for resources in the near-term horizon, there are challenges related to when it is most advantageous for projects to enter the interconnection queue. Projects aligned with the most recent Integrated Resource Plan (IRP) and transmission planning process (TPP) will likely need to stay in the queue for a number of years, waiting for completion of required upgrades. The absence of LRA procurement authorization for projects with potential commercial operation dates aligning with long lead-time upgrades adds further uncertainty for project developers. Projects become eligible to seek an allocation after the cluster studies are completed and then have a limited period when they are eligible to seek an allocation before being converted to Energy Only status. The TPD allocation process gives highest priority to projects that have executed a power purchase agreement (PPA) or are shortlisted for procurement. For projects with longer lead-time network upgrades, the window of opportunity to seek an allocation can be several years before their network upgrades are completed and possibly before load-serving entities (LSEs) seek to procure projects with later commercial operation dates (CODs).

The following provides a reference to the existing TPD allocation groups, the eligibility requirements for each and the order in which the groups are considered for potential allocation of available and planned TPD capacity.<sup>9</sup>

The ISO currently allocates TPD to the following four groups, A - D:

- (A) To Interconnection Customers that have executed PPAs, and to Interconnection Customers in the current Queue Cluster that are Load Serving Entities serving their own Load.
- (B) To Interconnection Customers that are actively negotiating a power purchase agreement or on an active short list to receive a power purchase agreement.
- (C)To Interconnection Customers that have achieved Commercial Operation for the capacity seeking TPD.
- (D)To Interconnection Customers electing to be subject to GIDAP Section 8.9.2.3.

Table 2. Current TPD Allocation Groups

Table 2: Current 1FD Anocation Gloups									
Allocation Group	Project/Capacity Status	Commercial Status	Allocation Rank						
A	Any project (active IR or achieved commercial operation)	Executed power purchase agreement requiring FCDS <sup>10</sup> or interconnection customer is an LSE serving its own load	Allocated 1st						
В	Any project (active IR or achieved commercial operation)	Shortlisted for power purchase agreement or actively negotiating a power purchase agreement	Allocated 2nd						
С	Any project that achieved commercial operation	Commercial operation achieved	Allocated 3rd						
D	Any active project that meets the allocation group D criteria	See criteria above	Allocated 4th						

The TPP identifies transmission projects to meet the policy goals of LRAs for specific resource technologies in specific locations. The ISO must ensure such transmission capacity is reserved for the specific technologies a transmission project is designed to serve. Doing otherwise would frustrate or countermand the public policy requirement the project was approved for. It may take many years for the transmission project to be

<sup>10</sup> Full Capacity Delivery Status (FCDS).

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<sup>&</sup>lt;sup>9</sup> <u>Generator Interconnection and Deliverability Allocation Procedures</u> BPM Section 6.2.9.4Second Component of the Allocation Process: Allocating TP Deliverability

permitted, constructed, and go into service, requiring the associated transmission capacity to not be used until the emerging technology can use it. For example, awarding the transmission capacity for Northern California offshore wind as generic TPD for generic RA needs would serve a different public policy goal than the goal the transmission was actually approved for.

The following is a summary of the ISO's proposal from the track 3 consolidated revised straw proposal.

#### Allocation Groups

The ISO proposes to reduce the allocation groups to three:

<u>1st priority group</u> – the PPA group (formerly group A) for projects with a PPA that meet the existing PPA eligibility requirements (provided in the ISO Tariff Appendix KK, Section 8.9.2).

<u>2nd priority group</u> – the Commercial Operation group (formerly group C) for eligible Energy Only projects that go into commercial operation.

<u>3rd priority group</u> – Conditional group (new group) for any projects without a PPA, similar to the current group D, but a distinct new group without group D restrictions.

The ISO proposes to no longer provide allocations to projects that are shortlisted.

The three proposed allocation groups simplifies the TPD process for developers, LSEs, and the ISO. It provides a simplified 2-step TPD track for all projects where all eligible projects without a PPA would automatically be processed for an allocation through the Conditional group. It eliminates the two-step retention process, avoids concerns that stakeholders have raised regarding questionable practices in project short-listings, and simplifies a complex project allocation tracking process. Moreover, it maximizes the capacity from each cluster that is able to compete for a PPA to meet accelerated procurement targets and puts the bilateral procurement process in the driver's seat for determining the value and viability of projects competing for a PPA. This levels the playing field in procurement where most projects would have a Conditional TPD allocation, allowing the procurement process to focus on other high value project attributes.

Multi-fuel projects receiving an allocation with PPAs

When seeking an allocation under the PPA group for a multi-fuel project, the interconnection customer will request a specific MW capacity for each fuel type for which it seeks an allocation. In addition, the request must provide the desired ranking order for each fuel type to be considered.

#### **Parking**

The ISO proposes to discontinue the parking process. Pre-cluster 15 projects will continue with the TPD allocation procedures, including any parking opportunities, in accordance with ISO Tariff Appendix DD.

#### Opportunities to seek TPD

Projects will have three consecutive opportunities <sup>11</sup> to seek an allocation of TPD. With parking eliminated, projects will no longer need to qualify for parking to seek an allocation in these three opportunities. Projects that have exhausted their three opportunities to receive TPD will be withdrawn. The previous proposal allowed projects to convert to Energy Only rather than be withdrawn. The change was made because Energy Only projects have the potential to need both local and area deliverability capacity that FCDS projects are counting on, and in some cases funding. Under the this proposal, many FCDS projects will receive a Conditional TPD allocation positioning them to be of interest to LSEs seeking to contract with projects with an allocation of TPD. Allowing Energy Only projects to seek TPD in the PPA allocation group could result in the ISO no longer being able to guarantee that some FCDS projects with a Conditional allocation are truly deliverable. Therefore, projects that have exhausted their three opportunities to receive TPD will be withdrawn. This will prevent stalled projects from reserving reliability related capacity and causing more viable projects to require costly and long lead-time RNUs that will likely never be needed.

In addition, the ISO sought stakeholder input on whether projects should be able to seek an allocation during the interconnection facilities study by demonstrating they have a PPA.

#### Eligibility of Energy Only projects to seek TPD

The 2025 allocation cycle will be the last opportunity for Energy Only projects in the queue to seek an allocation through either the PPA or Shortlist allocations groups. This will give projects in clusters prior to cluster 15 that are Energy Only one additional opportunity during the 2025 TPD allocation cycle to seek an allocation under these two allocation groups.

<sup>&</sup>lt;sup>11</sup> The opportunities to seek and retain allocations of TPD are typically done on an annual basis, but circumstances may result in the timing of the successive opportunities to be more than one year apart.

• Technology additions, added through the modification process to projects that were successful in the deliverability intake scoring process<sup>12</sup>, will be Energy Only and remain Energy Only, and be permitted to seek a TPD allocation solely through the Commercial Operation group, regardless of whether the requested addition is before or after their COD (via an MMA or Post-COD modification). Generating facilities that complete a TPD transfer that results in a portion of a project becoming Energy Only will be required to downsize to the portion of the project that has TPD.

For eligible Energy Only projects that seek TPD, the ISO will require a flat fee of \$5,000 to seek a TPD allocation in the cycle.

Any project that is Energy Only and later provides a PPA to modify its COD, must provide a PPA that specifies an Energy Only product. Energy Only projects cannot remain in the queue based on a PPA that is contingent on receiving or that requires TPD.

#### Documentation

The ISO will assess requests and substantiating documentation based on the documents as submitted by the TPD-retention or TPD-seeking request due dates. Documents required in the request processes that are not received by the request due date will not be accepted.

Modifications to the TPD scoring criteria:

The proposed modifications to the TPD scoring criteria are not summarized here to save space. The current proposal is provided in the proposal section below with the one proposed adjustment in red.

Scoring for the Commercial Operation group

The prioritization of allocations for the Commercial Operation group is proposed to be in the following order:

- 1. Projects that demonstrate having a RA contract
- 2. Lowest Distribution Factors (DFAX)

<sup>12</sup> Technology additions to Energy Only projects will always be Energy Only with not opportunity to receive TPD.

#### Stakeholder feedback and discussion

The stakeholder comments summarized below were based on the November 11, 2024, track 3 consolidated revised straw proposal, summarized above.

#### Three allocation groups

AES, CPUC, CESA, Clearway, ENGIE, GridStor, MN8 Energy, NCPA, REV, SEIA, Six Cities, and SCE support or do not oppose the proposed three allocation groups. REV supports, including removing the Short List group and creating the Conditional group. SCE agrees that until parties execute a PPA, the ISO should not prioritize the allocation of deliverability and instead preserve deliverability for projects that have the highest likelihood of coming online. In addition, SCE stated that while shortlisting status does indicate commercial interests, it is a signal of commercial interest at a very early stage of a procurement process and should not be relied upon when allocating deliverability.

