

2023 Interconnection Process Enhancements

Revised Addendum to Track 2 Final Proposal

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Introduction

The ISO appreciates the robust stakeholder engagement throughout track 2 of the Interconnection Process Enhancements initiative, which seeks transformational reform of the interconnection request intake and queue management processes to enable increased and accelerated onboarding of new resources to meet reliability and policy needs.

This addendum provides additional clarifications on the final proposal for stakeholders, based on the most recent round of comments. The addendum focuses on the following issues:

- Clarification of the implementation of the zonal approach, and how available transmission capacity will be assessed for each cluster;
- Clarifications to the scoring process, and specifically recommendations to loadserving entities (LSEs) on the LSE allocation process; and
- Context and rationale for the final proposal's treatment of Energy Only resources.

Implementation of the zonal approach

A central tenet of this initiative is the prioritization of projects in areas with available transmission capacity for progression into the study process. This proposal reflects the first principle established by the working group to "Prioritize interconnection in areas where transmission capacity exists or new transmission has been approved, while providing opportunities to identify and provide alternative points of interconnection or upgrades." Projects or interconnection requests outside the zones will still have the option to self-fund network upgrades through a modified "Merchant Deliverability" process, as explained below. The ISO understands that access to information is critical for the zonal approach, and will provide stakeholders with information on the available transmission capacity within the transmission zones prior to the interconnection request window.

As indicated, the resources identified within the CPUC portfolios mapped to the substations within the transmission interconnection areas are assessed in the annual transmission planning process. This is done to determine the capability of the existing transmission system and identify transmission projects for approval to address the constraints identified to deliver the capacity and types of resources to load at the locations identified in the CPUC portfolios. The transmission constraints in the Transmission Capabilities Estimates are used by the CPUC in development of its

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portfolios. While the ISO is planning the transmission up to the resource identified in the CPUC portfolio in each of the interconnection areas, the specific constraints provide the capability of sub-zones within the interconnection area. A particular interconnection point may be identified behind more than one constraint, as some of the constraints are either nested within or overlap other constraints. The capability of a point of interconnection (POI) for resource interconnection needs to consider all of the constraints that it would be behind. The ISO will utilize the transmission constraint information along with the allocated Transmission Plan Deliverability (TPD) to determine available transmission capability for future clusters to be studied, as described below.

The identification of the amount of available transmission capacity, whether currently available or planned, needs to be based on the available capacity associated with the various known constraints within a given zone. This method will provide a transparent determination of available capacity within a zone and for determining which zones are TPD option zones and which are Merchant option zones. The CPUC resource portfolio and other LRA plans will continue to inform the transmission plan, which determines the amount of capacity on the system and in the zones.

To summarize:

- To determine available transmission capacity, the ISO will use zonal approach only to designate zones as TPD or Merchant zones.
- Within the TPD zone, the ISO will use a constraint-based approach based on the project's POI to determine if a project can move forward to the scoring phase.
- The ISO will then determine projects to advance to the study process using project scores, distribution factors, and 150% of available capacity for each known area constraint.

Stakeholder feedback indicated confusion around whether projects would be evaluated by zone or by POI. A zone is a study area that has minimal electrical interaction with adjacent zones. As described above, there can be nested and overlapping constraints within a zone that need to be considered on a POI level.

Additionally, stakeholders questioned why, if projects are evaluated at the constraint level, the zones are necessary at all. The ISO is committed to identifying zones in order to differentiate between TPD and Merchant zones. As previously stated, a zone is a study area that has minimal electrical interaction with adjacent zones. Therefore, studying Merchant projects in a Merchant Option zone will identify network upgrades

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that are only needed by those Merchant projects. Area constraints can be nested and overlapping and have considerable electrical interactions as described below.

