Retention of Interconnection Service and Deliverability for Retirements and Repowers

Final Proposal

June 23, 2026

Prepared by:
Jill Jordan
Jason Foster
Angela Randall
Catalin Micsa

California Independent System Operator

Contents

1. Introduction and Background

With this paper, the California ISO (ISO) provides its Final Proposal to codify a generating unit's rights and obligations to retain deliverability and interconnection service capacity rights after an outage or after ceasing operations. This paper builds on the Draft Final Proposal with clarifications regarding the treatment of facilities that are subject to regulatory timelines and requirements outside the generator owner's control.

When a generating unit ceases operation, it retains its deliverability allocations and interconnection service capacity rights. Holding such deliverability and interconnection service capacity indefinitely may trigger future study results to identify additional network upgrades at ratepayers' expense even though available capacity exists on the system. To ensure prudent use of existing capacity and to incentivize timely repowers and returns to service, a generating unit must either return to service, enter the generator interconnection queue, or enter the repower process and begin construction activities within the timeframes specified by the ISO to retain their deliverability and interconnection service capacity rights. The ISO has long detailed these rules within its Business Practice Manuals (BPMs) but now endeavors to include certain provisions within the ISO tariff that reflect the intent and details of these BPM provisions.

1.1 Current Deliverability Processes

The ISO studies interconnection requests in each new queue cluster to determine reliability and deliverability network upgrades, and interconnection facilities required to support each project's interconnection service capacity and deliverability. The interconnection studies take into consideration the projects in the current queue cluster, all active projects that were previously studied, and all generating units that have achieved commercial operation.

Deliverability is allocated through the transmission plan deliverability (TPD) allocation process. Upon achieving commercial operation, generating units receive their allocated deliverability and can be added to the Net Qualifying Capacity (NQC) list.

Over the life of a generating unit's operations, the generating units may become physically derated, whereby the maximum output capability is reduced below the capacity identified in the generating unit's generator interconnection agreement (GIA). In these cases, under current ISO rules, the generating unit's deliverability will be derated commensurate with the loss of output capability if the derate lasts for three (3) or more years. If within three (3) years, the resource returns its maximum output capability to the capacity identified in the generating unit's generator interconnection agreement (GIA) then deliverability will be restored to the amount identified in the GIA.

The deliverability of a resource does not fluctuate from one year to the next when its

NQC value is reduced on the NQC list due to changes in QC calculation methodology. When a generating unit's NQC value is reduced below the capacity identified in the generating unit's GIA, the ISO clarifies that the generating unit has not lost its deliverability due to such NQC reduction. The generating unit retains the deliverability identified in the GIA.

1.2 Interconnection Rights

Generating units that began generating prior to the existence of the ISO have or had two-party GIAs with the applicable Participating Transmission Owner (Participating TO). These two-party GIAs are being, or have been, converted to three-party GIAs with the Participating TO and the ISO, and have grandfathered interconnection service capacity and deliverability up to the amount of generating capacity they constructed. They are included in the ISO transmission planning and interconnection base case. Moreover, Generators interconnected to distribution systems of utilities can also seek deliverability from the ISO and are subject to the same retirement provisions today as ISO interconnected generators, since they are subject to the terms and conditions of a participating generator agreement. The Participating Generator Agreement (PGA) requires both of these types of generators, like other generators, to submit timely retirement notices to the ISO.

For clarity, the ISO considers any generation that is subject to a PGA and intends to terminate participation in the ISO wholesale market but continues generating to serve load through applicable retail programs, to also be subject to the retirement process as a generator that is permanently retiring (Retirement Scenario 3). This would include, for example, distribution-connected or transmission-connected participating resources that wish to exit from the ISO markets to serve onsite load. Although such generators will continue to produce electricity, their exit from the wholesale markets will be treated as a retirement, including triggering a reliability-must-run review.