ACP-California, CalWEA, GSCE, Intersect, LSA, and NextEra proposed modification to the three allocation groups. GSCE opposed removing the group D restrictions from the conditional allocation group. GSCE, Intersect, LSA, NextEra, and Terra-Gen opposed removal of the shortlist allocation group. In response, the ISO has not made significant changes to the proposed three allocation groups; however, it has made a number of clarifications and provided additional detail. The primary concern of stakeholders in doing away with the shortlist allocation group was related to the time it takes to negotiate and execute a PPA, which could make it difficult for a project that receives a conditional allocation to retain that allocation by the next retention due date. The ISO discussed this concern with a number of LSEs and concluded that most, if not all, are willing to align their procurement processes with the ISO's cluster study and TPD allocation procedures. LSEs further indicated they plan on starting their procurement processes soon after the interconnection facilities studies are completed and would not wait for the results of the TPD allocation process to become available. As a result, the ISO developed an example of a procurement schedule that is more than seventeen months in length—enough time to negotiate and execute a PPA and enable projects to retain a conditional allocation. The example is provided in the ISO proposal below.

Three consecutive annual opportunities to seek an allocation

ACP, AES, CPUC, Calpine, CESA, Intersect, Six-Cities, SCE, and Terra-Gen supported or did not oppose the proposed three consecutive opportunities to seek an allocation. ACP stated that providing three opportunities with the conditional allocation group to secure a PPA appears to strike a reasonable balance in keeping projects moving through the process while also providing enough time for development activity. The CPUC stated that the proposal offers reasonable opportunity for projects to seek

deliverability in a timeframe that generally matches the expected commercial operation of projects. Calpine supports forced queue withdrawal at the conclusion of the allocation window, rather than conversion to Energy Only. The Six Cities agree with the ISO that three opportunities to retain a Conditional TPD allocation is sufficient for a project to demonstrate its viability for obtaining a PPA.

CalWEA, Clearway, GSCE, ENGIE, MN8, NextEra, REV, PG&E support, but offer modification to three opportunities to seek TPD. CalWEA, GSCE, NextEra, PG&E oppose the "three strikes and you're out" concept, stating that projects should be allowed to convert to Energy Only at the end of their three opportunities and not be withdrawn. The ISO continues to disagree. Energy Only projects in the queue retain their RNUs that by and large are not being constructed because the Energy Only projects are not moving forward. This results in unnecessary RNUs being required for later queued FCDS projects that are costly and time-consuming for the PTOs to build, hindering their ability to proceed on a timely basis and hindering LSE procurement targets and California's ability to meet its goals to reduce carbon emissions.

Clearway is concerned with long lead-time network upgrades and the lack of procurement for later projects. ENGIE stated that projects requiring long-lead-time NUs be offered the opportunity to delay TPD allocation until they are better positioned to obtain a PPA. MN8 Energy stated the ISO should allow projects to start the three-cycle TPD request window 3-4 years prior to the in-service date of the longest lead time contingent network upgrade. The ISO understands these issues and has considered the suggested options to provide some level of relief. The ISO believes that procurement market dynamics are better suited to handle these issues. The PPA market will seek out projects that are best suited to meet the needs of the off-taker, which includes the earliest achievable COD of the projects competing for a PPA. If the distribution of project CODs increases over time, the procurement process will adapt to that reality. It is best to let market dynamics deal with these issues rather than attempt to provide solutions in the TPD allocation procedures that could further complicate the issue.

MN8 also raised the concern about projects being admitted to the queue on the basis of TPD that ultimately may not be available when their studies are completed and they begin to seek an allocation. This issue is related to both the cluster intake procedures currently being implemented and the structure of the TPD allocation process. The ISO compared the combination of the current tariff's intake process and the IPE track 3 proposal to a potential alternative based on MN8's suggestion, concluding that its current proposal, taking into account the current cluster intake process, operates in a superior manner: The process of reserving the available TPD for each cluster and not allowing other cluster projects to be allocated a given cluster's TPD had negative long-term impacts on the number of projects able to enter each cluster. While the ISO

understands the concern MN8 raised, the issue is a dynamic of the competitive nature of the interconnection process, which should allow the best projects to move forward as quickly as possible, rather than being hindered by some form of capacity reservation that is based on initial project viability from the cluster intake scoring system.

Ability to seek an allocation during the Interconnection Facility Study

AES, EDF, Intersect, LSA, NextEra, PG&E, and Terra-Gen supported or did not oppose projects having the ability to seek an allocation during the facilities study by demonstrating they have an executed power purchase agreement. LSA stated that since it will likely be many months between the end of the facility study and the results of the next TPD Allocation, projects with PPAs should have the opportunity to proceed more quickly to meet their requirements. PG&E considered the option to be reasonable for the few cases where projects do not trigger large upgrades.

CalWEA, Calpine, GridStor, and PARS opposed the option. CalWEA did not support. noting that this would create an opportunity for unfair competitive advantage for utilityowned projects. The ISO notes that the CPUC and other local regulatory authorities approve their jurisdictional utilities' self-owned projects and would likely not approve such a project without knowing its final costs to interconnect. Calpine stated that it creates an unjust priority within the same group of clustered interconnection customers. The ISO responds that all projects have the same opportunity and if a project is able to secure a PPA at this point in the process, it would not be just to make the interconnection customer and the off-taker wait for the likely inevitability of receiving an allocation a year later. GridStor stated that allowing projects to seek TPD allocations during the facilities study process would create a significant competitive benefit for signing off-taker contracts before there is clarity regarding final study results with significant cost and schedule details. Effectively, GridStor argues, the ISO would be asking developers to shoulder more risk for advantage over their competition, which could increase the likelihood of contract failure. The ISO counters that the process is totally voluntary for projects and off-takers where a PPA at this point in the process is appropriate and does not put any party at increased risk. The ISO will do all it can to ensure that sham or conditional PPAs are not used to try to obtain an allocation inappropriately.

Multi-fuel process for requesting TPD

CESA, NextEra, Six Cities, and Terra-Gen support the proposed methodology for multifuel projects requesting TPD. AES recommended adding some flexibility for parties to transfer the received TPD from one fuel type to another should TPD only be awarded to

one fuel type. A number of other commenters requested clarifications on the process. The ISO made a number of clarifications in the proposal below.

Opportunities for Energy Only projects

ACP, AES, CPUC, Calpine, CESA, GridStor, Intersect Power, Lotus Infrastructure Partners, LSA, NextEra Energy Resources, PG&E, Rev Renewables, and Six Cities, provided comments in support of allowing Energy Only projects only one additional opportunity to seek a TPD Allocation in 2025 and only in the Commercial Operation group going forward.

CESA, Clearway, EDF-Renewables, MN8, NextEra Energy Resources, PG&E, requested clarification on which Energy Only projects would be eligible to seek a TPD allocation under the Commercial Operation group. Cluster 14 and earlier Energy Only projects would be eligible to seek a TPD allocation in the Commercial Operation Group. Cluster 15 and later projects that entered the Queue as Energy Only are not eligible to seek TPD allocation per Section 4 of ISO Tariff Appendix KK.

Clearway further commented that Energy Only projects should not be automatically withdrawn, but rather be subject to Commercial Viability Criteria that requires a PPA after 7 years in the queue, stating that the CPUC resource portfolios reflect this timeline. The ISO maintains that, historically, these Energy Only resources are being procured as part of hybrid/co-located projects, a portion of which have deliverability and a RA obligation. Most projects are not financially viable as stand-alone Energy Only projects; off-takers prefer projects that provide RA value relative to what the technology can deliver.

The CPUC asked for clarification on how a project could have a resource adequacy PPA without already receiving a TPD allocation. The ISO confirmed that in the 2023 and 2024 TPD cycles 96 projects sought a TPD allocation in Group A, which required an executed PPA prior to receiving a TPD allocation.

ENGIE, Executive Consulting Services, GSCE, Intersect Power, Lotus Infrastructure Partners, LSA, and Terra-Gen, LLC expressed concern about the prohibition on Energy Only projects ever seeking a TPD Allocation. The ISO is providing clarification that cluster 14 and earlier Energy Only projects would be eligible to seek a TPD allocation in the Commercial Operation Group, regardless of how they became Energy Only. Projects in cluster 15 and beyond that entered the queue as Energy Only are not allowed to seek a TPD allocation per Section 4 of ISO Tariff Appendix KK (with specific exceptions for technology additions). Allowing projects to switch deliverability status would circumvent the competitive screening processes.