Without the zones, the framework would have Merchant Option constraints and Deliverability Option constraints, and the need for the upgrades identified would be driven by both Merchant and Deliverability Option projects. Under that alternative framework, in order to study Merchant project delivery network upgrade needs, only a subset of the Deliverability Option project generation could be dispatched in the base case in order to avoid exceeding the transmission capability. Otherwise, Merchant Projects could be paying for upgrade costs that are not their responsibility. To avoid this outcome, two rounds of deliverability studies would be required. The first round deliverability study would model the Deliverability Option and Merchant generators in the zone, identify their LDNU requirements and establish the transmission or TPD limits. Then a second round deliverability study would need to be performed with the base case dispatched with Deliverability Option generators up to the transmission limit, and the Merchant generators added to determine the delivery network upgrade needs driven by only the Merchant generators. However, two rounds of studies cannot be completed in the time frame available in the 150 day Cluster Study, as required by FERC Order No. 2023. Only one round of study at the zonal level will be performed. The process would inappropriately assign cost causation if it were done at the constraint level, and therefore studies need to be done on a zonal level.

Stakeholders also asked about circumstances where a project is within a TPD zone but behind a constraint.

If the constraint has available transmission capacity, then projects will move forward to the scoring process and then to the study process up to 150% of the available transmission capacity. If the constraint does not have any available transmission capability, the project would not move on to the study process because no available transmission capacity exists. The information the ISO is providing will allow interconnection customers to avoid the POI that have no available transmission capability.

The ISO intends to discuss this approach for assessing the availability of transmission capacity further at a stakeholder workshop on May 16, 2024.

Fulfillment of 150% of Available and Planned Transmission Capacity

To fulfill each of the zones, the final proposal proposes to analyze individual transmission zones with sub-zonal constraints. In the interest of transparency, the ISO

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will use the same information provided to stakeholders prior to the interconnection process.

In the process of selecting projects that can proceed to the study process within each TPD zone, the ISO will add projects to various POIs in descending order of a project's score, until the available and planned transmission capacity for each constraint is filled to 150% of that capacity. Projects at a POI that are affected by a constraint with no available or planned transmission capacity will not be included in the study for that TPD option zone. Projects in a TPD zone and at a POI that has not been previously studied will be evaluated using engineering judgement or based on its effectiveness to the known constraints.

Any zone where each individual POI has available capacity of 50 MW or less will be designated a Merchant zone. The ISO also clarifies that the TPD zones are zones where one or more studied POI have at least 50 MW of available capacity or are not behind any known area constraint based on an assessment of the known constraints within the zone.

Scoring criteria

The scoring process is key to ensuring that the most ready projects advance to the study process. The ISO received concerns and questions around the scoring process and criteria, which are addressed with clarifications below.

Process and timelines

The ISO will require interconnection customers to submit documentation supporting their score, as well as a self-assessment score sheet with their interconnection request(s) to minimize time required for the ISO to score and validate a large batch of requests in a narrow window. As discussed in the final proposal, the ISO proposes to receive LSE point allocations directly from LSEs rather than interconnection customers during the interconnection request application window.

Because Cluster 15 is large, has been on hold, and will face these tariff provisions for the first time, the ISO will seek additional flexibility in the timeline for Cluster 15, which will enable additional time for the first LSE allocation process to occur in Cluster 15 to manage and adjust to the new process. For Cluster 15 only, the ISO will seek to allow LSEs 21 calendar days to submit their LSE allocations to the ISO.

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Commercial interest

As described in the final proposal, the ISO proposes to provide two opportunities to obtain points in the commercial interest scoring category: an LSE allocation process and an opportunity to earn points by demonstrating commercial interest from a non-LSE/commercial offtaker. In particular, the ISO received stakeholder comment noting that the LSE allocation process requires more structure and guidelines in order to ensure an open and fair process for awarding capacity, which will be translated into points, for each project.

LSE allocation process

The ISO received significant stakeholder comment on this element of the final proposal, and provides the following clarifications and expectations for how interconnection customers and LSEs should participate in this process.

The ISO does not intend to dictate procurement rules. To the extent LSEs consider the LSE allocation process as part of procurement, LSEs naturally will comply with their own procurement requirements. The ISO is not in a position to establish additional procurement requirements beyond those set forth by the California Public Utilities Commission or local regulatory authorities. Just like the ISO tariff's many requirements for power purchase agreements today, the ISO's intent is to provide each LSE with flexibility to accommodate its own unique jurisdictional requirements and procurement needs. However, the ISO provides this additional detail regarding expectations for this process.

