



California ISO

Maximum Import Capability Stabilization and Multi-Year Allocation Draft Final Proposal

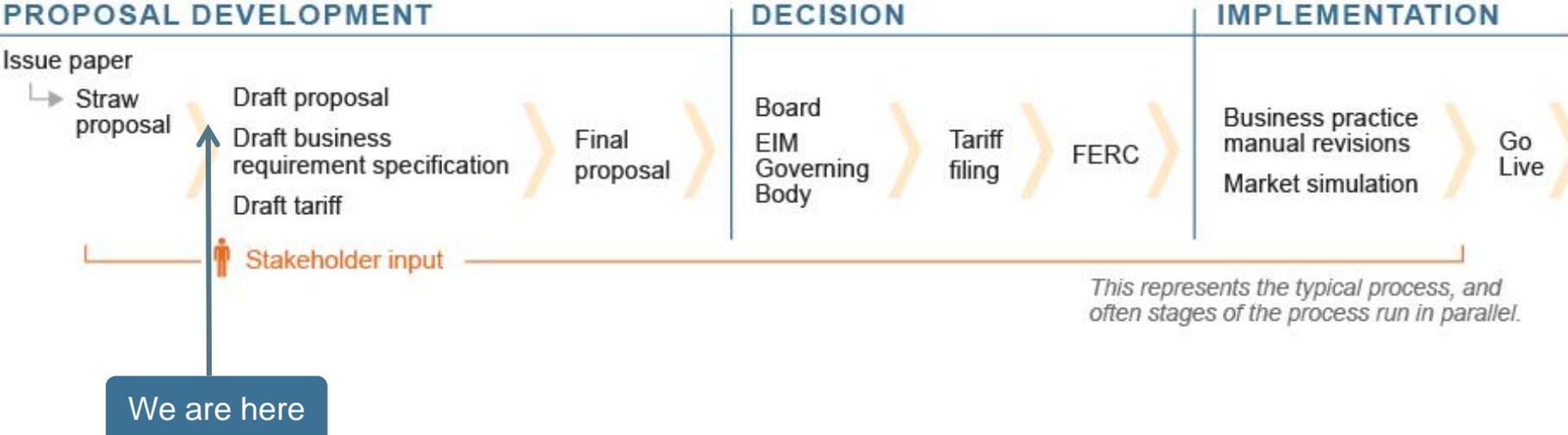
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Stakeholder Call

July 21, 2020

CAISO Policy Initiative Stakeholder Process



Agenda

- Purpose of stakeholder initiative
- Short-term - proposed stabilization of Maximum Import Capability
- Long-term - proposed multi-year allocation process
- Open discussion
- Initiative schedule

Purpose of stakeholder initiative

- Short-term - update the methodology used in the calculation of the simultaneous Maximum Import Capability (MIC) including its description in the CAISO Reliability Requirements Business Practice Manual (BPM) in order to achieve a greater stability of MIC overall allocations
- Long-term - update the annual nature of the MIC allocation process, as described in Tariff section 40.4.6.2 Deliverability of Imports, into a multi-year allocation process to accomplish numerous important objectives, the primary of which is the facilitation of long-term procurement of import resources and multi-year system Resource Adequacy (RA) requirements

Maximum Import Capability Stabilization

- Have a more stable MIC values from one year to the next
- Protect import deliverability values comparatively equal with internal resources that get protection for 3 years.
- Continue MIC protection for interties that are actually used by LSEs and allows MIC to decrease if not used for excessively long periods.
- No Tariff changes are required
- BPM changes have been effective since 6/1/2020.
- CAISO has implement new method for RA Year 2021.

New MIC calculation

Use the average of four hours, with no more than one hour per day, two in each one of the two years with the highest actual imports (when load is at or above 90% of that year's peak) among the past five years as baseline calculation.

In order to come up with the actual MIC for the applicable (future) RA year, the base line calculation above is augmented by the future year available ETC, TOR and Pre-RA Import Commitments as well as TPP portfolio (in order to assure that state and federal policy goals are accomplished).

Increased values must pass a simultaneous deliverability test.