ACP-California, CESA, EDF-R and LSA noted that projects in cluster 15 and beyond that submit an Energy Only interconnection request should be allowed to seek allocation of TPD in the Commercial Operation group, recognizing that the prohibition to do so is in the existing ISO Tariff Appendix KK that FERC approved September 30, 2024. The ISO and FERC disagree. In its order, FERC stated: 13

Finally, we decline to direct CAISO to clarify that an interconnection request that completes the interconnection study process and executes a GIA may change its status in a future cluster, without having to withdraw their initial interconnection position. As CAISO explains, interconnection requests that proceed to the cluster study based on energy-only criteria may not obtain deliverability through transfers, modifications, or the TP deliverability allocation process because "[i]nterconnection customers could proceed under the less competitive energy-only criteria to avoid competition, then receive deliverability later or after studies."14 We note that CAISO's Tariff does, however, permit expansions of generating facilities with energy-only deliverability status to receive deliverability if their interconnection requests proceed to the cluster study based on the criteria for interconnection requests seeking deliverability. 15 CAISO's Tariff also permits an interconnection customer to submit a new interconnection request for its generating facility if it seeks to be studied for deliverability in the future.

As the CAISO has maintained, allowing projects to switch deliverability status would circumvent the competitive screening processes.

LSA and SEIA also commented that pre-Cluster 15 Energy Only projects should not be limited to one more opportunity to seek TPD, and that such projects should be able to continue to seek a TPD allocation under any group in which they can qualify, not just the Commercial Operation Group. The ISO maintains that to best manage the TPD process, it will be important to ensure that the most viable projects are proceeding forward and limit projects from lingering in the queue.

NextEra requested that the ISO clarify if merchant projects (clusters 15 and beyond) that are converted to Energy Only would be allowed to apply for TPD. The ISO clarifies that once a merchant project is converted to Energy Only, it is no longer eligible to seek an allocation as Energy Only.

<sup>&</sup>lt;sup>13</sup> FERC Order Re: Docket No. ER24-2671-000, Issued September 30, 2024, at 214.

<sup>&</sup>lt;sup>14</sup> Transmittal at 29.

<sup>&</sup>lt;sup>15</sup> CAISO, CAISO eTariff, app. KK, § 4 (Cluster Study Criteria) (1.0.0).

NCPA requested the ISO clarify that the modification process is not the same as the Repowering process. The ISO confirms that these are two separate and distinct processes.

#### TPD Allocation Scoring Criteria

CalCCA, CESA, ENGIE, LSA, REV, and Six Cities supported or did not oppose the modified TPD scoring criteria. CalWEA, Intersect, PG&E, and Terra-Gen suggested modifications. CalWEA suggested shortlisted projects should have higher priority within the conditional group. As has been stated above, the ISO does not support including a shortlisted allocation group. Intersect opposed the five-point differential between LSE and non-LSE PPAs and suggested that non-LSE PPAs should at least be granted three points to reduce the competitive imbalance. The ISO maintains that policy driven TPD capacity is built for and paid by ratepayers to support the resource adequacy program, and LSEs who have RA requirements to meet should have priority over off-takers who do not and will not adjust the point values. Intersect proposed that projects that have executed an Engineering & Procurement agreement with their PTO to start funding Network Upgrades be given additional points. The ISO believes that the new FERC Order No. 2023 requirements to execute GIAs soon after the facilities study will result in diminished need for Engineering & Procurement agreements to differentiate between projects. Intersect also proposed permitting scoring refinements associated with the CEQA process. The ISO hesitates to include CEQA in any of our scoring process because the rules can be convoluted and have the potential to change with each legislative session. In addition, there are appeals processes associated with CEQA which could make any point in time scoring less certain. Terra-Gen proposed modifications to the GIA points due to issues controlled by the PTO and out of the control of the interconnection customer. The ISO responds that the strict requirements for processing GIAs in the FERC Order No. 2023, coupled with the anticipated reduction in the number of GIAs that will be processed each year, the ISO anticipates that GIA's will be completed more quickly.

## **Proposal**

#### Allocation Groups

The ISO proposes to reduce the allocation groups to three, described below. These allocation groups will be used for clusters 15 and beyond. Projects in clusters 14 and prior will continue to be governed by the current TPD allocation procedures, with the exceptions described further below.

- 1. **PPA group**: First priority will be given to projects with a PPA that meets the existing PPA eligibility requirements (provided in the ISO Tariff Appendix KK, Section 8.9.2).
  - The ISO will require that the LSE or non-LSE off-taker verify that the PPA provided by the interconnection customer is active and meets the tariff requirements for a PPA. Then, approximately annually, as part of the TPD retention process, the LSE or non-LSE off-taker must confirm that the PPA is still active and continues to meet tariff requirements. If the PPA is no longer active or does not meet the requirements, the project will lose its allocation, and will be able to re-seek an allocation if its cluster is eligible to do so. However, if the cluster has completed its three opportunities to seek an allocation, the project will be required to withdraw.
- 2. **Commercial Operation group:** Second priority will be given to eligible Energy Only projects that go into commercial operation. This allocation 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 an allocation under the 2<sup>nd</sup> priority group, nor any other group.
- 3. **Conditional group**: This is a distinct new group for any projects without a PPA, similar to the current group D, but without group D restrictions. Any projects without a PPA would by default be included in the conditional allocation process with a scoring process to determine which projects receive available TPD. Conditional allocations must be retained in the following TPD allocation cycle with an executed PPA. If not retained, projects can again seek an allocation if the project's cluster is eligible to do so. The TPD capacity allocated through the Conditional group would be included in the calculation for determining the amount of available TPD for the next cluster study, thereby reducing the amount of project capacity to be studied at that time.

The ISO proposes that the procurement processes of LSEs should begin soon after the interconnection facilities reports are provided to the interconnection customers. The facilities study report meetings are scheduled for the August before a cluster's first opportunity to seek a Conditional allocation by providing its project scores for the TPD allocation process in mid-March of the following year. The following is the schedule of key dates the ISO proposes for a robust procurement process. Year X is the year the facilities study is completed for a given cluster.

- 1. September 1 of year X Procurement process begins in the September after the facilities study is completed and study report meetings are done, allowing all current cluster projects to participate before TPD allocations are known.
- 2. March 15 of year X+1 TPD scoring for the Conditional and other TPD allocations are due.
- August 1 of year X+1 TPD allocation results are provided to the interconnection customers, providing off-takers the added information on which projects receive TPD Conditional allocations. At this point off-takers have had eleven months to evaluate projects participating in their procurement programs.
- 4. March 15 of year X+2 Retention due date for the Conditional allocations where executed PPAs are required to retain Conditional allocations. The total time from (1) through (4) is more than seventeen months enough time for off-takers to evaluate the competing projects and for off-takers and shortlisted projects to negotiate and execute a PPA for the March 15 due date to retain a Conditional allocation.

Cluster 14 and earlier projects will continue to be governed by ISO Tariff Appendix DD, with the only change being that the shortlist allocation group (group B) and the shortlist retention opportunity for group D will be removed after the 2025 cycle and not be available in the 2027 cycle. In other words, groups A, B, C, or D will be available only in 2025 for Clusters 14 and earlier, 16 and any projects that receive a group D allocation in 2025 must retain it with a PPA in 2027 or the project will be converted to Energy Only.

The ISO Tariff Appendix DD, Section 8.9.4.1, Extended Parking for Option (A) Generating Facilities, provides the requirements that cluster 14 projects will have to meet in order to be eligible to park a second year. No cluster 13 projects were eligible for extended parking and it is likely that will be the case for cluster 14 as well. In the event a Cluster 14 project is eligible for extended parking, that project will remain eligible to seek TPD in groups A or D when they come out of parking in 2027. Any group D allocations will require a PPA in the following TPD cycle to retain the allocation.

TPD allocation group D will continue only as a legacy allocation group for Cluster 14 and earlier projects. Any project that sought a TPD allocation in group D will remain

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<sup>&</sup>lt;sup>16</sup> Cluster 15 would not be eligible to seek allocations of TPD until 2027, at the earliest.

subject to the group D restrictions in Appendix DD, Section 8.9.2.3. This cluster eligibility is described in Table 3, below.

