

## Resource Interconnection Standards Fair Q&A

If you have issues with GRIP, please contact the ISO Service Desk [ServiceDesk@caiso.com](mailto:ServiceDesk@caiso.com), (916) 351-2309 or (888) 889-0450

If you have questions regarding the content of your interconnection request submittal, please send an email to [IRInfo@caiso.com](mailto:IRInfo@caiso.com)

### GENERAL

- What is the interconnection study process schedule under ISO Tariff Appendix KK, Resource Interconnection Standards?
  - The RIS study timeline is here <https://www.caiso.com/documents/resource-interconnection-standards-interconnection-study-timeline.xlsx>

### SUBMITTING AN INTERCONNECTION REQUEST IN THE GRID RESOURCE INTERCONNECTION PORTAL (GRIP)

- [Grid Resource Interconnection Portal \(GRIP\) | California ISO \(caiso.com\)](#) < User Guide and Tutorial
- I just was granted access to GRIP. How do I access our projects that are currently in the CAISO queue?
  - Customers will need to resubmit all application data into GRIP. The information is not transferred from RIMS to GRIP.
- How do I access GRIP?
  - Click the link on the ISO website <https://www.caiso.com/generation-transmission/generation/generator-interconnection/interconnection-request-study>
- Can multiple people have access to an entered project?
  - No, only one person will have access to the entered project until it has been validated.
- What is the maximum file upload size?
  - 500 MB
- What should I do if the 500MB upload size is not sufficient?
  - Zip the files and upload it
- In the application submission, will the GRIP allow an interconnection customer to select a POI that does not have available TPD?
  - Yes, please choose carefully.
- Can I enter information on a form and upload it?
  - No, all information must be entered in GRIP
- May I upload more than one document when required?
  - No, only one document may be uploaded. If there is more than one file, please zip the files
- Can an interconnection request deemed complete be reopened?
  - No, you will need to withdraw the complete interconnection request application and start over with a new interconnection request application.
  - Before the interconnection request is submitted you have full access

- After the IR is submitted, it can be returned to you before it is deemed complete.
- Will pre cluster 15 interconnection requests be in GRIP?
  - No, only cluster 15 will be in GRIP initially. Earlier clusters will be added in the future. Please continue to use RIMS for any pre cluster15 interconnection requests.
- Can an interconnection request be copied in GRIP?
  - Not at this time.
- Can I combine interconnection requests?
  - No, interconnection requests may not be combined

## TPD ZONE/ POI SELECTION

- What differentiates a TPD Zone from a Merchant Zone?
  - A TPD zone has more than 50MW of available TPD
  - A merchant zone has less than 50 MW of available TPD
- What happens if I choose a POI that has 0MW of TPD?
  - If you chose FCDSR TPD zone, the chosen POI must have more than 0MW of TPD available under all constraints to remain in cluster 15
  - If you chose FCDSR merchant zone or energy only, you will proceed to scoring.
- Are non-operational resources all interconnection requests until QC14?
  - Non- operational resources are all interconnection requests up through C14 that have not yet come online
- When we say the constraint has 100MW of capacity in the example, is that referring to an identified contingency/monitored element pair, that has been identified and mitigated, and there are 100MW remaining with that constraint applied?
  - The TPD amount is based on a particular mon/contingency pair and how many MWs can be delivered with the constraint not going above 100% loading
- Will the TPP 2022-2023 base case be used to determine which direction the majority of the power flow is towards for the loop in substation analysis
  - The ISO will use the latest TPP base case which is the 2024-2025 TPP Base case
- For the line-POI cases; if it's a loop in substation along A to B and substation A has 100MW available TPD and substation B has 150MW TPD available, if the power flow mostly goes towards A, is it correct to assume that the interconnection request will be considered as if it's being A and behind the same constraints at A with a 100MW TPD available?
  - Yes, your POI will be treated as if it was at POI A for the purposes of determining which constraints it's behind and what zone it's in
- PG&E's restricted POIs will result in a huge swath of interconnection requests that will not be accepted. This is a very late change in what is already a constrained and chaotic interconnection process. What else can ISO do to push back on PG&E's assertion here that no solutions are available to this issue? It is unacceptable that the ICs have to individually work through PG&E to resolve this issue.
  - Transmission owners are responsible for operating their systems according to good utility practice.

