2021 Interconnection Process Enhancements (IPE) Phase 2 – Draft Final Proposal Update

Stakeholder Meeting

August 2, 2022

Housekeeping reminders

- This call is being recorded for informational and convenience purposes only. Any related transcriptions should not be reprinted without ISO's permission.
- Meeting is structured to stimulate dialogue and engage different perspectives.
- Please keep comments professional and respectful.
- Please try and be brief and refrain from repeating what has already been said so that we can manage the time efficiently.

Instructions for raising your hand to ask a question

- If you are connected to audio through your computer or used the “call me” option, select the raise hand icon located on the top right above the chat window. **Note**: #2 only works if you dialed into the meeting.
  - Please remember to state your name and affiliation before making your comment.
- If you need technical assistance during the meeting, please send a chat to the event producer.
- You may also send your question via chat to either Elizandra Casillas or to all panelists.

IPE Phase 2 topics

- TPD allocation requirement for Power Purchase Agreement terms and allocations to non-LSEs
- Increased study deposit amounts, withdrawal penalties
- Cost allocation treatment for network upgrades (NUs) to local (< 200 kV) systems
- NU reimbursement policy when ISO is an affected system
- Providing more publicly available queue data
- Transparency over early GIA termination procedures

TPD allocation requirement for Power Purchase Agreement terms and allocations to non-LSEs

- Majority support a minimum PPA term
  - Propose middle ground of minimum of 5 years (supported by LSE procurement and CPUC, and is aligned with the FERC NOPR on commercial viability)
- Strong support to allow TPD to be allocated to ICs contracting with non-LSEs
  - Same minimum 5 year PPA term
  - Offtaker must demonstrate contract to sell RA capacity to LSE with a RA obligation for term of at least one year
  - Option to provide deposit in-lieu of a contract if offtaker does not have a contract to sell RA capacity to an LSE
    - Deposit amount: $10k per MW of allocated TPD, $500k minimum
    - Refunded with demonstration of contract or project COD

Should the allocation of TPD require a PPA that procures the project's RA capacity for some minimum term?

Stakeholder Feedback

	Minimum Term				
Entity (Name)	**No Min Term**	**1 Year**	**3 Years**	**5 Years**	**10 Years**
ACP-California			1		
Avangrid Renewables	1				
California Community Choice Association					1
California Energy Storage Alliance	1				
California Public Utilities Commission Energy Division				1	
California Wind Energy Association			1		
Golden State Clean Energy		1			
Large-scale Solar Association/ LSA	1				
San Diego Gas & Electric				1	
Solar Energy Industries Association/SEIA	0.5 [1]		0.5 [1]		
Six Cities/The Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California				1	
Southern California Edison					1
Sum of Comment Categories	**3.5**	**1**	**2.5**	**3**	**2**
		8.5 Agree to some Min Term [2]			

[1] SEIA does not believe CAISO should require any minimum term, but would support 3 years

[2] **Weighted average of suggested Min Term = 5.1 years**

Should the allocation of TPD require a PPA that procures the project's RA capacity for some minimum term? (cont.)

Proposal:

Beginning with the 2023-2024 TPD allocation cycle all PPAs must demonstrate the project has an executed PPA, are shortlisted for a PPA or are actively negotiating a PPA that requires deliverability and contracts for such deliverability for five or more years.

These criteria will apply to allocation groups A and B, including the retention requirements for group B, and for the retention requirements for group D.

Projects that received an allocation prior to the 2023-2024 TPD allocation cycle will be subject to the PPA requirements that were in place at the time they received their allocation.

Should a PPA that is with an entity that does not have an RA obligation be eligible for a TPD allocation?