Table 3. Cluster eligibility for TPD allocation groups

Cluster Eligibility for TPD Allocation Groups									
Cluster/Year	2025	2027	2028	2029	2030	2031	2032	2033	
C13 & Earlier	A, B & C	СО	СО	СО	СО	СО	СО	СО	
C14 <sup>1</sup>	C14 <sup>1</sup> A, B, PPA <sup>3</sup> & C & D CO		СО	СО	СО	СО	СО	СО	
C14 <sup>2</sup>	A, B, C & D	PPA, <sup>4</sup> CO & D <sup>5</sup>	PPA <sup>6</sup> & CO	СО	СО	СО	СО	СО	
C15		PPA	PPA, CO & Cond	PPA, CO & Cond	PPA, CO & Cond				
C16			PPA	PPA, CO & Cond	PPA, CO & Cond	PPA, CO & Cond			
C17				PPA	PPA, CO & Cond	PPA, CO & Cond	PPA, CO & Cond		

<sup>&</sup>lt;sup>1</sup> Assuming no projects are eligible for extended parking

#### Notes:

Letters A, B, C & D designate current allocation groups

PPA = Power Purchase Agreement allocation group

CO = Commercial Operation allocation group

Cond = Conditional allocation group

The three proposed allocation groups simplify the TPD process for developers, LSEs, and the ISO. The revision provides a simplified 2-step TPD track for all projects where all eligible projects without a PPA would automatically be processed for an allocation through the Conditional group. It eliminates the two-step retention process, avoids concerns that stakeholders have raised regarding questionable practices in project short-listings, and simplifies a complex project allocation tracking process. Moreover, this approach maximizes the capacity from each cluster that is able to compete for a

<sup>&</sup>lt;sup>2</sup> Assuming some projects are eligible for extended parking

<sup>&</sup>lt;sup>3</sup> For C14 in 2027, the PPA group is only open to projects seeking to retain allocations from groups B & D

<sup>&</sup>lt;sup>4</sup> For C14 in 2027, the PPA group is only open to projects seeking to retain allocations from groups B & D and projects that parked in 2025

<sup>&</sup>lt;sup>5</sup> For C14 in 2027, group D is only open to projects that parked in 2025

<sup>&</sup>lt;sup>6</sup> For C14 in 2028, the PPA group is only open to projects seeking to retain allocations from group D

PPA to meet accelerated procurement targets and puts the bilateral procurement process in the driver's seat for determining the value and viability of projects competing for a PPA. This levels the playing field in procurement where most projects would have a Conditional TPD allocation, allowing the procurement process to focus on other high-value project attributes.

#### Stakeholder requested clarifications:

• If a project seeks to retain an allocation received from the Conditional group with a PPA for a portion of the allocated TPD, the project would retain the amount of capacity required by the PPA, become Partial Capacity Deliverability Status (PCDS) and would be eligible to continue to seek to increase its allocation from any group it is eligible for until its cluster is no longer eligible to seek an allocation. If the project is PCDS after its three opportunities to seek an allocation, the project will be required to downsize to become FCDS through a Material Modification Assessment (MMA).

#### Multi-fuel projects receiving an allocation with PPAs

When seeking an allocation for a multi-fuel project, the interconnection customer will request a specific MW capacity for each fuel type for which it seeks an allocation, which must align with the requirements of the PPA if seeking an allocation in the PPA group. In addition, the request must provide the desired ranking order for each fuel type to be considered. For example, a PPA requires deliverability for a co-located PV and battery energy storage system (BESS) project. The project would need to specify which of the fuel types they want to have considered first, in case there is not enough TPD to meet the projects total TPD requested. If any of the various fuel type components of a project receives its requested TPD allocation, the interconnection customer must accept the TPD allocation for that particular component of the project. If the customer does not, the project will be modified by removing that fuel type from the project. For example, in the case of a 100 MW solar project with a 50 MW BESS that seeks FCDS for the BESS, if the BESS receives 50 MW of TPD, it must accept the allocation or it must remove the BESS portion from the project.<sup>17</sup> The 100 MW solar portion of project can remain active as a stand-alone solar project. However, if any fuel type portion of a project receives a partial allocation, it may decline or accept the partial allocation for that fuel type. In that case, the interconnection customer may re-seek an allocation of TPD or additional TPD

<sup>&</sup>lt;sup>17</sup> The same process applies for a single fuel type project. If it receives the requested TPD it must accept the allocation or withdraw the project.

for that fuel type portion of the project in any future allocation cycle it is eligible to participate in.

Stakeholder requested clarifications:

- If a project receives an allocation for less than what is requested for one or more of its fuel types it may continue to seek allocations in future allocation cycles for which it is eligible.
- An interconnection customer is not obligated to accept an allocation for less than it has requested for a given fuel type. If a project receives an allocation of less than requested for a given fuel type, it may reject the allocation and the project would remain as FCDS-R status and continue to be eligible to seek a full or partial allocation from any group it is eligible for until its cluster is no longer eligible to seek an allocation.
- If a project receives a Conditional allocation for less than what it requested, for one or more of its fuel types, it may only move an allocation from one fuel type to another (within that specific project) if the receiving fuel type demonstrates a qualifying executed PPA in the retention process.
- If a particular fuel type of a multi-fuel project has a Conditional allocation and the project is modified to exclude that fuel type, the allocation can only be retained by transferring it to a different fuel type that demonstrates it has an eligible executed PPA. Otherwise, the project will forfeit the allocated capacity associated with the portion of the project that is removed from the interconnection request.

#### **Parking**

Under Order No. 2023, all projects now must make any required increases to their Commercial Readiness Deposits following the completion of their studies. GIA tendering, execution, and associated financial requirements are as defined in the ISO's FERC Order No. 2023 compliance filing, irrespective of TPD cycles and the ability of a project to obtain TPD. The ISO understands that developers have concerns with the new FERC requirements, and the ISO and stakeholders must seek to integrate the TPD allocation process with the FERC Order's requirements in the most logical and workable manner possible. Interconnection customers wary of executing a GIA and submitting additional deposits without first getting a TPD allocation may withdraw before incurring additional financial risk. Ensuring GIAs are executed and GIA deposits are submitted on a timely basis, consistent with FERC's requirements, will help maintain construction schedules and avoid backlogs in the queue. Consistent with these requirements, the

ISO is eliminating the concept of "parking" and replacing it with the allocation request cycles described below.

Pre-cluster 15 projects will continue with the TPD allocation procedures in accordance with ISO Tariff Appendix DD. Cluster 14 projects have used their initial opportunity to park following the 2024 TPD results. The criteria for a second year of parking will remain available for cluster 14 following the 2025 allocation results if the projects meet the tariff requirements of Section 8.9.4.1. However, as with cluster 13, it is likely that no cluster 14 projects will be eligible to park a second time, ending the parking process for all pre-cluster 15 projects as well.

#### Opportunities to seek TPD

Projects will have three consecutive opportunities <sup>18</sup> to seek an allocation of TPD. Projects will no longer need to qualify for "parking" to seek an allocation in these three opportunities. The first opportunity will be in the TPD allocation request window following the interconnection customer's receipt of its interconnection facilities study report. After the third opportunity to seek an allocation, projects that have not received an allocation will be withdrawn. Projects that do receive an allocation through the Conditional group, but are unable to retain their allocation in the next request window by demonstrating an eligible PPA, will be withdrawn.

Projects will be eligible to seek an allocation in the allocation cycle that occurs during the project's interconnection facility study in the PPA Group only, by demonstrating they have an eligible, executed PPA. The Conditional group would not be open to projects until after the cluster's interconnection facilities study is complete. If a project with an eligible PPA does not receive an allocation in this opportunity, it will be eligible to seek an allocation along with the projects in its cluster during the three opportunities following receipt of their facilities study report.

Projects that have exhausted their three opportunities to receive TPD will be withdrawn. This will prevent stalled projects from reserving reliability related capacity and causing more viable projects to require costly and long lead-time RNUs that will likely never be needed.

The top half of Table 4 provides a graphic representation of each cluster's annual progression through the Resource Interconnection Standard (RIS) process from intake, through the studies, the allocation opportunities and ending with the final retention

<sup>&</sup>lt;sup>18</sup> The opportunities to seek and retain allocations of TPD are typically done on an annual basis, but circumstances may result in the timing of the successive opportunities to be more than one year apart.

opportunity. The bottom half provides the impact that prior clusters have on a given cluster's intake amount and potential available allocation amounts each cycle.