- As stated in the final proposal, prior to the interconnection request application window, the ISO encourages LSEs to conduct public Requests for Information (RFIs), Requests for Offers (RFOs), or some other functionally equivalent process to ensure fairness, transparency, and competition in the LSE allocation process.
- The ISO recommends that each LSE describe and notice its review process at least two months prior to the opening of the interconnection request window.
- The ISO expects interested interconnection customers to participate in LSE RFIs, RFOs, and/or bilateral discussions with LSEs to market their projects prior to the interconnection request application window to supplement information LSEs will be provided during the scoring process, increasing the projects' opportunity to obtain LSE-awarded points.

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- Most LSEs already have requirements to run open, fair, and competitive procurement processes. LSEs may use the same or similar processes to allocate points as well.
- The ISO expects participating LSEs to communicate clear evaluation criteria for this process to prospective interconnection customers.
- The ISO suggests that LSEs conduct broad market outreach to potential interconnection customers regarding their process for LSE allocations.
- LSEs should seek projects that best align with procurement and resource needs, as indicated by integrated resource plans or other relevant planning documents.
 Most LSEs currently make these documents publicly available and should clearly reference them when they communicate plans for their individual LSE allocation process.
- Prospective interconnection customers should be prepared to share project information as needed with individual LSEs in order to inform each LSE's decision. The ISO expects any information shared would be considered confidential under the LSE's tariffs or applicable practices.
- LSEs and prospective interconnection customers should understand that at this
 point in the process, interconnection costs and timelines will be highly uncertain;
 such information will not become clear until after the interconnection study
 process. It would be premature to expect agreement between LSEs and
 interconnection customers on contract terms (e.g., contract price, term length,
 commercial operation date) at such an early stage of project development.
- This step in the process is intended to be indicative of commercial interest, and the LSE allocation process is not intended to result in the exchange of value or have terms. However, each LSE and interconnection customer may decide whether or how binding any point allocation would be for future contracts; this decision should be in the mutual interest of both parties.
- LSEs are neither expected nor required to participate in this allocation process.
 However, two months prior to the interconnection request window, LSEs should publicly state whether or not they intend to allocate points to the ISO for transparency for prospective interconnection customers.
- Interconnection projects must be located at a POI with available capacity to be able to be studied. The capacity value allocated to a project at the POI will be

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used to determine the number of points the project receives. If the LSE awards a capacity amount to a project that equals the project's <u>requested Interconnection</u> <u>Service Capacity</u>, <u>aggregate MW capacity at its POI (100% of the aggregate MW capacity at its POI)</u>, the project will receive 100 points.

- The ISO will provide LSEs with a standard form to use in submitting their project capacity selections. Capacity awarded to projects by LSEs, resulting in points in the scoring process, will not be known or confirmed by the interconnection customer during the interconnection request application window, and therefore will not be included in the interconnection customer's self-assessment. However the ISO does not preclude communication between the LSEs and interconnection customers regarding the status of awards.
- The ISO is developing a list of LSEs for interconnection customers seeking information on individual LSE processes. The ISO must confirm that LSEs and their individual staff are willing to be contacted before posting the list. The ISO will provide this list as soon as possible, at least two months prior to the interconnection request window.
- The ISO will provide interconnection customers with an identifying number for each interconnection request that can be shared with LSEs. The ISO will not provide LSEs with information the tariff deems to be confidential.

Limits on LSE-owned projects in the LSE allocation process

The ISO reaffirms its commitment to reviewing data around utility self-build projects after the initial scoring process in Clusters 15 and 16 to determine if the LSE-owned project limitations should be reevaluated.

As noted in the final proposal, the ISO's intent with the proposed limitation of three projects or 25% of an LSE's allocation per cluster was to ensure continued, healthy levels of competition and to maintain historical trends regarding LSE-owned projects in the queue. The ISO's intent is neither to create new incentives for LSE-ownership, nor disrupt utility ownership.

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¹ Appendix A definition of Interconnection Service Capacity: The approved maximum instantaneous Power output at the Point of Interconnection for the Interconnection Customer, as set forth in its Interconnection Studies.

