

***SACCWIS Meeting to Consider Local and System
Grid Reliability Issues***

***Interagency Working Group
August 23, 2019***

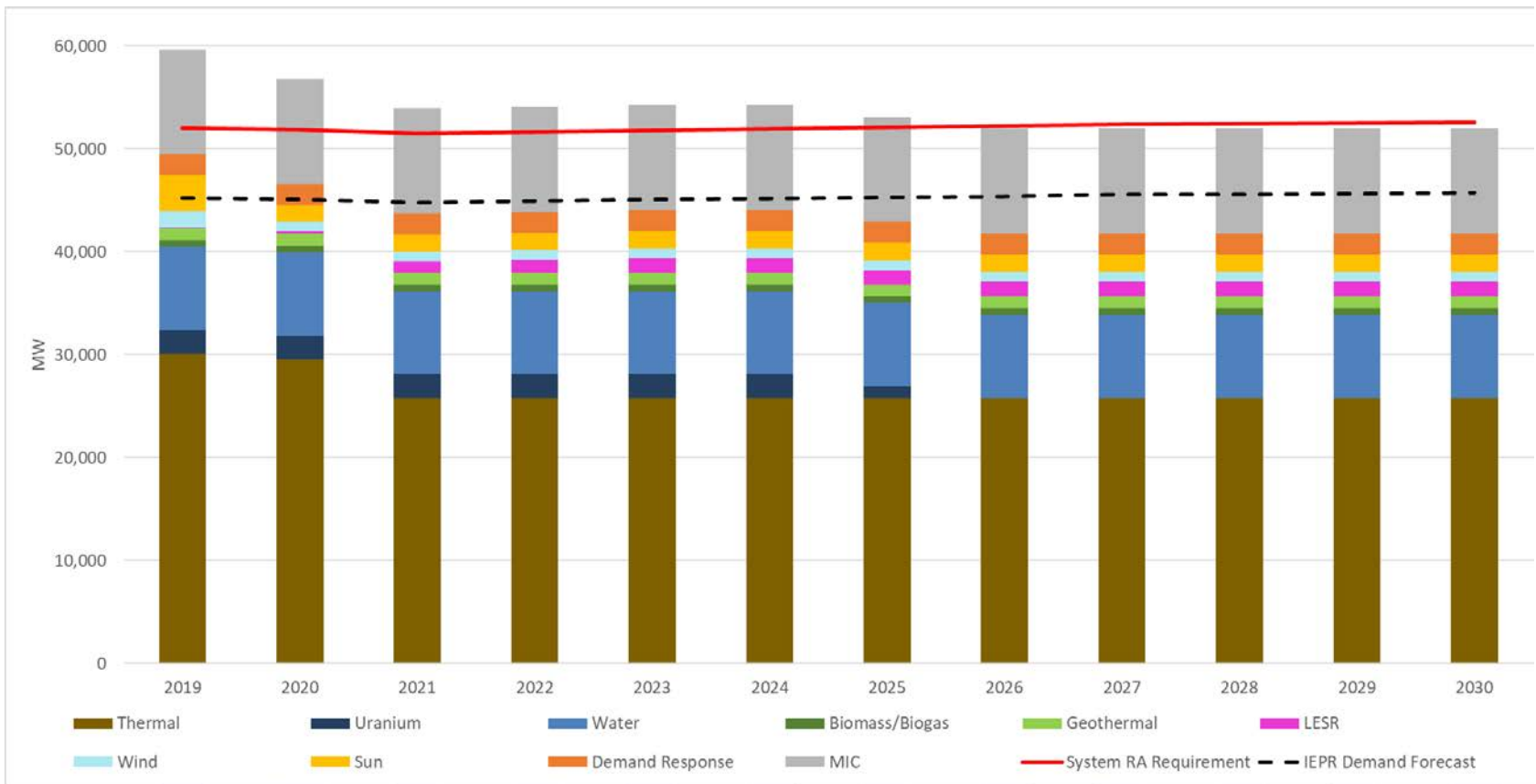
Background

- 2019 SACCWIS Report (3/8/19)
 - CAISO to perform local analysis for 2021 given delay in Mesa Loop-in project until 2022
 - SACCWIS would convene if CAISO found need for extension of Alamitos or Redondo
- CAISO 2021 Limited Local Capacity Study (7/11/19)
 - Baseline analysis did not find a need for extension
 - 476 MW to 816 MW needed for local needs in Western Los Angeles Basin under sensitivity scenarios
 - Notes system capacity need identified in CPUC Integrated Resource Plan (IRP) Ruling
 - Recommends extension of Alamitos for two years (until 12/31/22) to meet local and system needs
 - Exact MW amount to be determined