Table 4. TPD allocation impacts on cluster intake and future clusters

Primary Activity During the Calendar Year													
Cluster/Year	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
C15	Intake	Studies	Studies	Alloc 1	Alloc 2	Alloc 3	Retention Done						
C16			Intake	Studies	Studies	Alloc 1	Alloc 2	Alloc 3	Retention Done				
C17				Intake	Studies	Studies	Alloc 1	Alloc 2	Alloc 3	Retention Done			
C18					Intake	Studies	Studies	Alloc 1	Alloc 2	Alloc 3	Retention Done		
C19						Intake	Studies	Studies	Alloc 1	Alloc 2	Alloc 3	Retention Done	
C20							Intake	Studies	Studies	Alloc 1	Alloc 2	Alloc 3	Retention Done
Impacts on	Clust	er Intal	ce and Al	locations	from Pri	or Cluste	rs		•	•			
	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036
C15				No prior cluster impacts	No prior cluster impacts	No prior cluster impacts	Done						
C16			C15 yet to impact Intake avail	impacts	impacts	Alloc impacted by C15 alloc	No prior cluster impacts	No prior cluster impacts	Done				
C17				Intake impacted by C15 alloc			Alloc	Alloc impacted by C16 alloc	No prior cluster impacts	Done			
C18					Intake impacted by C15 alloc			Alloc impacted by C16/17 alloc	Alloc impacted by	No prior cluster impacts	Done		
C19						Intake impacted by C15/16 alloc			Alloc impacted by C17/18 alloc	Alloc impacted by C18 alloc	No prior cluster impacts	Done	
C20							Intake impacted by C16/17 alloc			Alloc impacted by C18/19 alloc	Alloc impacted by C19 alloc	No prior cluster impacts	Done

Eligibility of Energy Only projects to seek TPD

#### Cluster 14 and prior clusters

No changes are proposed to the existing TPD allocation process in ISO Tariff Appendix DD for the 2025 TPD allocation cycle. However, 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 give Energy Only projects currently in the queue the ability to proceed through the initial and post parking 19 TPD allocation procedures based on the current tariff. Cluster 14 and prior

<sup>&</sup>lt;sup>19</sup> This post parking opportunity does not include projects that are eligible for extended parking allowed under ISO Tariff Appendix DD, Section 8.9.4.1.

Energy Only projects, or portions of projects that achieve commercial operation will continue to be eligible to seek an allocation through the Commercial Operation group.

The proposed changes for cluster 14 and prior projects would begin with the 2027 TPD allocation cycle. Those changes are the result of the proposed elimination of allocation group B, the shortlist group, in 2027. No project will be able to seek an allocation based on being shortlisted or actively negotiation a PPA in 2027. This will also apply to any projects receiving a group D allocation in 2025. Such projects will only be able to retain a group D allocation in 2027 by demonstrating a PPA.

For cluster 14 and prior Energy Only projects that are eligible to seek TPD, the ISO proposes to revise the required study deposit for Energy Only projects seeking an allocation to a flat fee of \$5,000. This amount has been sufficient to cover study costs for this requirement in the past.

Cluster 14 and prior projects that added a technology as Energy Only via an MMA that is approved before the 2025 TPD allocation request due date will have one additional opportunity during the 2025 TPD allocation cycle to seek an allocation for such addition under the PPA group and the current Shortlist allocation group (but can seek TPD in the Commercial Operation Group indefinitely).

Finally, Energy Only projects cannot remain in the queue based on a PPA that is contingent on receiving or that requires TPD. This is because there is no guarantee that the required study for Energy Only projects seeking TPD will show the project to be eligible to receive TPD and there are no guarantees that TPD will be available if the project is found to be eligible.

#### Cluster 15 and future clusters

Beginning with cluster 15, the ISO Tariff Appendix KK prohibits Energy Only projects from seeking deliverability. Section 4 states: "Interconnection Requests that proceed to the Cluster Study based on the criteria for Energy Only Interconnection Requests may not obtain Deliverability for that Generating Facility and any associated Generating Units thereafter, including without limitation through transfers, modifications, or the TP Deliverability allocation process. Expansions to Energy Only Generating Facilities may receive Deliverability if their Interconnection Requests proceed to the Cluster Study based on the criteria for Interconnection Requests seeking Deliverability."

Projects in cluster 15 and beyond that were studied as FCDS or PCDS and complete a technology addition through the modification process will be Energy Only and only be permitted to seek a TPD allocation through the Commercial Operation group. This

occurs regardless of whether the requested addition is before or after their COD (via an MMA or Post-COD modification).

#### Documentation

The ISO will assess requests and substantiating documentation based on the documents as submitted by the TPD-retention or TPD-seeking request due dates. Documents required in the request processes that are not received by the request due date will not be accepted. All documentation must be fully executed and complete when submitted. Incomplete documentation will not be accepted and will result in the request being rejected. The ISO will continue to consult with off-takers and local regulatory authorities where necessary to verify any information or claim.

#### Modifications to the TPD scoring criteria

To determine the order that TPD is to be allocation among projects that are eligible to seek an allocation in any given allocation group, projects seeking TPD are assigned numerical scores in various aspects of their project's development progress. Table 5 below provides the proposed scoring methodology described in the GIDAP Business Practices Manual for prioritizing of projects seeking a TPD allocation within the same group where there is insufficient TPD for the whole group.

The changes from the prior proposal is shown in red font. Table 5 will be used for the allocation cycle in 2027 and will apply to all groups except the Commercial Operation group. However, the points associated with the PPA group will only be available to projects that have a qualified PPA per ISO Tariff Appendix KK, Section 8.9.2. For the 2025 TPD allocation year, the scoring Table in the GIDAP BPM Section 6.2.9.4.2 will be used. The Commercial Operation group will have its own scoring methodology, described below, beginning in 2025.

Table 5. Proposed modified scoring methodology for prioritizing projects seeking TPD when there is insufficient TPD for the whole group.

Points (select one per category)	Permitting (unchanged from existing process)	Power Purchase Agreement Status (PPA group only)	GIA Status
10	Has Final government permit to construct or Has authorization to construct with a qualifying exemption 20		The Interconnection Customer has provided payment and security to the Participating TO <sup>21</sup>
7			The Participating TO has received written authorization to proceed with construction from the Interconnection Customer <sup>22</sup>
5	Draft Environmental Report w/no significant impact that cannot be mitigated	Off-taker is procuring the capacity to meet its own RA obligation or the Interconnection Customer is a Load Serving Entity serving its own load	
3	Data adequate		Has provided to the ISO the required GIA Deposit <sup>23</sup>
1	Applied		
0 (Min. Req.)		Has an executed PPA	

To provide more clarity on the requirements for the Permitting category, the following list is from ISO Tariff, Section 8.9.2.1 (1) Permitting status. No changes to these requirements are proposed.

<sup>&</sup>lt;sup>20</sup> Example: In accordance with CPUC General Order NO. 131-D; https://docs.cpuc.ca.gov/PublishedDocs/Published/G000/M521/K748/521748942.pdf.

<sup>&</sup>lt;sup>21</sup> In accordance with Article 5.6.4 of the LGIA (Appendix LL). Performance of these obligations under SGIA (Appendix MM) shall be as defined in Article 5.6.4 of Appendix LL (LGIA).

2 In accordance with Article 5.6.3 of the LGIA (Appendix LL). Performance of these obligations under

SGIA (Appendix MM) shall be as defined in Article 5.6.3 of Appendix LL (LGIA).

<sup>&</sup>lt;sup>23</sup> In accordance with Appendix KK, Section 13.3.

- a. The Interconnection Customer has received its final governmental permit or authorization allowing the Generating Facility to commence construction. (10 points)
- b. The Interconnection Customer has received a draft environmental report document (or equivalent environmental permitting document) indicating likely approval of the requested permit and/or which indicates that the permitting authority has not found an environmental impact which would likely prevent the permit approval. (5 points)
- c. The Interconnection Customer has applied for the necessary governmental permits or authorizations and the authority has deemed such documentation as data adequate for the authority to initiate its review process. (3 points)
- d. The Interconnection Customer has applied for the necessary governmental permit or authorization for the construction. (1 point)

#### Tie-Breaker

The project's earliest achievable COD will be used as a tie-breaker between projects with equal scores with the earliest current COD getting a higher ranking.

Scoring for the Commercial Operation group

The prioritization of allocations for the Commercial Operation group is proposed to be in the following order:

- 1. Projects that demonstrate having a procurement agreement that requires the project to seek RA<sup>24</sup>
- 2. Lowest Distribution Factors (DFAX)

Clarifications and Limitations of TPD Transfers

The following outlines TPD transfer allowances and limitations:

 No TPD transfers are permitted from Cluster 15 and later clusters to earlier queued projects (e.g. C15 prohibited from transferring to a pre-C15 project, or C16 to C15, etc.). The expectation is that projects have demonstrated sufficient scoring to be included in a given cluster's study, and will seek TPD with other

<sup>&</sup>lt;sup>24</sup> The contract does not require the project to be deliverable, but requires the project to seek TPD.

projects in its cluster based on TPD available for that cluster and proceed to development accordingly.

