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)

<table>
<thead>
<tr>
<th>Year</th>
<th>Imports Needed (MW)</th>
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<tbody>
<tr>
<td>2019</td>
<td>2,548</td>
</tr>
<tr>
<td>2020</td>
<td>5,270</td>
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<tr>
<td>2021</td>
<td>7,785</td>
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<tr>
<td>2022</td>
<td>7,763</td>
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<tr>
<td>2023</td>
<td>7,768</td>
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<tr>
<td>2024</td>
<td>7,858</td>
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<tr>
<td>2025</td>
<td>9,194</td>
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<tr>
<td>2026</td>
<td>10,446</td>
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<tr>
<td>2027</td>
<td>10,626</td>
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<tr>
<td>2028</td>
<td>10,678</td>
</tr>
<tr>
<td>2029</td>
<td>10,750</td>
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<tr>
<td>2030</td>
<td>10,851</td>
</tr>
</tbody>
</table>

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

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)