While the ISO understands stakeholder concerns around maintaining competition, the ISO notes the following considerations:

- PTOs already have internal firewalls in place to avoid undue influence of interconnection projects in the procurement process.
- Of the 70+ LSEs in the state, very few have demonstrated any historical interest in developing and owning resources, including in Cluster 15.
- The CPUC scrutinizes utility-owned projects for investor owned utilities. Other LSEs are also required to run open and transparent processes and are governed by their own Local Regulatory Authorities.
- While the LSE allocation process is influential, it is not a sole determinant of projects advancing to the study process. The final proposal states that in order to ensure that LSEs are selective in capacity allocation, 50% of the total available TPD capacity is provided to LSEs to allocate, leaving 50% of the available TPD capacity available to projects that do not receive points from the LSE selection process. Non-LSE-scored projects could comprise even more than 50% of the studied projects if not all LSEs participate in the LSE allocation process.

As stated above, and in addition to these limitations, the ISO recommends that LSEs clearly communicate their plans for the LSE allocation processes prior to the interconnection request application window.

Information on Local Resource Adequacy

Some stakeholders asked for confirmation that there is a requirement for sufficient capacity available in the LCRA to charge any proposed new energy storage facilities without needed additional transmission as outlined in the annual local capacity technical study.

The ISO confirms that this is an essential requirement because a battery that is not able to be counted as local capacity because of charging restrictions is of no more value than a battery that is outside of the LCR Area. Therefore, such a battery should not be eligible for additional points in the scoring process, unless it is able to be charged. The ability for a battery to charge will be based on the charging analysis published in the annual local capacity technical study, after taking into account all existing, and indevelopment storage in the most recent CPUC portfolio provided for the ISO's transmission planning process.

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Additional clarifications to the scoring criteria

In addition to the guidance above on the LSE allocation process, the ISO offers the following additional minor clarifications to scoring criteria:

- The ISO proposes to require LSEs to provide the ISO with their elections no later than ten calendar days after the close of the interconnection request window. For Cluster 15, however, the ISO will extend this window to 21 calendar days.
- The ISO commits to posting the local areas/sub-areas that have a deficiency of generator capacity and the amount of additional capacity needed to eliminate the deficiency at least two months prior to the interconnection request application window, possibly much earlier.
- The ISO clarifies that long lead-time projects in zones with existing transmission capacity will be eligible for points, in addition to long lead-time projects in zones with approved transmission.

Figure 1 displays additional minor clarifications to the ISO's current proposal. The total score is to demonstrate the concept, where in this example a project qualifies for each scoring criterion. The ISO proposes to use weighted scoring, multiplying the total points value by the weight to calculate the total score for each category.

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Figure 1. Proposed Scoring Criteria

Indicators of Readiness	Points	Weight (%)	Max Points	Validation
Commercial Interest (Max points= 100)				
□ LSE allocations: Points based on the percentage of capacity allocated by LSEs to the project (e.g. a 500 MW project receiving 500 MW capacity allocation would earn 100 points for this category. A 500 MW project receiving 250 MW capacity allocation would earn 50 points for this category.) □ Check for Full Allocation Election: In instances where an LSE does not have enough points to award to an entire project, each LSE may award full capacity for one project per interconnection request application window.	100			The ISO will provide LSEs with a form to fill out to assign points to desired interconnection requests, to return to the ISO 10 calendar days after the close of the interconnection request application window. The ISO will add the points to each project's score as part of the scoring process. The ISO will provide LSEs with 21 days for Cluster 15 allocations.
□ Non-LSE Interest Points	25	30%	30	The ISO will provide a form requiring a signed affidavit from a representative that is authorized to execute power purchase agreements, indicating and affirming commercial interest a. Attest non-LSE off-taker is supporting this project in support of corporate policy goals on sustainability. b. Attest that the size of application is aligned with the non-LSE off-taker needs c. Attest that non-LSE off-taker is not affiliated with the IC or its holding company d. Attest that the non-LSE off-taker has not supported more than one application.