CPUC Integrated Resource Plan (IRP) Ruling

- Issued 6/20/19 in R.16-02-007
- Tightening of bilateral Resource Adequacy (RA) market
 - Some retirements earlier than expected
 - Potential additional mothballs and retirements
 - Changes to adopted Effective Load Carrying Capability (ELCC) factors
 - Peak load shifts: later in day and August to September
 - Uncertain ability to rely on imports to meet RA needs in future
- Three simultaneous approaches to meet system needs
 - Procure 2,000 MW new capacity by August 2021
 - SCE to procure 500 MW of existing non-OTC capacity
 - Extension of OTC compliance deadlines
- Decision in fall 2019

Available Capacity (September)



Imports Needed (MW)	2,548	5,270	7,785	7,763	7,768	7,858	9,194	10,446	10,626	10,678	10,750	10,851
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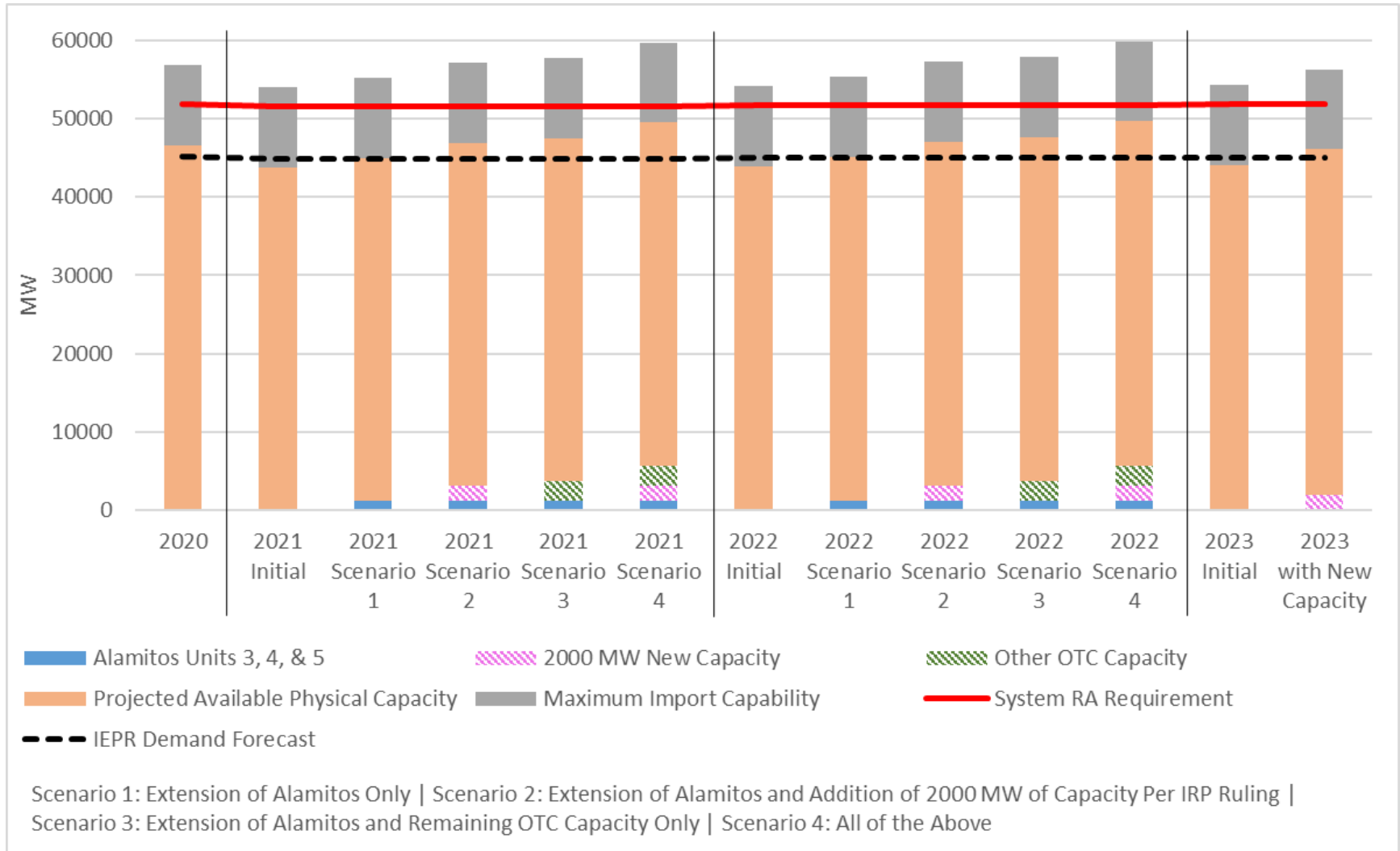
2019 Maximum Import Capability (MIC): 10,193 MW