- Transfers from C14 and earlier to Cluster 15 are permitted, and the transferring project will remain subject to the Appendix DD (including IPE Track 2) retention policies: The receiving customer must maintain the same requirements and obligations of the transferring project, including, but not limited to, the same or earlier COD, COD extension limitations, and withdraw requirements.
- For Cluster 15 and later projects, intra-cluster transfers will be permitted for projects in the TPD Study Group following the existing rights and obligations associated with such transfer, including, but not limited to, the same or earlier COD, COD extension limitations, and withdraw requirements.

# 4. Special Considerations for Interconnection of Long Lead-Time Generation and Storage Resources

## **Background**

The ISO is considering special exceptions or extensions for interconnection of certain long lead-time resources that fulfill specific public policy requirements identified in the transmission plan. The ISO currently has authority to give certain long lead-time generation and storage resources points in the interconnection request scoring process, and has exercised its authority under the tariff to reserve transmission capacity for certain long lead-time resources.<sup>25</sup>

The ISO lists the capacity that has already been allocated and the locations on the system where it was allocated below:

The CPUC portfolios for the 2023-2024 transmission planning process include for 2035:

- Wyoming wind 1500 MW (Eldorado)
- Idaho wind 1000 MW (Eldorado)
- NM wind 2328 MW (Palo Verde)
- Offshore wind (North Coast) 1607 MW
- Offshore wind (Central Coast) 3100 MW

The CPUC portfolios for 2024-2025 transmission planning process include for 2034 and 2039:

• Wyoming wind (Eldorado)

○ 2034 – 905 MW

<sup>&</sup>lt;sup>25</sup> Sections 8.9.1 of Appendices DD and KK to the CAISO tariff.

- o 2039 3000 MW
- Wyoming wind (Tesla)
  - 2034 0 MW
  - o 2039 1500 MW
- Idaho wind (Harry Allen)
  - o 2034 1060 MW
  - o 2039 1060 MW
- New Mexico Wind (Palo Verde)
  - o 2034 2131 MW
  - 2039 3536 MW
- Offshore wind (North Coast)
  - o 2034 931 MW
  - o 3039 1607 MW
- Offshore wind (Central Coast)
  - o 2034 2924 MW
  - 2039 2924 MW

The 2024 TPD allocation study reserved the following:

 426 MW of TPD for offshore wind in the Central Coast area by modeling a "generic" resource.

The capacity for offshore wind resources will continue to be reserved in the future TPD study cycles to the amount of offshore wind resources modeled in the baseline portfolio at that time. Because the recent cluster 15 Point-of-Interconnection (POI) mapping information was keyed off the 2024 TPD Allocation study, the available TPD figures shown in the package of data released prior to the cluster 15 resubmission window also reflects the TPD amount held back for Central Coast area offshore wind (426 MW).

In the consolidated revised straw proposal, the ISO proposed a process that would enable certain resources to defer their first attempt to seek TPD to better align with commercial development and procurement timelines. Eligibility was proposed for resources meeting some or all of the following criteria:

- A long lead-time resource technology (e.g. offshore wind, out-of-state renewable resources on interregional transmission, long-duration energy storage, advanced geothermal resource).
- Resource technologies that are location-constrained.
- Resources dependent on policy-approved transmission with explicit guidance to treat the resource as a long lead-time resource from the CPUC or local regulatory authority.
- These interconnection requests must enter the queue requesting amounts of capacity appropriate for the amounts specified for their resource in the LRA's

resource portfolio. Interconnection customers opting to use this pathway may not request more TPD than specified in the resource portfolios from the relevant LRA.

Below, the ISO proposes additional detail around the option for such interconnection customers to defer or extend their first attempt to seek TPD to better reflect commercial development timelines. This proposal would complement the existing considerations for long lead-time resources identified in the transmission planning process.

## Stakeholder comment and discussion

Several parties supported the conceptual proposal, including ACP-CA, CalCCA, the CPUC Energy Division, Executive Consulting Services (EAS), Invenergy, and PARS Energy. No parties fully opposed the concept, however several parties commented on what resources would warrant such special considerations.

ACP-CA noted that timelines for central procurement through the California Department of Water Resources are uncertain and may shift as the process evolves. They therefore encouraged flexibility in the ISO's interconnection process, specifically as it relates to the TPD allocation process. AREM and CalCCA both noted the need for additional detail around the proposal. AREM seeks additional detail on the eligibility of various types of storage technologies, and CalCCA and other parties sought additional detail around how much TPD can be reserved for this purpose.

## Eligibility

ACP-CA and CalWEA suggested that the ISO require resources to meet *all* of the originally proposed criteria to be eligible for the opportunity to extend the first attempt to seek deliverability, to ensure that the TPD deferral option is utilized as intended. However, ACP-CA also suggested that the ISO refrain from specificity in listing subtechnology types (e.g. "advanced" geothermal) to avoid unintentional restrictions.

ACP-CA also noted that the ISO must modify the eligibility definition to include long lead-time resources with existing or approved transmission, to avoid restricting resources that may already have available transmission capacity. The ISO clarifies that there may be cases where eligible long lead-time resources already have available transmission capacity, and may not need additional time for that transmission project to be placed into service.

ACP-CA suggested that the quantity of TPD that a long lead-time resource interconnection customer may seek should be defined based on the quantities in the LRA plans at the time of the affidavits for the upcoming TPD allocation process, after

the customer has re-initiated the TPD allocation process post-deferral. The ISO appreciates this suggestion and clarifies this below.

AREM and NCPA sought more clarity regarding what types of storage would be considered eligible long lead-time resources, noting that some energy storage technologies are location-constrained (e.g. pumped storage), while others are not (battery storage). The ISO understands the need for more clarity from stakeholders around eligibility for TPD deferrals and proposes a process below to provide greater clarity prior to each interconnection window opening.

The CPUC Energy Division suggested that the ISO coordinate with the CPUC and LRAs to determine the specific resource types, locations, and amounts eligible to utilize reserved deliverability, as well as to determine when reservations end. The CPUC offered to provide direct and updated guidance to the ISO in the annual transmittal of portfolios and policy goals to the ISO for the transmission planning process or a similarly appropriate venue. ENGIE NA and others supported alignment with the CPUC's definition of long lead-time resources for central procurement. Intersect Power and LSA suggested that the ISO convey specific eligibility criteria in a very open and transparent fashion in the TPP. The ISO proposes a similar, more detailed process below that includes guidance and feedback from the CPUC and all other LRAs.

CalWEA suggested combining the first and second proposed criteria to "location-constrained" to be more precise. CalWEA also suggested including in-state land-based wind and all geothermal energy resources in the list of resources, and limiting long-duration storage to location-constrained types. Rather than selecting and listing specific technologies in this policy initiative, the ISO proposes a process that allows flexibility of resource eligibility as the resource mix and technologies evolve. CalWEA also suggests that the policy explicitly be busbar-specific, as "Resources included in CPUC or LRAs" portfolios at a specific busbar that are dependent on existing or TPP-approved transmission lines, with explicit guidance from the CPUC or LRAs regarding TPD capacity reservation."

Calpine requested more transparency around TPD reservations, including the impact of incremental flows into the ISO BA from outside of the ISO on deliverability of existing resources within the ISO. The ISO proposes a process for improved communication and transparency around long lead-time resource eligibility and TPD reservations going forward. Clearway expressed concerns with the potential disruption to TPD allocations that the reservation process could cause, and encouraged the ISO to limit the amount of TPD reserved for long lead-time resources. Clearway also asked the ISO to clarify how many MW of TPD are reserved today and at what busbars, noting that the location of reserved TPD will have an impact on interconnection studies and the TPD available for

other projects in the queue. NCPA asked for additional detail on which area constraints are impacted by the North Coast and Central Coast offshore wind projects that may be eligible for TPD reservations. The Six Cities highlighted concerns with the possibility that a resource with commercial readiness to come online and begin providing energy and capacity in 2025 – and that is expected to do so based on terms included in the project PPA – could potentially be delayed in its ability to provide resource adequacy capacity because the necessary network upgrades will not be completed until months or years later. TerraGen reiterated a request for the ISO to clarify how specific TPD reservation amounts were determined, e.g. what technology output factors (%) were applied, and the impact on available TPD for non-long lead-time resources. The ISO notes that TPD reservations are published in the annual TPP report. Zero MW were reserved for long lead-time resources in the southern ISO zones, however the ISO has reserved expanded MIC in the South for out-of-state wind. The ISO will provide more transparency going forward but already has tariff authority to reserve transmission capacity for certain policy-driven resources.

LSA noted that location constraints do not necessarily equal long lead-times, and it's not clear why location constraints should warrant special treatment. The ISO agrees but is seeking to create a policy that balances flexibility to evolve with future resource portfolios and specificity to provide clarity and certainty to market participants.