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Project Viability (Max points=100) ²				
Engineering Design Plan Completeness, with points commensurate with percent completion of engineering design plan up to a maximum of 50, to be validated based on a set of pre-determined guidelines (e.g. 15% complete=15 points)	50			Signed affidavit accompanied by documentation of the project's engineering design plan level of completeness certified with a professional engineer's stamp.
Chose no more than one of the three expansion of a generation facility items				
□ Expansion of a generation facility that is currently under construction	10	35%	35	IC submits information indicating that new IR uses same or directly adjacent site as a facility under construction
□ Expansion of an operating facility	20			IC submits information indicating that new IR uses same or directly adjacent site as an operating facility
☐ Expansion of a facility that is under construction or in operation, where the Gen-Tie already has sufficient surplus capability to accommodate the additional resource	50			IC submits information indicating that new IR uses same or directly adjacent site as an existing facility and documents the capacity of the gen-tie, the existing (under construction or in operation) facility and the new facility

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² Maximum points of 100 for Project Viability = Engineering Design Plan 50% complete (50 points) + Expansion of an existing facility where the existing Gen-Tie already has sufficient surplus capability to accommodate the additional resource (50 points)

System Need (Check one. Max points=100) ³				
□ Ability to provide Local Resource Adequacy (RA) in an LCRA with an ISO demonstrated need for additional capacity in that local area	50	35%	35	The ISO will post information at least two months prior to the interconnection request window, describing the areas/sub-areas that have a deficiency of generator capacity and the amount of additional capacity needed to eliminate the deficiency and validate IRs against that information.
Long Lead-time Resources ☐ Meets the requirements of the CPUC and other LRA resource portfolios where the TPP has approved transmission projects to provide the necessary transmission requirements, or where transmission capacity already exists. 4	100			The ISO will work with the CPUC and LRAs to determine a list of eligibility requirements for this category of resources prior to the interconnection window opening.
Total		100%	100	
Distribution Factor	Value	Tie- Breaker		
□ Value used as tie-breaker (lowest DFAX selected first)				Interconnection request

Applicability of the scoring process to Cluster 15

The ISO has reviewed stakeholder comment suggesting that the ISO not apply the scoring criteria to Cluster 15 and instead either study all of the projects with available transmission capacity or proceed directly to an auction. This would be a significant departure from the final proposal. Moreover, it is critical that the ISO use the scoring criteria—including the results of the LSE allocation process—to identify the most ready projects in the queue, fulfilling the commitment in the Memorandum of Understanding to tighten the linkages between planning, procurement, and interconnection. The ISO intends to make severable a number of the elements of this final proposal to enable the FERC to rule on the various elements of the filing without delaying other impactful reforms.

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³ The ISO assumes that these two categories are mutually exclusive and that projects would not be able to select both.

⁴ Only long lead-time resources that are required to meet the CPUC and other LRA resource portfolio requirements are eligible, including resource types that are considered for central procurement under Assembly Bill 1373 (2023), or as specifically identified by the CPUC or LRAs in the portfolios provided to the ISO for use in the transmission planning process.

Finally, the ISO commits to monitoring the results of the reformed interconnection process, including the scoring process and the commercial interest outcomes, and will consider changes as necessary in future initiatives.

Treatment of Energy Only projects

The final proposal requires Energy Only projects to meet the site control requirements and provide the same entry fees and study deposits required by FERC Order No. 2023.

The interconnection procedures for Energy Only projects will include two options. The first option is the Reimbursement option, which is for projects that seek to interconnect in zones where the CPUC IRP base case portfolio and LRA plans identify the need for Energy Only resources. Projects in this path will be eligible for reimbursement of the cost of reliability network upgrades (RNUs) funded by the interconnection customer.

The second option is the Non-reimbursement option, which is for all other Energy Only resources seeking to interconnect in zones where the CPUC's IRP base case portfolio and LRA plans have not identified the need for Energy Only resources. Projects in this path will not be eligible for reimbursement of the cost of reliability network upgrades (RNUs) funded by the interconnection customer. The Non-reimbursement option is also available for resources that seek to interconnect in zones where the CPUC has identified a need for Energy Only resources, but opt to be studied and without having to be scored and to interconnect without being eligible for reimbursement of the cost of RNUs funded by the interconnection customer.