While generator owners have multiple avenues and processes to apply for, receive, and retain deliverability allocations and interconnection service capacity rights, they also are required by the ISO tariff and PGA to notify the ISO if and when they plan to retire their facility in accordance with the processes established in the ISO BPMs. This ensures that generating units always notify the ISO of their current and future operational status, which in turn allows the ISO to accurately update its planning assumptions in the interconnection and transmission planning processes. Generators that do not follow these processes disrupt the ISO's ability to plan the grid accurately and end up withholding scarce deliverability and interconnection service capacity from the broader group of participating generators. Although generators have rights to re-use their available capacity, these rights are not indefinite. The ISO and transmission owners have an obligation to ensure that network upgrades continue to be used-and-useful to

ratepayers.

1.3 Outages and Repowering

Generating units may cease operations for a variety of reasons, including planned or forced outages, which are scheduled in the ISO's Outage Management System (OMS) by the generating unit. The OMS is a secure software system that enables parties to complete transactions included in the ISO's outage management process. A planned outage happens when the generating unit ceases operating for the purpose of planned maintenance. A forced outage occurs when a generating unit ceases operation without the ability to provide sufficient notice. For example, as the result of an unexpected equipment failure or emergency at the generating unit.

The ISO convened a stakeholder process to establish a process for retirements of generating units and to define the retirement scenarios above in 2001 through 2005 when the Resource Adequacy Tariff was originally established. The ISO updated the policy through a stakeholder process during 2017 and concluded with language in the Reliability Requirements BPM and the Generator Management (GM) BPM. The resulting retirement scenarios are below.

When a generating unit ceases operation, the generator owner could choose to recommence operations, repower, mothball (then recommence operations), or retire the generating unit permanently. Repowering refers to the process where an existing generating unit replaces its generating units with either the same (but modernized) generating technology, or with a different technology. When generating units request to repower, the ISO conducts an initial study to determine whether the repower is possible without additional study. If the proposed generating unit is found, through the repower study process, to substantially change the electrical characteristics of the existing generating unit, it must submit a new interconnection request in the next queue cluster study process; however, the interconnection request would maintain its existing interconnection service capacity and deliverability.[1] The interconnection request also would automatically go through the cluster screens for new projects because it would not need new capacity; the ISO and transmission owner merely need to ensure the replacement generation does not negatively impact the grid. If a developer sought to *expand* its capacity beyond the original unit, the expansion would be scored separately under the cluster screens.

A generator owner also may be undecided and wish to retain its rights during an afforded window to decide. This can take two forms: if the owner knows it will not use the existing plant, it may begin decommissioning the plant while preserving its rights.

[1] If the replacement generation required less deliverability than the original, the deliverability would return to the allocation pool.

This often occurs while determining whether a repowering study will be successful. Alternatively, if the owner does not know whether it will resume operations of the original plant, repower, or simply retire, it may "mothball" the generating unit while it decides.

If a generating unit has reached end-of-life and the generator owner does not want to repower the generating unit, the generator owner may choose to retire the generating unit permanently and release the associated interconnection service capacity and deliverability back into the system.

All the above options require ninety (90) days' notice of retirement/mothball and a retirement/mothball affidavit to be submitted to the ISO, specifying the actual date the resources has or will become inoperable, the effective date of the retirement and the chosen retirement scenario. These processes are described in the GM BPM. After a valid ninety (90) days' notice and affidavit are received, the ISO initiates the reliability review process to assure that local and system reliability can be maintained without this resource.

1. If the technical review process concludes that reliability can be maintained without the resource, then the ISO will approve the retirement/mothball. The retirement/mothball approval letter will include specific data related to their specific chosen retirement scenario, including the retention period of deliverability and interconnection rights if applicable.

2. If the technical review process concludes that reliability cannot be maintained without the resources being operational then the retirement/mothball request will be denied and the ISO will work with the owner of the resource towards negotiation and implementation of a Reliability Must Run (RMR) agreement for the resource to continue operation. The owner of the resource may also enter an RA-type contract with another party, in lieu of the RMR agreement directly with the ISO, as long as that contract ensures the resource will stay operational.