Source: CPUC staff.

OTC Units Available for Extension

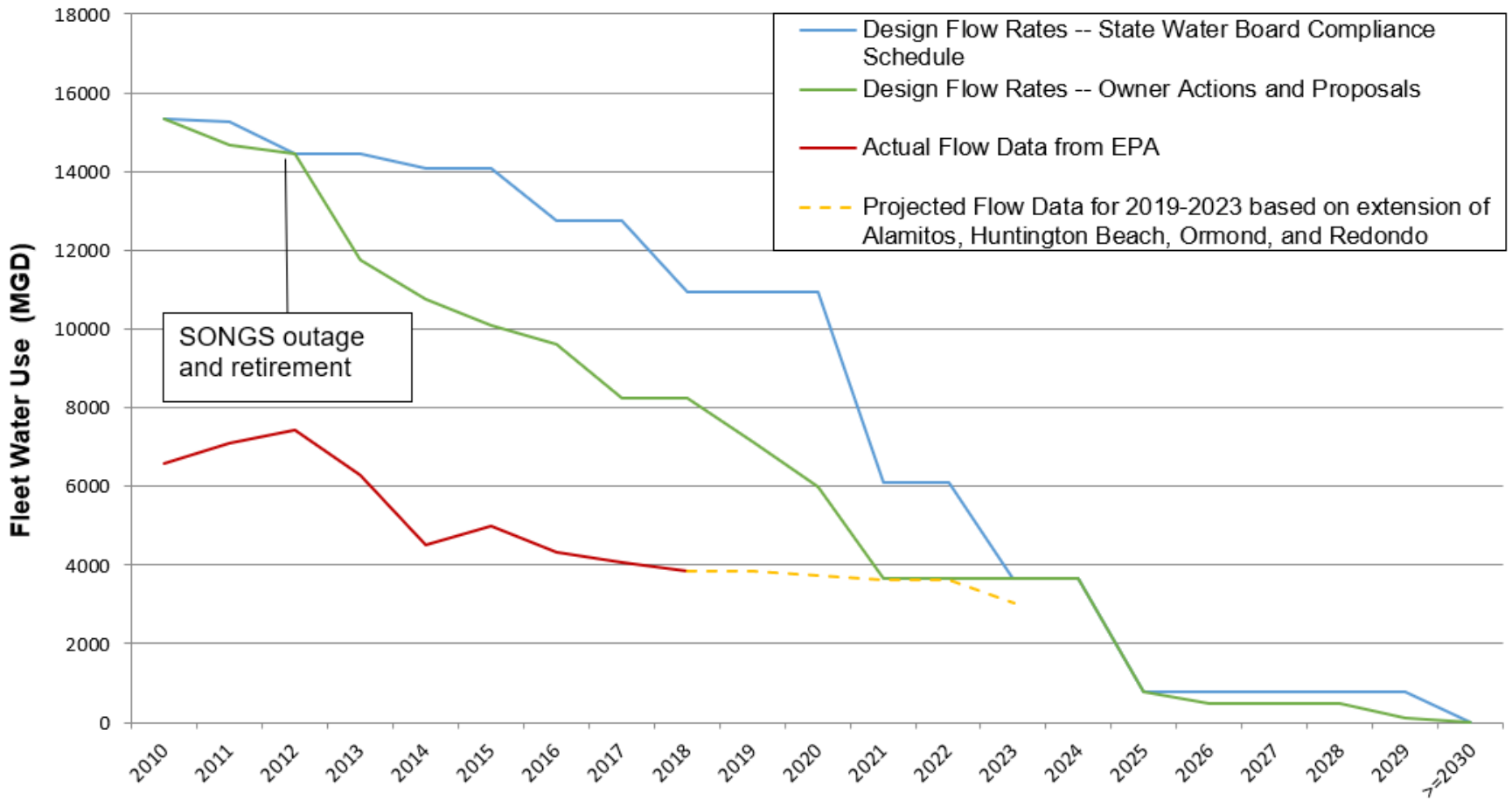
- Alamitos Units 3, 4, and 5 (1,163 MW)
 - Units 1, 2, and 6 retiring on 12/31/19 to provide emissions offsets for repower
- Huntington Beach Unit 2 (215 MW)
 - Unit 1 retiring 12/31/19 to provide emissions offsets for repower
- Ormond Beach Units 1 and 2 (1,516 MW)
- Redondo Beach Units 5, 6, and 8 (848 MW)
 - Unit 7 retiring 9/30/19 to provide emissions offsets for Huntington Beach repower
- **Total: 3,742 MW available for extension**