Other than the use of the CPUC and LRA portfolios, the identification of zones where Energy Only resources are eligible for reimbursement is totally decoupled from the TPD zone/Merchant zone criteria.

Scoring Energy Only projects

Energy Only projects seeking to interconnect under the Non-reimbursement option will not be required to submit scoring information because all such projects will be eligible to be studied. Projects seeking to be studied under the Reimbursement option will compete to be studied using the same scoring metrics used for FCDS projects. However, Reimbursement Energy Only projects will only be scored against the other such projects in their zone. These interconnection requests will be accepted up to a 150% study limit based on the amount of Energy Only capacity in the CPUC portfolio plus any non-CPUC jurisdictional LSE Energy Only capacity in their resource plans for each zone. Projects seeking to interconnect using the Non-reimbursement option can

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be studied in zones that are eligible under the Reimbursement option. Such projects would not have to compete to be studied in the scoring process and would continue to be ineligible for reimbursement of RNUs.

The scoring of commercial interest within the Energy Only scoring process will use the same process for LSE capacity allocations as is used for allocating the available TPD capacity to the LSEs. The allocation of Energy Only capacity to LSEs will be based on the total amount of Energy Only capacity in the CPUC portfolio and non-CPUC jurisdictional LSE resource plans. Fifty percent of this total will be allocated to each LSE in proportion to its load share. To achieve 100 points towards the commercial interest portion of the Energy Only scoring process an LSE will need to allocate anthe same amount of capacity to the Energy Only project as the project's requested Interconnection Service Capacity aggregate MW capacity at its POI.

Applicability of the proposed treatment

Stakeholders expressed concerns with this approach. The ISO notes that this proposal evolved at the request of stakeholders who expressed concern with the draft final proposal. The final proposal better aligns with the resource planning portfolios from the CPUC and LRAs while providing open access to the CAISO controlled grid.

The tables below show the locations of Energy Only capacity from the CPUC base portfolio for the 2024-2025 transmission planning process. This shows that all but one zone currently has a CPUC portfolio designated need for Energy Only capacity. The ISO will not be screening Energy Only projects by technology, so the technology designations in these tables will not be a limiting factor for Energy Only IRs. With the 150% cap for each reimbursable zone being based on the sum of the capacity of wind and solar designated for each zone, the 150% cap for Energy Only projects should not be a limiting factor for most zones for some time – particularly under the current capacity procurement requirements. Currently, only one zone would be a non-reimbursable zone for Energy Only projects. The ISO believes that for the limited number of non-reimbursable zones, following the CPUC's direction on the locations where there is no justifiable need for Energy Only projects, and providing disincentive for Energy Only projects in these areas is just and reasonable.

