



# 2023 Interconnection Process Enhancements

Summary of June 20 & 21 Track 2 Working Group Meeting  
Revised Principles and Problem Statements 1 and 2

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Prepared by:  
Danielle Mills  
Robert Emmert  
Jason Foster

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## **1. Introduction**

Following the Interconnection Process Enhancements (IPE) discussion paper as published on May 31, 2023, the ISO hosted a-day-and-a-half of workgroup sessions to hone-in on and refine the guiding principles and two problem statements.

As a result of the workgroup discussions, the following are the revised principles and problem statements to be used as a framework for workgroup discussions on revisions to procedures for interconnection and managing the queue.

## **2. Revised IPE 2023 Principles**

1. Prioritize interconnection in zones where transmission capacity exists or new transmission has been approved, while providing opportunities to identify and provide alternative points of interconnection or upgrades.
2. Ensure meaningful study results that take into account system capability, resource planning and procurement\*.  
*\* Resource planning includes the CEC, CPUC, and other Local Regulatory Authorities (LRAs) engaged in these activities.*
3. Align interconnection and transmission plan deliverability processes with resource procurement functions.
4. Enhance the procedures, including contracting and queue management procedures, for ensuring projects proceed to commercial operation and determine how to appropriately handle those that are not.
5. Enhance the interconnection process's ability to support the procurement necessary to meet California Public Utilities Commission (CPUC) resource portfolios and California Energy Commission (CEC) SB 100 portfolios, and portfolios established by non-CPUC jurisdictional LRAs.
6. Enhance public awareness and accessibility of data and information to support and enable the above principles.

In addition, the reforms must

- Continue to ensure open access and avoid discriminatory or preferential treatment.
- Result in a process that is manageable, meaningful, and sustainable to the ISO and stakeholders.

### **3. Revised Problem Statement 1 – Interconnection**

#### **Revised Problem Statement 1**

The massive increase in interconnection requests seeking to meet the accelerated cadence of resource development now needed by the state on a sustained basis has overwhelmed critical planning and engineering resources across the industry. Both the volume of capacity and individual interconnection requests in Clusters 14 and 15 compromise the ISO's ability to produce meaningful study results within necessary commercial timeframes, making it challenging to bring resources online in time to meet state policy and reliability needs. The current generator interconnection processes simply cannot efficiently accommodate the latest level of interconnection requests received. More publicly-accessible information on the location and amounts of available interconnection and deliverability capacity is needed help developers to decrease the numbers and increase the viability of applications. In addition, clearly defined measures of project viability and clear expectations around when viability should be tested and determined are needed.

#### **Problems / Pain points for Problem Statement 1**

1. Unsustainable increase in interconnection requests (IRs) has overwhelmed the GIDAP.
2. Increase in IRs has overwhelmed critical planning and engineering resources across the industry.
3. GIDAP, as currently designed, simply cannot efficiently accommodate increased amount of IRs.
4. Study results lose accuracy, meaning and utility when the level of cluster IR capacity are multiple times the existing or planned transmission capacity for an area.
5. Lack of accurate, actionable information on the location and amounts of available interconnection and deliverability capacity prior to opening of the IR windows results in increased numbers of IRs.
6. The issue of project viability is a widely discussed industry topic. However, project viability is not well defined and not currently considered for IR acceptance criteria in the GIDAP.
  - Stakeholders need to define what viability criteria is appropriate for a new IR, the point in the process viability is tested and determine if process revisions are needed.
7. Technology solutions to enhance the IR intake, validation and study process may exist and should be explored for opportunities to increase process efficiencies and reduce time and staff requirements.
8. Timelines for design and construction of interconnection customer required upgrades continue to increase, negatively impacting achievable CODs.