- Can you provide information on how we would contact a PTO contact, specifically PG&E, on these transmission interconnection handbook with questions better for PTO?
  - The ISO cannot be responsible for connecting ICs with specific individuals at each PTO.
- Can I connect to one of PG&E's restricted substations?
  - The IC is allowed to pick any POI but asking for a POI on either G2 or G2-A list will be evaluated by the following criteria:
    - Any new POI request to substations listed in Table G2/G2-A that requests new element at the substation is prohibited.
    - Any new POI request that is an existing plant site expansion at a substation listed in Table G2 is acceptable but could be subject to SCD mitigation upgrade which will be evaluated during the Cluster 15 Study Process.
    - Any new POI request to substations listed in Table G2-A who seeks to share an existing bay position with a prior Queue project is acceptable.
- The PG&E handbook shows quite a few substations as unavailable (even though the TPD report and heat map show the sub with available TPD). Does this mean only when the volumes in the heatmap/TPD workbook are exhausted, then there is no more capacity? Will the ISO then use only 100% and not 150% of the shown TPD volume for interconnection requests at these substations?
  - See answer above.
- If we have an interconnection request sharing a gen tie into Gates (which is one of the substations that has TPD but that PG&E says cannot accommodate additional growth), is that interconnection request subject to the "no more capacity" direction from PG&E?
  - See answer above.
- Could you please confirm that applications submitted on circuits out of PG&E's substations that are identified to have short circuit issues will not be rejected and the 100 amps criteria is only for allocating costs for short circuit upgrades?
  - POIs that are within sufficient electrical distance to restricted substations and that may contribute to more than 100 amps of fault current may not be removed from cluster 15 during intake but may be removed from cluster 15 during validation or extra mitigation may be required.
- There are several PG&E substations that are not eligible due to the short circuit duty limitation. However, some of the lines connecting to those substations have TPD available. Is there an ISO or PTO requirement that a new substation cannot be built within a certain distance (1 mile? 5 miles?) from an existing substation? We understand POI change is not allowed after 12/2, but can we change the interconnection point along the same line after 12/2?
  - PG&E does not allow the construction of new substations within 5 miles of an existing substation.
  - No interconnection customer changes to the interconnection point along the transmission line will be allowed after 12/2.
- Does the ISO have any plans to provide transmission expansion in merchant zones or will these merchant zones be merchant forever?
  - The zones will be updated for each cluster based on the available data.
- If a Cluster 15 interconnection request changes it's POI within the same transmission zone (specifically just changing voltage level at the same substation), will the

- interconnection request still go through the study process in this round (if it has available TPD and gets the interest points it needs to move forward) and as long as the change in POI occurs in the resubmission window?
- Within the resubmission window, as long as the voltage change results in the POI remaining in the same zone, the interconnection request will go through the intake process to determine if it will proceed to the cluster study.
  - If a POI is behind a constraint with 0MW available TPD only within the TPD zone in which the POI is located, that interconnection request will not be included in the cluster study. Is that right?
    - Yes
  - Is there a document that offers a breakup of the Allocated TPD values listed on the Matrix?
    - Look here <https://www.caiso.com/library/transmission-capability-estimate-inputs-for-cpuc-integrated-resource-plan-aug-29-2024>
  - If an interconnection request's POI is MANNING 500 kV, will the 150% limit be based on the 1680 MW based on injection transfer limit assessment?
    - Yes
  - When are POI changes allowed?
    - Only during the cluster application/resubmission window
  - How are zones determined?
    - Zones are defined based on the electrical topology to make transmission planning more manageable; therefore, zone boundaries may change.
  - What happens if I change the substation voltage of my interconnection request?
    - If you were already in ISO's cluster15 then you may change the voltage to another voltage under ISO control at the substation within the same zone.
    - No voltage changes that move an interconnection request from transmission level to distribution level or vice versa will be allowed.
  - What TPP policy and reliability projects were included as a basis for the data sets
    - TPP 23/24 policy & reliability projects not included in the data used for intake eligibility.
    - TPP 23/24 policy & reliability projects were included the 2024 TPD study
  - WDATs are studied by CAISO for deliverability only and will be studied to ensure that they are at a POI with available TPD in order to proceed to the cluster study.
    - WDAT IRs meeting bullets below will not be additionally studied by CAISO. Any further action is up to the PTO.
      - The WDAT is seeking to interconnect in a merchant zone.
      - The WDAT seeking to interconnect in a TPD zone, but at POI with no available TPD.