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2034 — Mapped Total Resources (In-D	ev & Generici										
	Geothermal	Biomass		Wind		OOS Wind	Offshore Wind	Distributed Solar		Solar	
CAISO Study Area	FCDS (MW)	FCDS (MW)	FCDS (MW)	EODS (MW)	Total (MW)	FCDS (MW)	FCDS (MW)	FCDS (MW)	FCDS (MW)	EODS (MW)	Total (MW)
PG&E North of Greater Bay Study Area	144.0	97.5	777.50	319.50	1,097		931	37	275	320	59
PG&E Greater Bay Study Area		24.6	688	90	778	141		40		100	10
PG&E Fresno Study Area	-	20.2	394	96	490	Cal.		66	2,636	869	3,50
PG&E Kern Study Area		18.0	300	10	310	-	2,924	-73	680	1,301	1,98
SCE Northern Area		1.0	564	16	580	*		5	1,633	1,653	3,28
SCE Metro Study Area	-	5.6			1	547	-	27	-	-	-
SCE North of Lugo Study Area		1.5	310	50	360			11	672	910	1,58
East of Pisgah Study Area	875.0		620		620	3,965		- 20	1,075	1,565	2,64
SCE Eastern Study Area	790.0	2.6	224	100	324	2,131		+3	810	2,649	3,45
SDG&E Study Area	160.0	- 250	1,325	239	1,564			1	700	882	1,58
		171.0		921	£ 122	6,096	3,855	260	8,481	10,248	18,72
Total 2034 Resources: 2039 — Mapped Total Resources (In-De	1,969.0	171.0	5,203	920	6,123	0,030	3,833	200	0,702		
	ev & Generic)	171.0	5,203		6,123		Offshore	Distributed	0,701		10,12
		Biomass	5,203	Wind	6,123	OOS Wind			3,401	Solar	10,72
	ev & Generic)		5,203 FCD5 (MW)		Total (MW)		Offshore	Distributed	FCDS (MW)		
2039 — Mapped Total Resources (In-De CAISO Study Area	ev & Generic) Geothermal	Biomass		Wind		OOS Wind	Offshore Wind	Distributed Solar		Solar	Total (MW
2039 — Mapped Total Resources (In-D	ev & Generic) Geothermal FCDS (MW)	Biomass FCDS (MW)	FCDS (MW)	Wind EODS (MW)	Total (MW)	OOS Wind	Offshore Wind	Distributed Solar FCDS (MW)	FCDS (MW)	Solar EODS (MW)	Total (MW)
2039 — Mapped Total Resources (in-De CAISO Study Area PG&E North of Greater Bay Study Area	Geothermal FCDS (MW) 144.0	Biomass FCDS (MW) 97.5	FCDS (MW) 1,677.9	Wind EODS (MW) 319.5	Total (MW) 1,997	OOS Wind	Offshore Wind	Distributed Solar FCDS (MW)	FCDS (MW)	Solar EODS (MW)	Total (MW) 1,54 68
2039 — Mapped Total Resources (in-De CAISO Study Area PG&E North of Greater Bay Study Area PG&E Greater Bay Study Area	Geothermal FCDS (MW) 144.0	Biomass FCDS (MW) 97.5 24.6	FCD5 (MW) 1,677.9 688	Wind EODS (MW) 319.5 90	Total (MW) 1,997 778	OOS Wind	Offshore Wind	Distributed Solar FCDS (MW) 37 40	FCDS (MW) 430 470	Solar EODS (MW) 1,115 215	Total (MW/ 1,54 68 6,43
2039 — Mapped Total Resources (In-Do CAISO Study Area PG&E North of Greater Bay Study Area PG&E Greater Bay Study Area PG&E Fresno Study Area	Geothermal FCDS (MW) 144.0	Biomass FCDS (MW) 97.5 24.6 20.2	FCDS (MW) 1,677.9 688 394	Wind EODS (MW) 319.5 90 96	Total (MW) 1,997 778 490	OOS Wind	Offshore Wind FCDS (MW) 1,607	Distributed Solar FCDS (MW) 37 40 66	FCDS (MW) 430 470 3,027	Solar EODS (MW) 1,115 215 3,404	Total (MW/ 1,54 68 6,43 3,09
2039 — Mapped Total Resources (In-Oc CAISO Study Area PG&E North of Greater Bay Study Area PG&E Greater Bay Study Area PG&E Fresno Study Area PG&E Kern Study Area	Geothermal FCDS (MW) 144.0	Biomass FCDS (MW) 97.5 24.6 20.2 18.0	FCDS (MW) 1,677.9 688 394 300	Wind EODS (MW) 319.5 90 96 10	Total (MW) 1,997 778 490 310	OOS Wind FCDS (MW)	Offshore Wind FCDS (MW) 1,607	Distributed Solar FCDS (MW) 37 40 66 73	FCDS (MW) 430 470 3,027 1,036	Solar EODS (MW) 1,115 215 3,404 2,061	Total (MW) 1,54 68 6,43 3,09