Generator owners must notify the ISO well in advance of when their generating unit may become inoperable to ensure the ISO can conduct a reliability study. All resources seeking to retire must initiate the retirement process through ISO Regulatory Contracts group. Simply requesting a Scheduling Coordinator ID (SCID) End Date does not initiate the retirement process, although it is a required step within the overall procedure.[2]

[2] If a Resource Owner or its Scheduling Coordinator submits a CIDI ticket to initiate the SCID End Dating process before formally entering the retirement process, they are redirected to Regulatory Contracts to begin the required retirement procedure. If an SCID is relinquished and the resource does not designate a new Scheduling Coordinator within 30 days or fewer, the resource will be deemed

The current announced retirement and mothball list is posted here: https://www.caiso.com/documents/announced-retirement-and-mothball-list.xlsx

After a generating unit is permanently retired, the generating unit is removed from the ISO network model and transmission planning base cases.

2. Stakeholder Comments

Pacific Gas & Electric Company (PG&E) and Yuba County Water Agency (YCWA) provided comments in support of the proposal with requests for clarification regarding the applicability of the Mothball/Repair-in-Progress retirement status.

PG&E requested clarification regarding the applicability of the policy to Utility Owned Generation (UOG) hydro facilities that the utility elects to sell, as well as UOG facilities that are regulated under a FERC Hydro License, where FERC has authority to direct the path of the generating facility, either through the Orphan process or commencing the decommissioning path. PG&E suggests allowing such facilities to utilize the Repair-in-Progress status under the mothball scenario. The ISO clarifies that such facilities may remain mothballed, in Repair-in-Progress status, so long as they continue to demonstrate progress regarding the sale and return to service, or FERC processes.

YCWA requested confirmation that the Repair-in-Progress status is applicable to generating facilities that have experienced a major event that requires considerable work to repair, and where there is not yet an estimated return to service date due to significant work required around engineering, environmental, permitting, regulatory, and safety requirements which could take a considerable time to complete. The ISO confirms that the Repair-in-Progress status under the mothball scenario is applicable to such generating facilities.

3. Proposal

As discussed above, when a generating unit ceases operation, it continues to hold deliverability and interconnection service capacity for a period. However, holding deliverability and interconnection service capacity triggers future study results to identify additional network upgrades at ratepayers' expense for other interconnections when there is available capacity. To ensure prudent use of existing capacity and to incentivize timely repowers and returns to service, the ISO proposes requiring generating units that

non-compliant, unless the resource has been approved for retirement. Only dissociating from a Scheduling Coordinator while not submitting and seeking approval through the retirement process leaves generators at risk of losing their interconnection service capacity and deliverability rights.

cease operations to notify the ISO and determine a path forward as follows.

The ISO proposes to update the tariff to include the retirement scenarios that are currently defined in the BPM for Generator Management to the tariff, and proposes adding two additional sub-categories to the Mothball scenario as outlined below:

Scenario 1: Repower/Enter Queue

Scenario 2: Undecided and decommissioning (unavailable for service)

Scenario 3: Permanent Retirement (voluntarily release of TPD/ISC)

Scenario 4: Mothball (make unavailable), Generating Unit remains intact

4a. Temporary off-line Status (economic outage) - remaining unchanged (intact) and with intention to return-to-service

4b. "Repair-in-Progress" Status with intention to return to service pending equipment procurement (repairs, maintenance, or regulatory)

The ISO clarifies that a generating unit is permitted to make the following changes between retirement scenarios. All changes must occur within twenty-four (24) months of the generating unit ceasing operation and all changes at that point are final.

- Permanent retirements may not change status (selection at any time is final)
- Repower/Enter Queue, Undecided and decommissioning, and Mothball generating units may change to Permanent Retirement at any time (including after submitting a repower or submitting an interconnection request)
- Repower/Enter Queue generating units may not change to Undecided and decommissioning or Mothball, but may change to Permanent Retirement
- Undecided and decommissioning generating units may change to Repower/Enter Queue or Permanent Retirement, but may not change to Mothball
- Mothball generating units may return to service or change to Repower/Enter Queue or Permanent Retirement, but may not change to Undecided