## COMMERCIAL READINESS DEPOSIT/POSTINGS

- Interconnection customers in Cluster 15 will be able to submit their Interconnection Request via the GRIP platform BEFORE their Commercial Readiness Deposit and or Merchant Option Deposit has been finalized as long as they upload the draft agreement showing that they are working with the PTO in good faith. The ISO will confirm this with the PTO.

- Interconnection requests that do not have an executed Commercial Readiness Deposit and/or Merchant Option Deposit by the end of validation period will not be eligible to move forward in the study process.
- The ISO encourages interconnection customers to complete the process well before the deadline to ensure the Commercial Readiness Deposit and/or Merchant Option Deposit meets all requirements. There is no cure period.
- Would you please expand on the process the customers should use to post the customer readiness deposits?
  - All commercial readiness deposits are to be submitted directly to the PTO.
  - Submit deposits early to allow time for updates and verifications.
  - Any deposit not complete by the end of the engagement window will not be accepted, and the interconnection request will be deemed withdrawn.

Due Date	Amount
Interconnection Request Submission	2X study deposit
20 CD after Cluster Study Report Meeting	5% NU
Simultaneous with the execution of IF Study Agreement/Appendix B (within approx. 37 days of Cluster Restudy Report Meeting)	10% NU
Upon GIA execution or within 10 BD of request for unexecuted filing	20% NU

- Look here <https://www.caiso.com/generation-transmission/generation/generator-interconnection/interconnection-request-study> under Participating transmission owner financial security instruments to find what each PTO accepts.
- Make sure you upload the banking receipts and financial instruments with the application in GRIP.
- Cluster Study Criteria – who posts the commercial readiness deposit?
  - All customers must post the commercial readiness deposit
- Where do deposit funds go?
  - Deposit are held as security to alleviate stranded asset costs.
- What happens to merchant deposit?
  - See the RIS Section 4.2
- Does the ISO accept financial instruments?
  - All deposits to ISO must be cash

## WITHDRAWALS

- For withdrawals, could ISO please clarify whether the 5% penalty is 5% of the NUs currently posted or 5% of the total NUs? If the 5% is 5% of the total NUs, is it possible that an Interconnection Customer's Withdrawal Penalty could be greater than their current NU posting?
  - The penalty is 5% of its estimated NU costs. The penalty should not exceed the current NU posting since they align.
- FERC Order 2023 says to use the withdrawal penalty for study fees and or network upgrades. What is ISO's process on the withdrawal penalties collected?
  - See Section 7.6 of RIS
- If an Interconnection Customer selects TPD zone and there is no deliverability, and the Interconnection request gets removed from Cluster 15 with no cure for deficiency, the only penalty they would be subject to is the application fee – is that correct?
  - Yes
- For study and site control deposits paid for Cluster 15 interconnection requests back in April 2023, how can we determine the spend to date and when/how much the refund will be if we withdraw right now?
  - The ISO has not yet applied all of the costs incurred thus far. We do not know the amount yet.
- When will deposit funds be returned
  - Refunds will be processed as quickly as possible after we have acceptable refund documents and appropriate costs have been applied.

## SITE CONTROL

- What are site control requirements?
  - See Section 6.6 here <https://www.caiso.com/documents/draft-resource-interconnection-standards-business-practice-manual.docx>
- Is the site control demonstration form still required?
  - Not for C15 projects, the information is captured in GRIP.
- What is the basis of site control requirements?
  - ISO used industry information and solicited stakeholder input via the BPM change management process
- Does the 90% include gen-tie right of way
  - Site control does not include the length of the gen-tie.
- If the project is on public lands with Cost Recovery Agreement, does regulatory limitation apply and is deposit required?
  - No, the Cost Recovery Agreement is sufficient to demonstrate site control.
- If an option to lease expires before the COD, but lease contract starts right after the option to lease ends, will this be considered valid site control?
  - Yes, as long as the customer has an unrestricted ability to make the lease effective.
- When does site control in-lieu deposit go at-risk?
  - Never, it is returned upon withdrawal or upon providing the required Site Control demonstration for its point in the Cluster Study Process
- How do I show a regulatory limitation?
  - Provide an affidavit that:

- Describes the regulatory limitation;
- Documents the interconnection request land rights process for the specific agency; and
- Demonstrates where the interconnection request is in the land rights process with supporting documentation
- There is no explicit acreage requirement for long duration storage and that ISO will evaluate what developers show; is there any guidance on this
  - See note \*

● Acreage Reasonably Necessary**							
Technology	Solar PV	Solar CSP	Wind	Biomass	BESS	Gas Turbine	Hydro
Minimum Acres/MW	6	9	30	3	0.06	3	10

\*For a generation type not currently listed, provide documentation showing the interconnection request has acquired sufficient acreage.

\*\*Smaller land requirements will be considered with proper documentation of interconnection request configuration

## LSE POINTS

- The LSE I am working with let me know how many points my interconnection request is being allocated. How do I enter the points in GRIP?
  - Interconnection customers will not enter anticipated points.
- Can I get a better understanding of the LSE scoring process?
  - Information on the process is here <https://www.caiso.com/documents/cluster-15-interconnection-request-intake-process-training-on-lse-commercial-interest-scoring-process.pdf>
  - <https://www.caiso.com/documents/c15-commercial-interest-information.pdf>
- What distinguishes an LSE from a non-LSE?
  - An LSE is an entity that has an ISO resource adequacy obligation. A non-LSE is an entity that does not have an ISO resource adequacy obligation.

## ENGINEERING DESIGN PLAN

- What should be included when considering the engineering design plan?
  - All plans, specifications, engineering calculations (including mechanical, electrical and structural), working drawings, diagrams, details, and other relevant data for the equipment procurement, installation, and completion of the Generating Facility within a defined area. This includes maps, profiles, plans, and other necessary data to detail the location, nature of the work, and property that may be affected.
- Does affidavit need to be notarized?
  - No



- How should the percent completion be assessed?
  - The attesting engineer should determine the completeness. Consider the progress toward completion of the aspects of the engineering design plan and assign a percent complete.

## EXPANSION POINTS

- Can I get more detail on expansion points?
  - An Interconnection Customer can claim 10 sub-points if it is an expansion of a Generating Facility that has executed a GIA and submitted its notice to proceed and commenced Construction Activities, as confirmed by the Participating TO.
  - An Interconnection Customer can claim 20 sub-points if it is an expansion of an online Generating Facility.
  - Alternatively, an Interconnection Customer can claim 50 sub-points if it is an expansion of a Generating Facility that has executed a GIA, submitted its notice to proceed, commenced Construction Activities, as confirmed by the PTO, or is online, and the Generating Facility's generator tie line to the ISO Controlled Grid has sufficient surplus capacity to accommodate the sum of the maximum capacities of the extant Generating Facility and the expansion.
- What qualifies as an expansion?
  - An interconnection request that shares the site of an existing resource or interconnection request qualifies as an expansion.

## SYSTEM NEED

- How do I qualify for system need points?
  - An Interconnection Customer may claim up to 35 points for system need.
  - The Interconnection Customer may claim 50 sub-points if the Generating Facility could be a Local Capacity Area Resource when the Interconnection Request is submitted, and the ISO has projected a Local Capacity Area Resource Deficiency in that Local Capacity Area.
  - The Interconnection Customer may claim 100 sub-points if the Generating Facility is designated by a Local Regulatory Authority as a long lead-time resource; meets the requirements of the Local Regulatory Authority resource portfolio; and corresponds to approved Network Upgrades in the Transmission Plan specifically designed to meet the long lead-time resource needs of the Local Regulatory Authority, or does not require additional transmission capacity. The ISO will confirm eligibility for these sub-points with the applicable Local Regulatory Authority.
  - See specific details below.
- Is Out of State wind considered a "long lead-time resource"?
  - No, Off shore wind is considered a long lead-time resource.
- What resources are considered "Long Lead Time resources"? It seems the ISO will determine a list of eligible resources prior to the interconnection window opening.
  - See the following document <https://www.caiso.com/documents/cluster-15-long-lead-time-resources.pdf>
- Will an 8-hour battery qualify for system need points?
  - No