NCPA and Six Cities emphasized the importance of developing eligibility criteria that accounts for the needs of non-CPUC jurisdictional LSEs on a basis that is comparable to the CPUC's ability. Six Cities asked for clarification of the term "location constrained resource interconnection generator" and whether the ISO tariff should be expanded to include geographic regions certified by non-CPUC LRAs. The ISO notes that Location Constrained Resource Interconnection Generator (LCRIG) is already defined in the ISO tariff. In addition, the Energy Resource Areas (ERA) where LCRIGs are located are also defined in the ISO tariff as being certified by both the CPUC and the CEC, so ERAs can include geographic regions certified by the CEC for non-CPUC LRAs.

Opportunity to defer first attempt to seek TPD

Several parties supported the proposed deferral of the first attempt to seek TPD.

ACP-CA suggested that a deferral period extend to one year after the latest CPUC-authorized solicitation for that resource is completed by the central procurement entity or three years before its anticipated COD, whichever is later. The ISO appreciates this suggestion but adds the need to consider non-CPUC jurisdictional LSE needs in this timeline as well. The ISO proposes a modified version of this approach, below.

CPUC staff supports the ISO proposal to enable long lead-time resources to defer their first attempt to seek TPD, but expressed concerns about the potential for speculative queue applications that enable projects to enter the queue early and monopolize reserved TPD. The ISO shares this concern and is working to provide clarity in the eligibility requirements for this proposal to mitigate such risks.

Invenergy and LSA highlighted the challenges certain projects face in meeting TPD retention requirements, and suggested that the ISO either change retention requirements or allow LLT resources that have already received TPD allocations to defer their retention requirements. The ISO considered this proposal but is reluctant to change the rules for some resources in the queue, while leaving rules in place for other resources in the queue. Further, to create a level playing field among long lead-time resources, a simpler and more-timely solution would be for early adopters to exit the queue and re-enter the queue at a time that better aligns with commercial development.

Several parties, including ACP-CA, Calpine, CESA, Clearway, EDF Renewables, ENGIE NA, GridStor, Intersect Power, LSA, NextEra, and Rev Renewables suggested that the ISO extend the option to defer the first attempt to seek TPD to additional interconnection customers, particularly those with long lead-time upgrades. ACP-CA argued that such treatment should apply to more mature and standard resources (e.g. solar, land-based wind, and battery storage), particularly those with active interconnection requests in Cluster 14 or earlier, or those currently in Group D. Parties such as Calpine, CESA, and Clearway noted that interconnection customers with long lead-time interconnection network upgrades or reliability network upgrades may similarly benefit from such a deferral opportunity. EDF-R suggested that until the CPUC directs long-term procurement, the ISO allow projects with long lead-time RNUs and DNUs to stay in queue until three years before their minimum in-service date. Intersect Power suggested that this treatment apply to resources that are not able to take advantage of available headroom in the intra-cluster prioritization component of this proposal. NextEra suggested an alternative approach of limiting the opportunity for resources to extend the amount of time to seek TPD to when they actually enter the queue. Rev Renewables suggested that rather than allowing long lead-time projects to defer their first attempt to seek TPD, the ISO create a process where projects can enter the TPD allocation cycle five years before the online date of the transmission project (or four years for cluster 14 projects that have already used one of their opportunities).

The ISO understands these positions but notes that the various long lead-time resources have different transmission development and procurement timelines, so there is no approach that works for each resource. Moreover, not all "long-lead projects" have specific transmission upgrades specifically approved for unique public policy requirements. Most of the projects described by stakeholders are simply for generic RA

needs. As the ISO noted in Section 2 of this paper, procurement market dynamics are better suited to handle these issues. The PPA market will seek out projects that are best suited to meet the needs of the off-taker, which includes the earliest achievable COD of the projects competing for a PPA. If over time the distribution of project CODs increases, the procurement process will adapt to that reality. It is best to let market dynamics deal with these issues rather than attempt to provide solutions in the TPD allocation procedures that could result in more harm to the process than the issue that it's seeking to resolve. The ISO remains committed to seeking resolution of these issues both within and outside of the IPE process. The ISO has also included the intra-cluster prioritization proposal in this paper to address these concerns for Cluster 14 in particular, and other clusters if necessary. These projects will likely enjoy more certainty in the procurement regime than the more nascent resource technologies currently experience. Further, the ISO's intent is to recognize other commercial challenges — beyond infrastructure development, such as technology maturity and procurement, associated with long lead-time resource development.

## Amount of TPD requested and reserved

The ISO initially proposed that interconnection customers eligible for the deferral of the first attempt to seek TPD must enter the queue requesting the appropriate amount of capacity per the LRA's resource portfolio. CalWEA suggested that all location-constrained resources at specific busbars should be eligible until TPD allocation occurs, at which time the allocation can be based on scoring. LSA and TerraGen noted the impracticality of requiring long lead-time developers to limit their interconnection request capacity to the capacity in LRA portfolios. Instead, TerraGen suggests that the ISO should allow all qualifying interconnection customers to compete for the available holdback capacity using an objective and transparent scoring process. The ISO agrees and has removed this initial limitation from the proposal and instead will require interconnection customers to compete for available TPD, including that which is reserved.

Southern California Edison proposed that the ISO modify the proposal to only consider allowing projects (1) where the entire interconnection request capacity is being utilized by defined long lead-time resource types or (2) only assigning deliverability through long lead-time deliverability allocation process to the capacity of the project that meets the requirements of the long lead-time resources. These modifications would prevent the potential for developers to game the long lead-time deliverability allocation process. The ISO appreciates these suggestions and welcomes stakeholder feedback on the modifications, however the ISO views such changes as more appropriate to the next IPE initiative, which will address modifications to the track 2 reforms, specifically regarding interconnection request intake procedures.

Triggers for releasing reserved TPD

Several parties agree that the ISO should identify a trigger for releasing reserved TPD, including ACP-CA, AREM, CalCCA, Calpine, and Clearway.

ACP-CA suggested that the ISO only release TPD from the reservation process when it is certain that TPD will not be needed for those long lead-time resources. ACP-CA noted that this may include the conclusion of the central procurement solicitation process and subsequent revisions to LRA portfolios with reduced quantities of the specified long lead-time resources. AREM also noted the relationship with central procurement.

CalCCA suggested identification and maintenance of a clear deadline for projects without a PPA to be removed from the queue and the TPD to be released to make room for other projects to seek an allocation. The ISO clarifies that transmission capacity is not typically reserved for specific interconnection customers or projects; rather it is reserved for the specific resource types that satisfy the public policy requirement that triggered the transmission upgrades in the transmission plan.

Need for additional detail and discussion

Several parties suggested additional workshops on this topic, including ACP-CA, CPUC staff,

CPUC staff suggested additional discussion around the potential to identify and develop long lead-time interconnection upgrades associated with long lead-time projects in the policy-driven transmission planning process. Calpine suggested that deliverability should be identified in the TPP and reserved for *any* resource meeting the CPUC's busbar mapping in the targeted area. The ISO maintains that certain long lead-time resources warrant certain exemptions or extensions that are not necessary for more commercially mature resources. However, the ISO agrees to work to identify long lead-time transmission investments in the TPP that are needed, which will provide greater certainty to all projects in the queue.

Several parties did not support the creation of an additional interconnection process or additional exemptions for long lead-time resources, though many parties expressed openness to further discussions. Intersect Power and the Six Cities suggested moving the discussion to a separate track to avoid slowing down the other proposed track three reforms. Invenergy noted that additional, swift resolution of the issue is needed in advance of the September 2025 TPD allocation affidavit due date to incorporate "early adopters" who have already entered the queue. The ISO continues to refine the proposal below with the goal of bringing this entire package to the Board of Governors

in March of 2025, but may ultimately opt to split this section of the track 3 draft final proposal out from the other items prior to the final proposal, depending on stakeholder feedback.

## **Proposal**

## Eligibility

The ISO proposes a clear and transparent process in coordination with the LRAs to identify and determine eligibility of the option to defer the first attempt to seek TPD. This process will include an opportunity for stakeholders to comment on eligibility during development of the annual transmission plan. In this process, the ISO will also provide more regular transparency around TPD reservations resulting from policy guidance of the LRAs.