The ISO will maintain the retirement affidavit submittal process and continue requiring that all generating units intending to mothball or retire from service submit the retirement affidavit and define the expected return-to-service date. The ISO will change the repower affidavit to a repower request form. Additionally, generating units will not be able to submit outage cards longer than twelve (12) months. The ISO proposes a requirement that such generating units take specific action within a specific timeframe after it ceased operations as follows:

Generating units currently generating and planning to retire are required to submit a retirement affidavit within ninety (90) days of planned retirement date to avoid delays in retirement process. This includes those in all Scenarios, including those in mothball status and intending to be temporarily offline. Not submitting the affidavit within 90 days

of planned retirement may result in a delay of the retirement date of the generating unit. Such delay will not increase the retention timeline of deliverability or interconnection service because those are calculated from the date when the generating unit ceased operation (and not when the paperwork was submitted).

Within twelve (12) months of ceasing operation, all generating units must submit a retirement affidavit, selecting a retirement scenario. Those that have submitted a retirement affidavit for a planned retirement, as noted above, will have been considered to have met this obligation. This includes all generating units that dissociate from their scheduling coordinator and have not yet contracted with another. The generating unit may be removed from OMS and managed in the retirement processes until it returns to service or the repower achieves commercial operation.

Within twenty-four (24) months of ceasing operation, generating units in Repower/Enter Queue, Undecided and decommissioning, and Mothball/Temporary Offline Status (if desired) must submit a repower request or a new interconnection request. Those in Mothball/Temporary Offline Status that are not submitting a repowering or interconnection request must provide their targeted online date. Note that the online date must be within three (3) years from date generating unit ceased operations to meet the thirty-six (36) month window. Additionally, starting at the twenty-four (24) month mark, those in Mothball/ Repair-in-Progress status must begin providing status reports every six (6) months to demonstrate timing and plan to return to service.

Within thirty-six (36) months of ceasing operation, those in Mothball/Temporary Offline Status must return to service.

Note that Mothball/Repair-in-Progress Status may continue maintenance or equipment replacement beyond the thirty-six (36) month point and will retain deliverability and interconnections service rights, so long as generator owner provides notice to the ISO and whereby the ISO agrees to the reasoning (where agreement will not be unreasonably withheld), maintains good standings of the contracts and progress to commercial operations, and demonstrates continued equipment procurement and progress to return to service. Mothball/Repair-in-Progress status can also be used for generating facilities that are subject to regulatory restrictions that are outside the control of the generator owner.

Generating units on outage that have already notified the ISO they will repower or retire will continue on those paths. They will only be required to meet the timelines for doing so starting with the effective date of the ISO's tariff revisions (not retroactively).

Likewise, beginning on the effective date of the ISO's new tariff revisions, generating

units on outage will have one (1) year in which to submit a retirement affidavit and select a scenario. Based on which scenario they select, they will have 24-36 months to retire, repower, repair, or return to service as described above.

Generating units that complete the above requirements within the specified timeframes will remain in good standing and retain their interconnection service capacity and deliverability. If a required action is not completed within the specified timeframe, the generating unit will be considered to be in breach of the PGA, GIA, or other market agreements, and the ISO will notify the unit under the relevant agreements. Failure to cure any breach will lead to default and termination. At such a point, the generating unit will be considered permanently retired. The ISO will remove the generating unit from the ISO base case, releasing the associated interconnection service capacity and deliverability back into the system and made available to others.

The following are specific situations that could arise and how the ISO proposes to manage them:

- In the event a generating unit repowers with a lower interconnection service capacity than the generating unit's current GIA capacity and does not submit a repower request or enter the queue for the remaining capacity within the timeframe defined above, the interconnection service capacity in the generating unit's GIA will be reduced to the capacity of the approved repower. For example, if the generating unit's GIA has interconnection service capacity of 1000 MW, but the repower has an approved interconnection service capacity of 700 MW, the interconnection service capacity included in the generating unit's new GIA would be 700 MW. The generating unit's deliverability would be reduced to the same capacity.

- If a generating unit adds battery storage to existing generating unit (e.g., via a post-COD modification request) and the original generating unit ceases operation and does not complete a repower or return to service within twenty-four (24) months, the original generating unit will be considered permanently retired and the GIA will be adjusted to reflect the technology, interconnection service capacity, and deliverability of the remaining generating unit(s) of the generating unit.