### 3. Revised Problem Statement 2 – Managing the Queue

Following the study process, a number of projects in the interconnection queue do not proceed to commercial operations as expected (e.g. delay executing a GIA, meet contract milestones, etc.) and remain in the queue without indication of their intent to proceed to contracting or construction. The current processes for managing the queue presents certain challenges for projects proceeding to commercial operation (e.g. modifications, limited operation study, commercial viability criteria, etc.) and challenges for the ISO's enforcement of projects that are not. Lastly, there is a lack of common understanding of what it means for a project to maintain 'viability' as it moves through the stages to achieve commercial operation.

The focus on the solutions for problem statement 2 will be guided by the statement above and can utilize the supporting material and other considerations below, as presented and discussed in the June 21<sup>st</sup> workgroup meeting, as support:

#### **Summary of pain points for Problem Statement 2**

1. Volume of Modification requests (had over 85 Active in early 2023)
2. Concerned with projects lingering in the queue...
  - a. Contract/Interconnection Agreement Executions
  - b. CODs beyond 7 years in queue, multiple milestone/COD extensions
  - c. Volume of Energy Only projects

And [the need to adjust] how to hold those projects accountable and at what points in the process.

3. How to bring more efficiency and accuracy to the processes (Modifications, LOS, etc.)
4. How to balance the ISO being laissez-faire and being over-the-top with project accountability and compliance (Reasonableness and Enforceability)
  - a. Will we place a project under construction in breach or withdraw them?
  - b. Consider layered approach based on projects progress, status, many factors
5. PTO milestone extensions (upgrade development timelines – TPP or Study/Project specific)
6. Overall, there is not a one-answer-fits-all approach to managing the queue;
  - a. How do we define/create those firm factors (dark lines in policy) and balance the remaining?

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- b. How do we consistently apply these firm and non-firm factors?
7. How do we define 'viable' while proceeding to Commercial Operation, and how to identify the metrics for whether a project is proceeding (without IC delay) and when/how to apply viability when deciding if a project should proceed or be withdrawn?
8. Identify the quantifiable elements and factors that are measurable and factual, vs. those elements that are less quantifiable:
  - a. Potential Quantifiable: GIA execution, Some GIA Milestones (if date-specific and not tied to other milestones/actions), IFS, Notice To Proceed, site exclusivity, status reports, PPA executed, project success in RFOs (are they meeting quantifiable and qualifying metrics to be shortlisted/enter PPA negotiations?), a developers success rate in developing projects in queue (ratio of IRs to CO MW / # IRs submitted) (need to consider entities that initiate projects and sell them without intent to actually develop).
  - b. Less Quantifiable: people resources, permitting, upgrade delays, start of construction, PPA negotiations/shortlists, supply chain or other delays.
9. How to evaluate opportunity for projects to achieve Commercial Operation ahead of lengthy upgrades?
10. Better understand why projects do not proceed to Commercial Operation in a timely fashion from various stakeholder perspectives:
  - c. PTO/ISO Related: lengthy upgrade timelines, PTO extensions, TPP process, etc.
  - d. IC/Project Development related: costs, unable to obtain, etc. commercial/offtake contract, permitting, land acquisition, etc.
  - e. Commercial Procurement related
  - f. State Policy Related: long-term timeline of procurement orders, etc.
11. Review data being published in ISO Queue Report and other locations and determine what other data may benefit stakeholders/projects proceeding to commercial operation.
12. Consider current processes that may not be best practice going forward:
  - g. 7-year time in queue
  - h. Contract (GIA) execution requirements
  - i. Qualifications and needs/requirements for modifications