Stakeholder input

- A majority of stakeholders agree that the new methodology is an improvement to the old methodology.
- To date the CAISO and stakeholder have not found a viable alternatives to replace the current method for calculating the Maximum Import Capability.
- Enhancement or changes to the calculation method (for example centered around actual new RA contracts) may be explored in the future through an open stakeholder process.

Multi-Year Allocation Process

- CAISO intends to move forward with multi-year available import capability allocation process that could facilitate long-term contracting (minimum 3-years) and facilitates multi-year contracts for resources dedicated to LSEs that serve load inside the CAISO BAA, without unduly restricting entry of new LSEs in the future.
- In order to be implemented in the 2022 RA year it requires FERC approval of new Tariff along with BPM changes by mid June 2021.
- Import capability is allocated to CAISO LSEs because those LSEs and their customers pay for the transmission system and should receive the benefits from it and therefore have the ability to select which external resources are procured and relied upon as part of RA capacity portfolios.

Positive stakeholder input

- A majority of stakeholders agree with two items in current CAISO proposal therefore we are moving forward with them:
 - Transparency - make public for each branch group (scheduling point) at least: LSE holder, locked up amounts, lock start date, lock expiration date
 - Change to the Remaining Import Capability allocation methodology – introduce a intermediate calculation in order to assure that the LSE that are below their load share ratio, effectively carry the same burden imposed by LSE above their load share ratio due to existing ETC, TOR and Pre-RA Import Commitments.

Transparency

CAISO intends to make public for each branch group (scheduling point):

- LSE holder
- Locked up amounts
- Lock start date
- Lock expiration date

Changes to the Remaining Import Capability allocation methodology

Current methodology results in an uneven effective allocation among LSEs. Example:

TIC = 500	Load share ratio	Steps 3 & 4	Load share quantity	Load Share after step 4	RIC allocation	Actual allocation MW	Effective allocation
LSE 1	53	15	$500 \cdot .53 = 265$	$.53 / .98 = .54$	$300 \cdot .54 = 162$	177	$177 / 265 = .67$
LSE 2	40	75	$500 \cdot .40 = 200$	$.40 / .98 = .41$	$300 \cdot .41 = 123$	198	$198 / 200 = .99$
LSE 3	5	10	$500 \cdot .05 = 25$	$.05 / .98 = .05$	$300 \cdot .05 = 15$	25	$25 / 25 = 1$
LSE 4	2	100	$500 \cdot .02 = 10$	-	-	100	$100 / 10 = 10$

New proposed methodology for RIC allocation

Follows steps 1-4 as done today.

Under step 5 calculate Gross Remaining Import Capability as:

$$\text{GRIC} = \text{TIC} - \sum(\text{MWs allocated to non-eligible LSEs})$$

- then calculate the load share ration share of GRIC to eligible LSEs.
- any LSE with Step 3 & 4 allocations > then their share of GRIC will also be excluded from further allocation
- Each remaining eligible LSE will have its RIC calculated as:

$$\text{RIC} = \text{LSE share of GRIC} - \sum(\text{MIC allocations in previous steps})$$

New proposed methodology for RIC allocation

Example:

TIC = 500	Load share ratio	Steps 3 & 4	Load share quantity	Load Share after step 4	GRIC share	RIC allocation	Actual allocation MW	Effective allocation
LSE 1	53	15	$500 \cdot .53 = 265$	$.53 / .98 = .54$	$400 \cdot .54 = 216.3$	$216 - 15 = 201.3$	216.3	$216.3 / 265 = .82$
LSE 2	40	75	$500 \cdot .40 = 200$	$.40 / .98 = .41$	$400 \cdot .41 = 163.3$	$163.3 - 75 = 88.3$	163.3	$163.3 / 200 = .82$
LSE 3	5	10	$500 \cdot .05 = 25$	$.05 / .98 = .05$	$400 \cdot .05 = 20.4$	$20.4 - 10 = 10.4$	20.4	$20.4 / 25 = .82$
LSE 4	2	100	$500 \cdot .02 = 10$	-	-	-	100	$100 / 10 = 10$