Stakeholder Feedback

	Oppose/Support		Suggested Extra Time					
Entity (Name)	Opposes TPD to non-LSEs	Supports TPD to non-LSEs	No Extra Time	1 Extra Year	2 Extra Years	Other Extra Time	Use Group B for No LSE Contract	Other Proposal
ACP-California		1		1				
Amazon Energy		1				1 [1]		
Avangrid Renewables		1		1				
California Community Choice Association		1	1					
California Energy Storage Alliance		1			1			
California Public Utilities Commission Energy Division		1	1				1	
California Wind Energy Association		1		1				
EDF-Renewables		1				1 [2]		
Golden State Clean Energy		1				1 [3]		
Large-scale Solar Association/ LSA		1		1				
Pacific Gas & Electric		1						1 [4]
Solar Energy Industries Association/SEIA		1		0.5 [5]	0.5 [5]			
Six Cities/The Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California		1	1					
Southern California Edison	1							
Sum of Comment Categories	**1**	**13**	**3**	**4.5**	**1.5**	**3**	**1**	**0**
				9 Support some extra time				

[1] Not be required to have an arrangement in place until the final LSE supply plans are due for the year the project is to reach COD

[2] Supports "minor delays"

[3] Defers to non-LSE offtakers for amount of time

[4] Require entities seeking an allocation of TPD meet certain qualifications e.g. 3rd IFS posting, site control, etc.

[5] SEIA supports 1 to 2 years of extra time

Should a PPA that is with an entity that does not have an RA obligation be eligible for a TPD allocation? (cont.)

Proposal:

Allow TPD to be allocated to ICs contracting with non-LSEs.

IC's demonstration of an executed PPA (allocation group A), or is shortlisted for a PPA (allocation group B), must demonstrate the offtaker requires deliverability and contracts for such deliverability for five or more years.

Executed PPAs must demonstrate the offtaker has a contract to sell the RA capacity to an LSE with a RA obligation for a term of at least one year.

If offtaker does not have a contract to sell the RA capacity to an LSE with a RA obligation it must provide a deposit in-lieu of such a contract until it demonstrates a contract or reaches COD. The deposit amount will be $10,000 per MW of allocated TPD, with a minimum deposit of $500,000.

Deposit will be non-refundable if the project withdraws prior to demonstrating a contract with an LSE.

Increased Study Deposits / Withdrawal penalties

- ISO recommends <u>not</u> moving forward with the prior straw proposal of increasing study deposits based on the number of projects submitted by a parent company due to:
  - Majority of stakeholders opposed
  - FERC's June 16th NOPR: Improvements to Generator Interconnection Procedures and Agreements

- ISO recommends a revised proposal that incorporates many of FERC's NOPR proposals, where the notable changes include:
  - Revised allocation of study costs;
  - Study deposits based on project MW size;
  - Demonstration of commercial readiness, or in lieu deposit; and
  - Withdrawal penalties that increase as the IC moves through the study process

Increased Study Deposits / Withdrawal penalties

Draft Final Proposal Highlights:

- Allocation of study costs
  - 90% pro-rata based on requested MW
  - 10% per-capita based on number of IRs received in a cluster
- Study Deposit – Based on project MW size
  - Projects < 80MWs = $70K + $2K/MW (Max would be $230K)
  - Projects 80MW to < 200MW = $300K
  - Projects 200MW and greater = $500K
- Commercial Readiness
  - The ISO will require projects to meet increasing commercial readiness requirements to enter the Phase I and then the Phase II studies.
  - A commercial readiness in-lieu deposit can be made as follows:
    - 1 times the study deposit to enter the Phase I Studies
    - 3.5 times the study deposit to enter the Phase II Studies

Increased Study Deposits / Withdrawal penalties

Draft Final Proposal Highlights (continued):

– Withdrawal Penalties

Withdrawal penalties if Commercial Readiness Demonstration is provided:

- No penalty if withdrawn after the IR is deemed complete until 30 days following the scoping meeting.
- 0.5 times the study deposit if withdrawn after 30 calendar days following the scoping meeting up to 30 days following the Phase I study results meeting.
- 1 times the study deposit if withdrawn after 30 days following the Phase I study results meeting.