2039 — Mapped Total Resources (In-De CAISO Study Area PG&E North of Greater Bay Study Area PG&E Greater Bay Study Area PG&E Fresno Study Area PG&E Kern Study Area SCE Northern Area	Geothermal FCDS (MW) 144.0	Biomass FCDS (MW) 97.5 24.6 20.2 18.0	FCDS (MW) 1,677.9 688 394 300 564	Wind EODS (MW) 319.5 90 96 10	Total (MW) 1,997 778 490 310 580	OOS Wind FCDS (MW)	Offshore Wind FCDS (MW) 1,607	Distributed Solar FCDS (MW) 37 40 66 73	FCDS (MW) 430 470 3,027 1,036 1,634	Solar EODS (MW) 1,115 215 3,404 2,061 3,017	Total (MW) 1,54 6.83 6,43 3,09 4,65
CAISO Study Area CAISO Study Area PG&E North of Greater Bay Study Area PG&E Greater Bay Study Area PG&E Fresno Study Area PG&E Kern Study Area SCE Northern Area SCE Metro Study Area	Geothermal FCDS (MW) 144.0	Biomass FCDS (MW) 97.5 24.6 20.2 18.0 1.0 5.6	FCDS (MW) 1,677.9 688 394 300 564	Wind EODS (MW) 319.5 90 96 10	Total (MW) 1,997 778 490 310 580	OOS Wind FCDS (MW)	Offshore Wind FCDS (MW) 1,607 - 2,924	Distributed Solar FCDS (MW) 37 40 66 73 5	FCDS (MW) 430 470 3,027 1,036 1,634	Solar EODS (MW) 1,115 215 3,404 2,061 3,017	Total (MW) 1,54 683 6,43 3,09 4,65
2039 — Mapped Total Resources (In-Do CAISO Study Area PG&E North of Greater Bay Study Area PG&E Greater Bay Study Area PG&E Fresno Study Area PG&E Kern Study Area SCE Northern Area SCE Metro Study Area SCE Motof Study Area	Geothermal FCDS (MW) 144.0	Biomass FCDS (MW) 97.5 24.6 20.2 18.0 1.0 5.6 1.5	FCDS (MW) 1,677.9 688 394 300 564	Wind EODS (MW) 319.5 90 96 10	Total (MW) 1,997 778 490 310 580 -	005 Wind FCDS (MW) 1,500	Offshore Wind FCDS (MW) 1,607 - - 2,924	Distributed Solar FCDS (MW) 37 40 66 73 5 34 27	FCOS (MW) 430 470 3,027 1,036 1,634 - 752	Solar EODS (MW) 1.115 215 3,404 2,061 3,017 1,258	Total (MW) 1,54 683 6,43 3,09 4,65 - 2,01 4,23
CAISO Study Area CAISO Study Area PG&E North of Greater Bay Study Area PG&E Fresno Study Area PG&E Kern Study Area PG&E Kern Study Area SCE Northern Area SCE North of Lugo Study Area East of Pisgah Study Area	Geothermal FCDS (MW) 144.0 875.0	Biomass FCDS (MW) 97.5 24.6 20.2 18.0 1.0 5.6 1.5	FCD5 (MW) 1,677.9 688 394 300 564 - 310 620	Wind EODS (MW) 319.5 90 96 10 16 .	Total (MW) 1,997 778 490 310 580 - 360 620	OOS Wind FCDS (MW)	Offshore Wind FCDS (MW) 1,607	Distributed Solar FCDS (MW) 37 40 66 73 5 34 27	FCDS (MW) 430 470 3,027 1,036 1,634 - 752 1,200	Solar EODS (MW) 1,115 215 3,404 2,061 3,017 -1,258 3,030	Total (MW) 1,54' 683' 6,430 3,094 4,65'

Historically, there were zero Energy Only interconnection requests submitted in clusters 10 to 15 request windows. While two Energy Only interconnection requests are shown in the cluster 15 list that is posted, one was originally an independent study Energy Only project that failed the independence test and converted to cluster 15 and the other is a net-energy-metering project that is being included in cluster 15.

Based on the historical disinterest in Energy Only requests, the wide-ranging availability of zones calling for Energy Only capacity in the CPUC portfolio, and the current CPUC procurement orders requiring procurement of resource adequacy eligible resources, the ISO believes the proposal for Energy Only projects is just and reasonable and aligned with the foundational framework improvements being coordinated between the CPUC, CEC, and the ISO to help meet California's energy policy objectives in a timely and efficient manner set forth in the joint Memorandum of Understanding signed by the three parties in December 2022.

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