Procurement Scenarios



Source: CPUC staff.

Projected Ocean Water Flow Rates with Extension of Alamitos and Ormond



Source: CEC and State Water Board Staff, Updated August 22, 2019.

Assumptions:

- Projected water usage based on 2018 data.
- Alamitos 3-5, Huntington Beach 2, Ormond 1 and 2, and Redondo 5, 6, and 8 stay online through 2022.
- Moss Landing has “zero” water usage after 2020 compliance, though it is pursuing Track 2, and there will be some water usage.

Options in Proposed SACCWIS Report

- Three options
 - No action
 - Extend Alamitos (Units 3, 4, and 5) for two years to address local need
 - Extend Alamitos (Units 3, 4, and 5) and one or more other OTC resources for two years to address system and local needs

Recommendation in Proposed SACCWIS Report

- **Recommendation: Extend Alamitos and one or more other OTC resources for two years**
 - Begin permit and OTC Policy updates for Alamitos now
 - Interagency Working Group performs additional analysis in fall 2019
 - SACCWIS reconvenes in fall 2019 to make concrete recommendation for other OTC resource(s)
- Advantage of OTC compliance date extensions
 - Mitigate delays in procuring new capacity by 2021
 - Low capacity factors, and do not expect higher capacity factors under an extension (no increased air and water effects)

OTC Extension Process

- Group 1 Tasks: Interagency Working Group prepares report for SACCWIS (**DONE**)
- Group 2 Tasks
 - IAWG presents report to SACCWIS (**8/23/19**)
 - SACCWIS considers report (**8/23/19**)
 - SACCWIS representative presents to State Water Board

If State Water Board approves extension:

- Group 3 Tasks (State Water Board Staff)
 - Review changes to OTC Policy
 - Prepare draft staff report, amendment language, and resolution
 - Bring amendment before Board
 - Submit administrative record to Office of Administrative Law for review and approval
- If needed, repeat in late 2019 for additional OTC resource(s)

Permit Updates for Alamitos

- Los Angeles Regional Water Board (9-12 months)
 - National Pollutant Discharge Elimination System (NPDES) permit
 - Time Schedule Order (TSO)
 - San Gabriel Metals Total Maximum Daily Load (TMDL)
 - Occurs concurrently with State Water Board OTC Policy amendment
- South Coast Air Quality Management District (SCAQMD) and EPA Region 9 (estimate: 6-12 months)
 - Only affects Unit 3, which is identified in permits as part of a repower (units 4 and 5 can operate under existing permit)
 - AES submits application to SCAQMD to update boiler shutdown date in Title V permit (may require public notice by EPA)
 - AES modifies retirement plan for boiler filed with SCAQMD

Conclusion

- **Recommendation:**

- Extend Alamitos 3, 4, and 5 for two years to meet local and system needs
- Extend one or more other OTC units for two years to address system needs

- **Proposed Process:**

- SACCWIS approves recommendation on 8/23/19
- Bring recommendation to State Water Board
- If additional analysis is needed:
 - IAWG performs additional analysis in fall 2019 to study
 - SACCWIS reconvenes in fall 2019 to make concrete recommendation for other OTC resource(s)
- State Water Board meeting(s) to approve extension(s)