Simplified Alternative 2 - positive stakeholder input

- Support – PG&E
- Support with caveats - CDWR, SWPG, NCPA, VEA, CPUC, Brookfield Renewable, Direct Energy Business
- Neutral - PowerEx
- Opposed with caveats - SCE (lack of multi-year system rules); Six Cities, CMUA, SMUD (eliminate)

CAISO will not move forward with

- Eliminating the allocation process, because technically it is very useful - the total of physical capability of each intertie totals about 44,400 MW and the highest net import the CAISO has ever seen is around 12,500 MW – whereas MIC is at around 15,800 MW.
- Moving deliverability testing until after the showings are in. That could leave LSEs with stranded assets, it will required far more time for showings validation and it could have high ramification of CPM back-stop costs for system RA.

Move forward with a simplified Alternative 2 One year allocation with possibility to lock MIC

- Follow current LSE by LSE one year out MIC allocation at the branch group level as available today. (Done mid-late August).
- LSEs may lock their yearly allocations at the branch group level through RA contracts for an undetermined length of time, however if the individual LSEs total year ahead allocation falls below the previous year(s) total lock up amount, then the LSE will be limited to the current total year ahead allocation
 - LSEs to provide CAISO with contract priority curtailment order
- Up to 75% of an LSEs MIC allocation can be locked up at the branch group level by multi-year *applicable contracts* signed by May 15th of the next RA year (coincides with July RA showings) AND they must be communicated to the CAISO by submitting the completed template by deadline included in the BPM.

Why move forwards with simplified Alternative 2?

- It is closest to current approved allocation method (limited to one year load share ratio for all new contracts)
- It solves the biggest part of the load migration (formation of new LSEs and year ahead load migration).
- Provides a way to get up to 75% of ones MIC allocation locked up at a branch group level for long-term contracting
- LSEs will need to manage the risk on their own by either:
 - Staying further back from the 75% limit
 - Selling the extra contracts with load share ratio decrease
 - Buying extra MIC allocations from other LSEs (if available)

Why simplify Alternative 2?

- Most stakeholders prefer a simpler implementation
- Currently there is no LSE by LSE load forecast provided by the CEC that goes beyond one year.
- Even if the CEC makes one, it will not include “unknown” new LSEs that will contribute to load migration in the future (beyond one year)
- Majority of LSEs would like to be able to lock MIC at the branch group level for multi-year contracts
- Efficiency of the process and reduces upgrades required to CIRA.

Tariff changes required for implementation:

- Step 5 needs to be modified to allow assignment of Remaining Import Capability on a specific intertie and to specify how this assignment will be done (potentially adding a new step)
- Step 6 (public posting) needs to be modified to increase transparency for Pre-RA Import Commitments and to add transparency and data for the new contracts that lock Remaining Import Capability
- Step 7 (communication to the SC for the LSE) needs to be modified to include the amount of, and Intertie on which, the Load Serving Entity's new lock amounts of Remaining Import Capability, as applicable, have been assigned; and any additional amount of Remaining Import Capability that the LSE can lock by May 15th of the next RA year.
- New definition for the locked part of Remaining Import Capability.

Applicable contracts used to lock MIC allocation

- CAISO agrees with stakeholder comments that the CAISO should develop mechanisms that will ensure capacity built outside California to support CAISO load will be available and accessible to California on the same basis as RA capacity in the CAISO balancing area is available to the CAISO
- Therefore the CAISO is proposing that new contracts used to lock MIC allocations to branch group should be associated with source specified import resources (either resource specific or an aggregation of specific resources). This design is consistent with the proposed import RA rules and maintains alignment with RAE must offer obligation rules.

RA contractual requirements to qualify for MIC lock

- In order to qualify for any one year lock the RA contract has to span a minimum of 3 summer months (between June-September). For years when the contract drops below the minimum summer months requirement the RA import allocations can still be received through the annual allocation process, however the LSE will not have a lock or pre-assignment at the respective branch group.
- In order to maintain the lock on the branch group, the RA contract used for locking must be active in the next RA year and must be included in the year ahead template submitted to the CAISO.
- Evergreen contracts are not allowed, the RA contract must have a specific end date and must be communicated to the CAISO.