- Can I change my long-duration energy storage to a lesser duration battery that is no longer long-duration energy storage after cluster intake scoring?
  - No, interconnection customers may not make changes that reduce the long-duration energy storage status after cluster intake scoring.
- How do I qualify for the local Capacity Area Resource points?
  - Refer to the [Deficient local areas and sub-areas for GIP/WDAT incentive purposes](#) document dated May 22, 2024 on the CAISO website for information.
- How do I qualify for the long lead-time resource points?
  - Each Interconnection customer must demonstrate that it has been designated by a Local Regulatory Authority as a long lead-time resource; meets the requirements of the Local Regulatory Authority resource portfolio; and corresponds to approved Network Upgrades in the Transmission Plan specifically designed to meet the long lead-time resource needs of the Local Regulatory Authority, or does not require additional transmission capacity.
  - For example, the CPUC has identified the following technologies as long lead-time resources as applicable to CPUC-jurisdictional LSEs in D. 24-08-064.
    - Long-duration energy storage with a 12+ hour duration
    - Long duration energy storage with a multiple-day duration
    - Geothermal generation
    - Offshore wind generation
  - Interconnection customers must identify the Local Regulatory Authority that has identified the need for its project. The CAISO will confirm eligibility for these sub-points with the identified and applicable Local Regulatory Authority.
- What are the implications of changing the generation type of my project?
  - Interconnection customers may not enter the queue as a long lead-time resource and later change the generation type such that it no longer meets the long lead-time resource standard under which it entered the queue.

## CLUSTER STUDY CRITERIA

- If an interconnection request application has a POI with no TPD available, the interconnection request will then have to revert to EO or not be included in the cluster study?
  - If you submit as FCDSR or PCDSR and there is no TPD at the POI, your interconnection request will be removed from cluster 15 with no opportunity to proceed as energy only.
  - Interconnection requests may submit an energy only interconnection request either as reimbursement or non-reimbursement. If the interconnection request is not included in the 150% as reimbursement, it can switch to non-reimbursement.
- If an interconnection request elects to proceed in a TPD zone and competes to be studied and is removed from the study, can the interconnection request then switch to Energy Only?
  - No
- If an interconnection request elects to proceed in a Merchant Zone with the additional deposit, could the interconnection request switch to Energy Only after the cluster study results.
  - Yes, energy only non-reimbursement.
- If we start as an EO Reimbursement IR and are not successfully accepted for study, we can change to an Energy Only non-reimbursement IR, is that correct. How does that happen?

- As energy only reimbursement, if you do not make the 150% cut off you will be notified and allowed five BD to switch to energy only non-reimbursement.
- If we start with a TPD interconnection request and are studied, can we convert to Energy Only later? At what point?
  - A TPD interconnection request can become energy only non-reimbursement during submittal of the interconnection facilities study agreement/appendix B.

## AUCTION

- Can I get a better understanding of the Auction process?
  - All interconnection requests that are tied after the scoring and DFAX analysis are complete will be notified to submit an auction bid. Auction winners will be notified and must post to the PTO based on the winning bid before the end of the customer engagement window. Please review the RIS Fair presentation for additional information.

## NON-DISCLOSURE AGREEMENT (NDA)

- TP NDA template: [https://www.caiso.com/documents/regionaltransmissionnon\\_disclosureagreement.pdf](https://www.caiso.com/documents/regionaltransmissionnon_disclosureagreement.pdf)
- TP NDA instructions (includes WECC agreement template): <https://www.caiso.com/documents/regionaltransmissionnondisclosureagreementsubmissioninstructions.pdf>
- User Access Administrator (UAA) guide: <https://www.caiso.com/systems-applications/user-access-administrator-uaa#uaa-guide>
- UAA-related questions: [uaarequests@caiso.com](mailto:uaarequests@caiso.com)
- How often are the NDAs refreshed? Will we be notified if we have a deficient NDA?
  - NDAs are not refreshed. If there is a problem with the NDA, the ISO will reach out to you.

