Joint LSE MIC Enhancements Catalog Submission

May 15, 2024



Background

- The CAISO calculates Maximum Import Capability (MIC) annually to determine a MW quantity of out-of-state (OOS) resources simultaneously deliverable to the aggregate of CAISO load and allocates it to load serving entities (LSE)
- LSEs depend on OOS resources to meet RA requirements, and when they show OOS resources as RA, they must also show MIC
- The CPUC's Preferred System Plan includes over <u>7 GW</u> of out-of-state wind by 2035 that will require MIC to count for resource adequacy (RA), and therefore Integrated Resources Planning (IRP) obligations
- MIC can be allocated on a multi-year basis but only once resources meet their commercial operating date (COD), complicating long-term contracting of new resources

Month Ahead September 2019-2023			
Year	NQC	RA	Amount of RA
		Requirement	not Covered by
			CAISO
			Connected
			Resources
2019	50,898	50,242	(657)
2020	47,334	49,135	1,801
2021	44,843	48,351	3,508
2022	46,923	48,944	2,020
2023	49,977	52,476	2,499



Challenge #1: The Availability of MIC

• Depending on the intertie, there may be at least two sources of MIC availability challenges:

Insufficient MIC to meet LSE demand on popular interties

Unused MIC

either because of a cumbersome trading mechanism, MIC was not made available, or unusable location

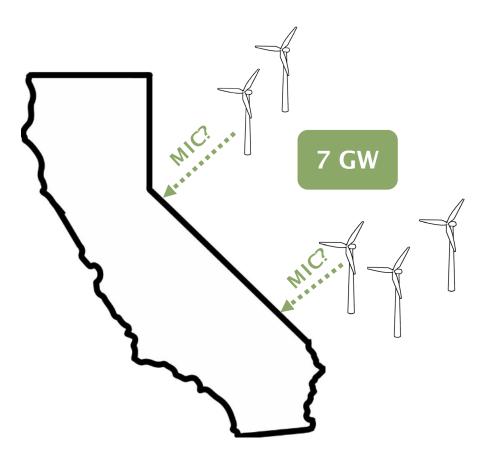
- Data needed to understand the source of MIC availability challenges:
 - Monthly MIC allocated by intertie and LSE*
 - Monthly MIC shown by intertie and LSE*
 - Monthly MIC available to trade by intertie *
 - Monthly MIC traded by intertie

* These data points are available on OASIS but have data errors, so unable to reach conclusions at this time



Challenge #2: Risks to Long-Term Contracting

- RA contract used to lock in MIC must be active <u>in the</u> <u>next RA year</u>
- LSEs cannot secure MIC to support PPAs with online dates multiple years into the future. This creates immediate risks for:
 - CPUC-jurisdictional LSEs with mid-term reliability requirements with delivery dates between now and 2028 and their IRPs which plan procurement out to 2035
 - Non-CPUC jurisdictional LSEs, who are likewise actively planning and procuring to meet long-term needs
- Uncertainty around whether MIC will be available to support these projects is a barrier to LSEs moving forward with PPAs for OOS projects





Recommendation

Create a new initiative exploring the MIC calculation and allocation methodology

Follow-on to the generator deliverability initiative, which explored ways to increase deliverability of internal generation while balancing reliability and cost containment considerations

Types of proposals may include, but should not be limited to:

- A process to allocate MIC on a multi-year going forward basis to accommodate LSEs with long-term contracts, as opposed to only allowing multi-year MIC the year prior to resource COD.
 - E.g., To retain MIC for long-term contracts could require an annual demonstration of contracts to provide assurance that the MIC will be used by the LSE in the future
- A mechanism to make unused MIC better available to LSEs rather than creating a marketable right that requires cumbersome bi-lateral trading to obtain.

• E.g., If an LSE does not show import RA contracts for a particular month in advance of T-45, the unused MIC