The ISO will continue to reserve transmission capacity commensurate with the lower of (a) the MW quantity of long lead-time FCDS generation in the approved LRA portfolios submitted to the ISO in the most recent TPP and (b) the transmission capacity created by the transmission plan upgrades for the specific long lead-time public policy requirement.<sup>26</sup>

The ISO expects eligible interconnection requests to satisfy the following criteria:

- A long lead-time resource technology (e.g. offshore wind, out-of-state renewable resources on interregional transmission, long-duration energy storage, advanced geothermal resource).
- Resource technologies that are location-constrained.
- Resources dependent on policy-approved transmission with explicit guidance to treat the resource as a long lead-time resource from the local regulatory authority.<sup>27</sup>

The ISO no longer proposes requiring interconnection requests to enter the queue requesting the exact amount of capacity that is reserved. Regarding TPD reservations, the ISO will only reserve TPD consistent with, and not to exceed, what is included in the approved LRA resource portfolios, submitted to the ISO in the most recent TPP. To the extent that a resource seeks additional deliverability beyond what is approved and reserved in the portfolio, the interconnection customer will have to compete for the

<sup>&</sup>lt;sup>26</sup> This may include the use of existing transmission and upgrades.

<sup>&</sup>lt;sup>27</sup> The transmission plan could identify cases where existing transmission is freed-up, but should be allocated toward these public policy needs. Examples could include large retirements or a reallocation of needs in the portfolios.

excess. If a tie-breaker is necessary, the project's COD will be used as a tie-breaker between projects with equal scores with the earliest current COD getting a higher ranking. This is consistent with the proposed treatment of all resources seeking TPD in the conditional allocation group, in Section 2.

To effectuate interconnection of the resources described above, the ISO proposes the following process for identifying long lead-time resources eligible to defer their first attempt to seek TPD.

- 1. The ISO will provide a legal standard in the transmission planning process, specifying what types of resources will qualify for that cycle's long lead-time resource pool (e.g. technology, fuel, capacity, and Transmission Zone). In other words, the tariff will define how the transmission planning process will identify and describe the resources that meet specific long-lead-time policies.
- 2. Within each recurring transmission planning process initiative, LRAs will have an opportunity to review the standards and provide the ISO with a more explicit list of qualifying resources.
  - The CPUC can provide its more explicit list as part of the decision conveying transmission planning scenarios. All other LRAs can submit their explicit lists within the formal TPP process, with sufficient time for stakeholder comment and study.
  - The complete list of qualifying resources will be subject to stakeholder comment in the TPP.
- 3. The ISO Board-approved transmission plan will then 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.

This process can be used to provide specificity and transparency regarding the amount of transmission capacity that will be reserved for long lead-time resource deliverability in the future, and will articulate which resources are eligible to enter the interconnection queue with long lead-time resource points and to later defer their first attempt to seek deliverability.<sup>28</sup>

<sup>&</sup>lt;sup>28</sup> To the extent that the ISO proposes tariff changes to the interconnection request intake process to align with this proposed long lead-time process, those changes can be explored in a future IPE initiative, where the ISO will also consider all modifications to the recently adopted track 2 reforms.

## Option to defer first attempt to seek TPD

The ISO proposes to provide eligible long lead-time resources with an option to take additional time to seek TPD to better align with commercial milestones and procurement. The ISO proposes that once eligible projects are in the queue and have been studied, they may opt to defer their opportunities to seek TPD until they are more commercially ready to meet the requirements of the allocation procedures proposed above. Once an eligible interconnection customer re-initiates the process of seeking TPD, that interconnection customer would follow the standard TPD allocation process that applies to all other projects, as described above in Section 3. Specified projects must begin seeking TPD no later than three years prior to the expected online date of the resource, according to the resource portfolio.

The ISO proposes to release reserved transmission capacity into the generic RA deliverability pool if specific long-lead-time resources or their associated transmission upgrades identified in the transmission plan do not materialize. Reserved TPD should only be released in the event of formal cancellation of an associated policy-driven transmission project or if the resource is later removed from the LRA's portfolio due to project failure, with formal written decision by the LRA.

#### Other considerations for additional stakeholder discussion

At this time, the ISO only proposes an extension in time for certain long lead-time resources to first seek TPD. This option to extend would complement the ISO's current authority to award points to long lead-time projects in the intake scoring process and the ISO's current practice of reserving deliverability for specific eligible resources.

The ISO does not propose a more discrete interconnection request intake process for long lead-time resources, and does not at this time propose a unique study process nor extensions for commercial readiness deposits at this time.

# 5. Adjustment to the Second Interconnection Financial Security Posting for Cluster 14 Parked Projects

## **Background**

The ISO proposes to adjust the due date for the second Interconnection Financial Security (IFS) posting for cluster 14 projects that opted to park following the publication of the 2024 TPD allocation results. The reason for the adjustment is the need to change the 2025 – 2027 TPD allocation cycle schedules to accommodate the unique schedule for implementing the intake and cluster study for cluster 15. The ISO intends to implement the following revised schedule for the 2025 – 2027 TPD allocation cycles.

2025 – 2027 TPD allocation cycle schedule

The 2025 seeking and retention affidavit due date for cluster 14 and prior clusters will be delayed from March 15 to September 1, 2025. The TPD study will begin on November 1, 2025, and the TPD study results will be published on March 31, 2026. With the date of the 2025 TPD allocation results occurring in 2026, no additional TPD allocations will be performed in 2026. The 2027 TPD allocation cycle will occur on the standard schedule with the affidavits due March 15, 2027.

Appendix DD, Section 11.3.1.3 *Posting Requirements and Timing for Parked Option (A) Generating Facilities*, provides for the second IFS posting due date to be extended by 12 months. The original due date for projects that did not park was July 1, 2024, which would set the due date for cluster 14 parked projects July 1, 2025. However, this date is well before the March 31, 2026, publication of the TPD allocation results from the next cycle, requiring interconnection customers to make their second posting without knowing these results. Customers normally would have that information to help inform their decision on whether they want to make their second IFS posting or withdraw their project.

## **Proposal**

The ISO proposes to adjust the second IFS posting due date for cluster 14 projects that opted to park to May 29, 2026 – roughly sixty calendar days after the TPD allocation results are published on March 31, 2026. The sixty days will give the ISO a month to send out any adjusted IFS posting amounts, if needed, and the interconnection customer time to complete its IFS instruments with the PTO. This is consistent with past schedules where the due date for the second posting was 180 days after the phase II study reports being provided, resulting in an IFS due date approximately sixty days after the TPD results were provided.

Under the unlikely event that some cluster 14 projects are eligible to take advantage of extended parking (a second opportunity to park), the need to consider adjusting the second IFS posting date for any project electing to park a second time will be evaluated at that time.

## 6. WEM Governing Body Role

This initiative proposes certain tariff amendments to enhance the process for studying and approving interconnection requests. ISO staff believes that these proposed tariff changes need to be considered only by the Board of Governors and that the WEM Governing Body has no role in the decision.

The Board and the WEM Governing Body have joint authority over any

"proposal to change or establish any CAISO tariff rule(s) applicable to the WEIM entity balancing authority areas, EIM Entities, or other market participants within the EIM Entity balancing authority areas, in their capacity as participants in EIM. This scope excludes from joint authority, without limitation, any proposals to change or establish tariff rule(s) applicable only to the CAISO balancing authority area or to the CAISO-controlled grid."<sup>29</sup>

Charter for EIM Governance § 2.2.1. The tariff changes proposed here would not be "applicable to EIM Entity balancing authority areas, EIM Entities, or other market participants within EIM Entity balancing authority areas, in their capacity as participants in EIM." Rather, they would be applicable "only to … the CAISO-controlled grid." Accordingly, these proposed changes to implement these enhancements would fall outside the scope of joint authority.

The WEM Governing Body also has an advisory role that extends to any proposal to change or establish tariff rules that would apply to the real-time market but are not within the scope of joint authority. This initiative, however, does not propose changes to real-time market rules.

Stakeholders are encouraged to submit a response in their written comments to the proposed classification as described above, particularly if they have concerns or questions.

## 7. Stakeholder Initiative Schedule

The schedule for stakeholder engagement is provided below. The ISO presented its proposal for track 1 to the Board of Governors in May 2023 and presented its track 2 enhancements to the Board of Governors in May and June 2024, with the Board of Governors approving track 2 on June 12, 2024. The ISO intends to bring this proposal to the Board of Governors in March of 2025, which will require an aggressive schedule for receiving and reviewing stakeholder comments, and developing a draft final and final proposal.

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<sup>&</sup>lt;sup>29</sup> Charter for EIM Governance § 2.2.1.

Date	Milestones	
January 9, 2025	Draft final proposal posted	
January 15, 2025	Stakeholder call on draft final proposal	
January 29, 2025	Comments due on draft final proposal	
February 18, 2025	Final proposal posting	
February 25, 2025	Stakeholder call on final proposal	
March 4, 2025	Comments due on final proposal	
March 2025	Board of Governors Meeting	