**Queue Statistics by Cluster** (as of 6/17/2023)

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Cluster	Submitted IRs / Queue Date	Current Active IRs	Executed / Not Executed GIA	Current EO Status	EO Achieved Comm. Op.	Seeking as EO/PCDS and Achieved CO as FC/PCDS**
<b>Totals</b>		<b>Through C14: 462 / 187,170 MW</b>	<b>Executed: 171 Not Exec: 86</b>	<b>78 / 24,442 MW</b>		
Amend 39, ISP, Serial L/SGIP, TC, FT		25 / 6,036 MW	21 / 7	8 / 397 MW*	14 / 904 MW*	11 / 294 MW*
1-4	XX / 2011	7 / 1,497 MW	7 / 0	2 / 76 MW	1 / 20 MW	2 / 40 MW
5	80 / 2012	1 / 250 MW	1 / 0	1 / 200 MW	1 / 25 MW	
6	64 / 2013	4 / 549 MW	4 / 0	1 / .5 MW		
7	90 / 2014	8 / 850 MW	7 / 1	4 / 550 MW	1 / .1 MW	
8	131 / 2015	26 / 8,386 MW	26 / 0	1 / 20 MW		
9	127 / 2016	27 / 8,137 MW	24 / 3	6 / 1,348 MW		
10	91 / 2017	21 / 10,029 MW	17 / 4	4 / 1,103 MW		2 / 500 MW
11	123 / 2018	30 / 8,102 MW	22 / 8	3 / 494 MW		
12	153 / 2019	45 / 21,846 MW	30 / 15	15 / 5,438 MW	1 / 20 MW	
13	155 / 2020	60 / 27,072 MW	12 / 48	33 / 14,764 MW		
14	373 / 2021	205 / 94,412 MW	PhII Study	0	0	
15	541 / 2023	541 / 354,000 MW	IR Applications	0	0	

\*FT and Appendix S states that all SGIP projects, are all EO by definition

\*\*2018 to 2022 Allocations sought in Groups 4, 5, 6, or 7 OR in 2023 A, B, C, or D.

Note:

Does not include BESS additions seeking TPD requests.

MW are summed as total installed capacity.

#### **4. Process for stakeholders to submit IPE Solution Proposals**

The ISO is requesting that stakeholders submit a summary of their proposed solutions by July 5, 2023. For stakeholders who have already indicated interest in presenting a proposal, please confirm your interest by providing a summary of the proposal so the ISO can plan accordingly. Please submit summaries to [isostakeholderaffairs@caiso.com](mailto:isostakeholderaffairs@caiso.com).

The ISO will review submitted comments to ensure they align with the principles and problem statements and will establish an agenda and timeline for stakeholder proposals to be presented and discussed at the July 11, 2023 IPE workgroup meeting.

## 5. Stakeholder Engagement

The ISO Board of Governors approved the Track 1 Proposal in May 2023, setting the stage for more substantive and transformative reform in Track 2.

The ISO initiated a stakeholder working group process for IPE Track 2 and facilitated the first working group meeting on June 20-21, 2023 to discuss principles and problem statements regarding new interconnection applications and existing projects in the queue. The working group meetings scheduled for June 27 and July 11 will be focused on solution proposals and driving to the drafting of a straw proposal.

To meet the proposed schedule for implementing process changes ahead of commencing Cluster 15 phase I studies, the ISO intends to present Track 2 to the Board of Governors in December 2023.

### **Tentative Schedule:** 2023 Interconnection Process Enhancements – Track 2

<b>Date</b>	<b>Track 2 Milestone</b>
05/31/2023	Publish discussion paper
06/7/2023	Stakeholder call on discussion paper
06/14/2023	Stakeholder comments due
06/20/2023 – 06/21/2023	Working group session 1: Principles and Problem Statements (hybrid)
06/27/2023	Working group session 2 (virtual): <ul style="list-style-type: none"> <li>• Review principles and problem statements</li> <li>• Discuss process for framing proposals and solutions</li> <li>• Discuss pain points and ISO-proposed concepts</li> <li>• Discuss data needs and viability</li> </ul>
07/11/2023	Working group session 3 (possibly hybrid): <ul style="list-style-type: none"> <li>• Presentation and discussion of stakeholder proposals</li> </ul>

The ISO recognizes the need for more information on the future timeline of this initiative, and is working to provide more detail during the June 27<sup>th</sup> working group meeting.