Withdrawal penalties if a deposit is provided in lieu of Commercial Readiness Demonstration:

- 0.2 times the study deposit if withdrawn after the IR is deemed complete until 30 days following the scoping meeting.
- 1 times the study deposit amount if withdrawn after 30 calendar days following the scoping meeting up to 30 days following the Phase I study results meeting.
- 2.5 times the study deposit after 30 days following the Phase I study results meeting.

(As per the FERC NOPR these penalties will be used to offset study costs)

Increased Study Deposits / Withdrawal penalties

Draft Final Proposal Highlights (continued):

– Withdrawal Penalties

ICs that withdraw are subject to withdrawal penalties unless:

- the IC withdraws after receiving the Phase II cluster study or reassessment reports and the costs assigned to the IC have increase 25% compared to the Phase I cluster study report; or
- current tariff provisions that allow a project to withdraw without penalty due to a substantial error or omission.

– Site Exclusivity

Filed with FERC as part of the IPE Phase 1 initiative, decision anticipated by 9/1/2022

- Demonstration of Site Exclusivity required to enter the Phase I study, or an in-lieu deposit of $250K for projects 20 MW and below, and $500K for projects greater than 20MW.
- 50% of the site exclusivity deposit is non-refundable if project withdraws after 30 calendar days following the scoping meeting up until the Phase II studies.
- Demonstration of Site Exclusivity required to enter the Phase II studies.

Increased Study Deposits / Withdrawal penalties

Commercial readiness demonstration to enter the Phase I cluster study:

1. Executed term sheet (or comparable evidence) related to a contract, binding upon the parties to the contract, for sale of (1) the constructed generating facility, (2) the generating facility's energy or capacity, or (3) the generating facility's ancillary services; where the term of sale is not less than five years; or
2. Reasonable evidence that the project has been selected in a resource plan or resource solicitation process by or for an LSE, is being developed by an LSE, or is being developed for purposes of a sale to a commercial, industrial, or other large end-use customer.

Commercial readiness demonstration options to enter the Phase II cluster study:

1. Same as 1 above except must be an executed contract (as opposed to term sheet)
2. Same as 2 above

Cost allocation treatment for network upgrades (NUs) to local (<200 kV) systems

To protect local ratepayers from rate shock for interconnection-related NUs

Original proposal

- Costs for low voltage network upgrades greater than 15% of each PTO's local TRR will be financed by ICs without cash reimbursement.
- Proposal would apply to all PTOs equally

Enhancements to proposal

- ISO to maintain up-to-date data on the ISO website
  - where each PTO's share of interconnection-related low-voltage costs are; and
  - where the ISO projects them to be in the near-term based on queued projects that have executed GIAs.
- Allow ICs to withdraw under certain circumstances
  - Where the PTO would have reimbursed the costs of a low-voltage upgrade, but that changes for the customer while in queue (due to the PTO going over the 15% threshold, regardless of whether this was projected).

Cost allocation treatment for network upgrades (NUs) to local (<200 kV) systems

PTO	(A) Estimated investment for all low voltage network facilities	(B) Estimated investment for low voltage network upgrades driven by generation interconnections	Percentage = B/A	Estimated available investment before the proposed 15% cap is reached
PG&E	$9,645,808,250	$347,586,176 *	3.6%	$1,099,285,061
SCE	$387,761,394	$3,532,187	0.9%	$54,632,022
SDGE	$3,387,000,000	$264,480,000	7.8%	$243,570,000
VEA	$23,049,376	$0	0%	$3,457,406

* PG&E's (B) estimate includes all reimbursed network upgrades driven by generation for all voltage levels. Therefore, the estimated available investment for low voltage network facilities before the proposed 15% cap is reached is worst case. Bottom line is there is little chance PG&E will reach the 15% threshold in the foreseeable future.

Policy for ISO as an Affected System – how is the base case determined and how are the required upgrades paid for?