## SCOPING MEETING

- Will you have an anonymous chat option or similar to receive questions?
  - No, FERC intended for the meetings to be group meetings.

## INTERCONNECTION REQUEST COSTS

- In the new BPM, will there be detail updates to the Cost Responsibility Calculation (CCR MCR MCE formulas) for new study processes. The old BPM has minimum of phase I vs phase II calculation. Just want to have an updated formal documentation from ISO to support the new cost cap calculation for cluster 15 and for reallocations in reassessment studies.
  - Yes
- Could you clarify when CANU could no longer be attributed to later queued interconnection requests? Is it linked to interconnection requests prior signing a GIA? or 3<sup>rd</sup> deposit being made?
  - A CANU becomes a PNU when it is included in an executed GIA.

## REASSESSMENT/RE STUDY

- What triggers a re-study? If no interconnection requests withdrawal, is re-study still necessary?
  - The ISO will perform an annual reassessment/restudy. The immediately preceding cluster may not get a restudy report if there were no changes impacting the immediately preceding cluster identified as part of reassessment.
- Will the restudy be zonal or the whole cluster will be restudied?
  - The whole cluster will be studied

## INTERCONNECTION FACILITIES STUDY

- What changes can I make through the interconnection facilities study a greement/Appendix B?
  - Customers are encouraged to submit changes before the beginning of the reassessment. After this, the impact of any requested reduction may not be able to be provided to the IC until the next reassessment.
  - (a) no more than 15% decrease of electrical output of the proposed project through either (1) a decrease in plant size (MW) or (2) a decrease in Interconnection Service level (consistent with the process described in Section 3.1) accomplished by applying the CAISO-approved injection-limiting equipment;
  - (b) Generating Facility technical parameters associated with modifications to Generating Facility technology and transformer impedances; provided, however, the incremental costs associated with those modifications are the responsibility of the requesting Interconnection Customer; and
  - (c) a Permissible Technological Advancement for the Generating Facility after the submission of the Interconnection Request. Section 6.7.2.4 specifies a separate technological change procedure including the requisite information and process that will be followed to assess whether the Interconnection Customer's proposed technological advancement under Section 6.7.2.2(c) is a Material Modification. Appendix A to the CAISO Tariff contains a definition of Permissible Technological Advancement.
- If we submit an IR for long duration storage, and then need to change to 4-hour duration, when would the cut-off be? Can we switch after the Cluster study results are published?
  - No, you may not make changes that reduce the long-duration energy storage status

## PTO PREPARATION

- Is ISO planning to have any training sessions or reference material targeted for PTOs to clarify the PTO obligations and expectations in this new process?
  - The ISO has been meeting with PTOs over the past several weeks. If you have questions please send them to [IRInfo@caiso.com](mailto:IRInfo@caiso.com)

## TRANSMISSION PLAN DELIVERABILITY (TPD)

- Can you restate the conclusion on energy only resources into Cluster 15? I thought that was still under discussion under track 3 in the stakeholder process?
  - Interconnection requests requesting energy only will not be able to seek TPD.

## FUTURE CLUSTERS

- Is it safe to assume to that the next Cluster (C16 and future clusters) will open on 10/1/xxxx and close on 12/2/xxxx?
  - No. Subsequent windows will open October 1 and close October 15.

## RESOURCES

- ISO Tariff KK RIS Appendix 1, 2, 3
  - <https://www.caiso.com> > Generation and transmission > Generation > Generator Interconnection and the scroll down to the bottom of the page (Related ISO Tariff and Business Practice Manuals) or go to <https://www.caiso.com/documents/ferc-order-and-ipe-2023-pending-iso-tariff-appendix-kk.pdf>
- RIS Fair Presentation and Recording
  - <https://www.caiso.com/meetings-events/calendar/resource-interconnection-standards-fair>
- Interconnection Data
  - Under interconnection facility information
  - <https://www.caiso.com/generation-transmission/generation/generator-interconnection>
- TPD White Paper
  - <https://www.caiso.com/documents/transmission-capability-estimates-white-paper-2024.pdf>