- The rules discussed in this policy will apply to market-participating distribution-connected resources as well. In the event that the generating unit fails to abide by the timelines and does not cure its breach after notification, the ISO will take the same steps it will take with its own interconnection customers, and work with the PTO to terminate the GIA.

- If a generating unit repowers or submits a new interconnection request, the replacement generation must come online within seven (7) years from the date the repowering request or new interconnection request is submitted to the ISO, including those submitted and studied prior to the effective date of this policy. If an interconnection customer's construction will take longer than seven (7) years, the ISO will apply CVC to repower requests starting from the date the repower request is submitted or the interconnection request is submitted into the queue cluster application window to ensure the generating unit completes the repower process and returns to operation within a reasonable timeframe. If the repowering generating unit must extend its COD beyond seven (7) years from the date the repowering request was submitted and does not satisfy/demonstrate CVC, the default provisions in the GIA will apply. If the default is not cured, the repower study will be withdrawn, the GIA, PGA and market agreements will be terminated, and the generating unit will be considered permanently retired, releasing the associated interconnection service capacity and deliverability back into the system and made available to others. For those repowers that require new interconnection requests, the CVC will apply just as they would for greenfield interconnection requests, based on the date of the new interconnection request.

- Deliverability transfers at the same POI must be specifically requested by the generator owner or scheduling coordinator (if already operational). All deliverability transfer requests are processed by the ISO. If the transfer is between different types of technology, ISO deliverability coefficients are used for conversion. All deliverability transfers under the ISO Tariff follow the process described in the GM BPM section 6.5.4 "Deliverability Transfers". The preferred way for deliverability transfers is to be done before resources become operational through the queue or repower process. Transfers of deliverability can be done after resources become operational; however, the timelines of such deliverability transfers can be very restrictive. All deliverability transfers must follow the "Deliverability Transfer Implementation Process" as described in section 6.5.4.2 of the GM BPM.

4. WEM Governing Body Role

This initiative proposes certain tariff amendments to codify a policy that defines a generating unit's rights to retain deliverability and interconnection service capacity rights after a generating unit ceases operation within the ISO Balancing Authority Area (BAA). ISO staff believe that these proposed tariff changes will go to the Board of Governors only and that the Western Energy Markets Governing Body will have no role in the

decision.

The WEM Governing Body has primary authority over any

> "proposal to change or establish a tariff rule applicable to the WEIM/EDAM Entity balancing authority areas, WEIM/EDAM Entities, or other market participants within the WEIM/EDAM Entity balancing authority areas, in their capacity as participants in WEIM/EDAM… The scope of this joint authority excludes, without limitation, any other proposals to change or establish tariff rule(s) applicable only to the ISO balancing authority area or to the ISO-controlled grid."[3]

Charter for WEIM and EDAM Governance § 2.2.1. The tariff changes proposed here would not be "applicable to the WEIM/EDAM Entity balancing authority areas, WEIM/EDAM Entities, or other market participants within the WEIM/EDAM Entity balancing authority areas, in their capacity as participants in WEIM/EDAM." Rather, they would be applicable "only to … the ISO-controlled grid." Accordingly, these proposed changes to implement these enhancements would fall outside the scope of the WEM Governing Body's primary authority.

The WEM Governing Body also has an advisory role that extends to any "proposals to change or establish tariff rules that would apply to the real-time and/or day-ahead market but are not within the scope of its primary authority." This initiative, however, does not propose changes to the rules of the real-time or day-ahead markets.

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.

5. Stakeholder Initiative Schedule

In order to provide time for filing tariff changes to FERC, and to hold the various training events on a timely basis prior to the window, the ISO will endeavor to present a final proposal to the ISO Board of Governors in July 2026.

Current Schedule	Retention of Interconnection Service and Deliverability for Retirements Initiative Schedule
6/23/2026	Final Proposal Posting
7/16/2026	Board of Governors Meeting (decision)

[3] Charter for WEIM and EDAM Governance § 2.2.1.