- Proposal for study base case assumptions based on the previously queued projects as of the affected system study agreement execution date as proposed remains, no stakeholder opposition was received

- Proposal to use existing policy to reimburse network upgrade costs is unchanged
  - Consistently applies ISO policy for reliability network upgrades
  - Network upgrades benefit local ratepayers regardless of cause
  - Consistent with Order No. 2003 and FERC' policy
  - Ensures network upgrades are right-sized to mitigate specific impacts
  - Non-reimbursement by neighboring BAAs is consistent with their own policies

Providing more publicly available queue data

- Stakeholders have asked for a significant amount of data to be available to the public to be able to make better decisions on projects entering the cluster process
- There were 12 separate requests for data elements from 21 stakeholders
- There was significant support for a number of items and only one entity supported other items
- ISO still encourages Interconnection Customers to make whatever additional information publicly available
- If Interconnection Customers want to be on a list of developers, the ISO will post the list on its website

ISO proposal of data that should be made publically available by the ISO

- PTO study area and subarea by cluster
- TPD allocation, group and percentage allocation or MW amount for the project, with this information stakeholder will know if a project has a PPA or not
- Resource ID(s) by queue number
- Status of suspension and parking (yes/no)
- Phase data: Gen and fuel type, MW, hybrid or co-located, synchronization date and COMX or COD date

Public data next steps

- ISO will need to propose templates of the data to be published working with the data transparency stakeholders

- Once templates are agreed to, ISO will determine timing of roll-out

- Intent is to put the new reports on RIMS PUB so that stakeholders can pull them at any time

- Likely will be available in 2023

Transparency over early GIA termination procedures

- ISO proposed that Energy-Only projects should not be allowed to stay in the queue forever. Stakeholders agreed. The ISO proposed to be more assertive in implementing BPM for Generator Management, Section 6.5.2.1
  - Requiring projects to demonstrate issues with engineering, permitting, or construction
- Interconnection Customers should be reporting the status of their projects and if the customer does not respond, then the ISO should invoke the default clause in the GIA, Section 17 in the LGIA and Article 7.6 of the SGIA.
  - The only clarification would be that the ISO would only use BPM Section 6.5.2.1, or breach Section 17 of the LGIA and Article 7.6 of the SGIA where appropriate, taking into account the project specific issues and circumstances

Participating TO planning of upgrades

- ISO and Participating TOs plan to continue the quarterly Transmission Development Forum
  - Provides status on transmission upgrades
- ISO is not in a position to negotiate, and does not have more influence over, the scheduling of transmission upgrades
- Consistent with the milestones in the GIA, the Interconnection Customers should work with the Participating TO for their project to ascertain the status of the transmission upgrades

NEXT STEPS

Schedule Overview

IPE Phase 2	
Date	**Event**
07/26/22	Publish draft final proposal
08/02/22	Stakeholder conference call on draft final proposal
08/16/22	Stakeholder comments due on revised draft final proposal
09/13/22	Publish final proposal and draft tariff language
09/20/22	Stakeholder conference call on final proposal and draft tariff language
10/04/22	Stakeholder comments due on final proposal and draft tariff language
October 26-27 2022	Board of Governors Meeting

Next Steps

- Please submit comments on the draft final proposal and meeting discussion using the commenting tool linked on the initiative webpage
  - Comments are due by end of day Aug. 16, 2022

- Visit initiative webpage for more information: https://stakeholdercenter.caiso.com/StakeholderInitiatives/Interconnection-process-enhancements-2021

- If you have any questions, please contact isostakeholderaffairs@caiso.com

- The ISO is pleased to be hosting the Stakeholder Symposium in person at the Safe Credit Union Convention Center in downtown Sacramento on Nov. 9 – 10, 2022.

- Register on the Stakeholder Symposium page at: https://californiaiso.swoogo.com/2022StakeholderSymposium

- Please direct questions to symposiumreg@caiso.com