RA contractual requirements to qualify for MIC lock

- In order to assure that each LSE has a chance of locking up MIC at any given branch group and to also assure that an LSE does not have a forever lock on a certain branch group; the LSEs cannot change the contract used for locking MIC with a new contract or an extension of the same contract without going through the yearly MIC allocation first.
- An extension of an old contract (Pre-RA Import Commitment or New Use) is treated as a new contract and must meet any new (future) Tariff and BPM requirements in order to achieve a new lock based on its own merits.

Maximum value by branch group (scheduling point)

- If the specific resource or the aggregation of specific resources have variable Qualifying Capacity values between months, then the month with the highest total QC value by branch group will represent the locked amount. These values must be given to the CAISO in the template LSEs will have to fill in around mid-June for the next RA year (similar to the Pre-RA Import Commitment template).
- Example - LSE A has 3 contracts at the same branch group:

Month	Jan.	Feb,	Mar.	Apr.	May	June	July	Aug.	Sept,	Oct.	Nov.	Dec.
Res. 1	8.61	7.38	17.22	15.38	15.38	20.30	14.15	12.92	9.23	4.92	7.38	8.00
Res. 2	0.00	1.00	2.00	3.00	5.00	6.00	6.00	5.00	3.00	2.00	1.00	0.00
Res. 3	8.30	10.30	10.50	15.3	15.3	8.50	8.50	7.50	6.50	5.00	4.00	2.00
Total	16.91	18.68	29.72	33.68	35.68	34.80	28.65	25.42	18.73	11.92	12.38	10.0

- MIC allocation lock for this branch group will be 35.68 MW for the next RA Year.

Maximum value by branch group (scheduling point)

New:

- In order to avoid excessively high off-peak contracts that would lock MIC allocations over the entire year; and
- In order to allow for resource specific contracts that may have slightly higher values in the off-peak period,
- Each LSEs locked amount per branch group (scheduling point) is limited to 120% of the highest summer monthly value.
- Additional MWs may be obtained through the regular allocation process, without lock or through trading.

LSE provided contract priority curtailment order vs. cutting all contracts pro-rata

- Reminder – the year immediately after an LSE has a cut to its RA contracts due to lower load share ratio, the LSEs can resubmit and use the same contract, if it is still active and meets all the current requirements, to increase back its RA lock if the new load forecast has increased again.
- Same process is true if the LSE load share ratio stayed the same however the LSE sold one of its other RA contracts.
- Cutting all contracts pro-rata, will be more “painful” for the involved LSE in the first year, however will not prevent the LSE from selling any contract they want and most likely getting back the lock on the branch groups of their choice the next RA year.
- Allowing the LSE to pick the curtailment order will allow the LSE to sell the preferred contract immediately, avoiding one year lag and the “pain” of having to go through the locking process again.

Available Pseudo-ties and Dynamic scheduled resources

- Currently there are:
 - Over 6450 MW of dynamic scheduled resources and
 - Over 650 MW of pseudo-ties
- Geographically spread:
 - Over 1150 MW in the north
 - Almost 5000 MW in the south
- Contractual status:
 - Estimated that over 2000 MW are existing Pre-RA Import Commitments or scheduled over existing ETC and TOR
 - About 5000 MW are already under new RA contracts or immediately available for multi-year contracting



California ISO

Open discussion

Initiative Schedule

- Post issue paper – December 3, 2019
- Stakeholder call – December 10 – comments by December 24
- Post straw proposal – January 22, 2020
- Stakeholder meeting – January 29 – comments by February 12
- Post revised straw proposal – March 12
- Stakeholder call – March 19 – comments by April 2
- Start BPM process for short-term MIC stabilization – March 26
- Post second revised straw proposal – May 21
- Stakeholder call – May 28 – comments by June 11
- Post draft final proposal – July 14
- Stakeholder call – July 21 – comments by – August 4
- Board of Governors Meeting – September 2020
- FERC filing after Board approval – Exact date TBD

Next Steps

- Stakeholder comments due by end of day August 4, 2020
 - Email comments to regionaltransmission@caiso.com
 - Stakeholder comments are to be submitted within two weeks after stakeholder meetings
 - ISO will post comments and responses on website