



Stakeholder Comments of the California Community Choice Association
Maximum Import Capability Stabilization and Multi-Year Allocation Initiative:
Straw Proposal

Submitted to: regionaltransmission@caiso.com

| Submitted by | Organization | Date Submitted |
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| Evelyn Kahl, Buchalter (415) 227-3563 | California Community Choice Association ¹ | <i>February 12, 2020</i> |

CalCCA appreciates the opportunity to comment on the CAISO’s Maximum Import Capability Stabilization and Multi-Year Allocation Straw Proposal and wishes to acknowledge the CAISO staff for their efforts undertaken to draft the proposal.

This document focuses on the calculation of MIC rather than the allocation proposal and is in three parts. CalCCA is generally supportive of the CAISO’s multi-year approach to MIC allocations and believes this is a vast improvement over the present rules. That said, CalCCA is not commenting on implementation details in these comments at this time. CalCCA is continuing to develop its view on the MIC allocation process and anticipates providing comments on important aspects of this issue (e.g., load migration) at a later date.

In this document we first, we describe some of our assumptions regarding the problem that the CAISO faces in setting MIC values in aggregate and by branch group. Second, we offer comments/recommendations. Third, we end with two questions for consideration by the CAISO and parties in this stakeholder process. Some assumptions are restatements of those the CAISO has already made but are included here because of their relevance to our comments.

We include assumptions because i) they guide the rest of our comments, ii) we wish to understand the CAISO’s problem(s) and proposal solution(s) better, and iii) we wish to help others understand the assumptions underlying our comments in order to interpret and respond to our comments.

¹ California Community Choice Association represents local government Community Choice Aggregation electricity providers in California members, including Apple Valley Choice Energy, CleanPowerSF, Clean Power Alliance, East Bay Community Energy, King City Community Power, Lancaster Choice Energy, MCE, Monterey Bay Community Power, Peninsula Clean Energy, Pico Rivera Innovative Municipal Energy, Pioneer Community Energy, Rancho Mirage Energy Authority, Redwood Coast Energy Authority, San Jacinto Power, San Jose Clean Energy, Silicon Valley Clean Energy, Solana Energy Alliance, Sonoma Clean Power, Valley Clean Energy.

Assumptions:

- The CAISO has limited ability to forecast the simultaneously feasible optimal power flow across the WECC system, given uncertainty regarding supply volume, supply and transmission arrangements, and relative marginal cost of resources among and within each balancing authority area.
- The CAISO does not know ahead of time when the period of greatest system need will be in any given window of time (year, season, month, day).
- The period of peak demand and peak imports may not perfectly align with the period of peak system need and available import capability at such time.
- Uncertainty, especially regarding internal power flows resulting from internal load and generation statuses, suggests conservative estimates for branch group MIC may be warranted; however, there are risks that being too conservative will impede the efficient and equitable treatment of internal and external resources.
- While the total physical import capability of all interties is 44,400 MW, the interplay between external and internal power flows limits the actual amount of net imports that can be accommodated during a delivery period/operating hour (the CAISO's Operating Procedure 6150 limits net imports to 12,800 MW).
- Historical import data is imperfectly representative of future available import capacity.
- Stabilization of MIC and multi-year allocation will increase certainty needed by market participants to transact for imported capacity.
 - Stabilization of MIC using any chosen historical period risks underestimating actual import capacity during the actual operating period.
- A forward-looking MIC methodology is challenging for several reasons:
 - CAISO does not know what actual internal power flows will be (input variables include gas prices, generator outages/derates, transmission outages/derates, weather, VER production, etc.).
 - CAISO has limited information on current and future resource fleets outside of its territory.

Comments

CalCCA offers the following items for consideration as the CAISO develops the revised straw proposal:

- Principle: MIC calculation should be a best unbiased estimate of actual operating conditions.
- Comment: CAISO should consider a forward-looking (WECC-wide) analysis.
 - For example, a full forward-looking WECC-wide simultaneously feasible/optimal power flow production cost model able to develop ranges of MIC values by branch group for multiple realistic CAISO stressed grid conditions may be feasible and valuable (positive cost/benefit of developing the new methodology).
 - This analysis should also take into account how much potential import capacity is reserved for the EIM market, and how much this capacity can be counted on to deliver energy into California when needed.
- Comment: CAISO should estimate how results from an historical analysis (including the one proposed in the Straw Proposal) differ from an ideal/perfect-information forward-

looking analysis. While the results of a perfect forward-looking analysis are necessarily unknown, striving to minimize the gap between the outputs of what is implemented, and what a perfect set of outputs would be should be a priority.

- Perhaps the CAISO could use back-testing with best available information to make such an estimate.
- Estimates must also consider how the historical analysis may include only un-stressed periods in the West that fail to account for potential future stressed conditions (for example, drought through-out the West). In other words, if we know the input data are unrepresentative or otherwise biased against projected operating conditions, such insights should be acknowledged and addressed as best as possible (see “best unbiased estimate” principle).
- Comment: CAISO should continually identify data it does not have that would help improve accuracy of the methodology (historical or forward-looking).
- Comment: CAISO has described peak demand as the period of interest in deriving MIC values; CAISO should consider whether net demand (demand minus in-front-of-the-meter VER production plus/minus net storage dispatch) would better reflect time periods of greatest need, or whether the analysis should consider both periods.
- Comment: Allow MIC calculation to remain flexible to changing resource fleet by redefining objective from determining import capacity at period of system peak to import capacity at period of greatest system need.
 - For example, if system need increases when internal resource production drops off, the import capacity of greatest relevance may be post-peak, in which internal and external resources are not competing to serve load but are complementary to meeting the objective of optimal commitment and dispatch (WECC-wide). A MIC process that restricts branch group capability to those most limiting periods in terms of how much energy can be imported, and is then applied to other periods where such actual limits are much higher, this may distort and adversely affect the RA market, violating the principle of equitable in-state and out-of-state resources.
- Comment: CAISO should consider whether some description of Operating Procedure 6150 that would be valuable to market participants, can be made public.

Questions:

- Will the aggregate MIC value appropriately align with CAISO system needs over the medium and long-term, as these system needs evolve over time with a changing supply portfolio (net peak demand pushing the greatest need for capacity and energy into the evening hours, and perhaps into the overnight and early pre-solar-ramp morning hours; the MIC methodology should be flexible enough to accommodate a storage-heavy CAISO supply portfolio)?
- Will the adopted rules align with, or at least not conflict with, the RA-CPE as contemplated in the settlement proposal within CPUC Proceeding R.17-09-020?