Item # 6

Proposed Amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling

Once-Through Cooling Policy

Board Workshop

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State Water Resources Control Board

April 21, 2020
Outline

• Board Workshop
  • Open discussion
    • No decision on the proposed amendment
• History of the OTC Policy
• Summary of Proposed Amendments
• Projected Project Timeline
• Questions and Comments
OTC Policy History

- Federal Clean Water Act Section 316(b)
- Applied to 19 coastal and estuarine power plants: 17 fossil fueled plants and two nuclear fueled plants
- OTC Policy success:
  - To date, 10 OTC power plants have ceased operation
  - 9 currently operating
Summary of Proposed Amendments

1. Grid reliability – Extend compliance dates:
   • Alamitos, Huntington Beach, and Ormond Beach for three years until December 31, 2023
   • Redondo Beach for one year until December 31, 2021

2. Diablo Canyon Nuclear Power Plant (Diablo Canyon) Units 1 and 2 – Amend compliance dates to match NRC license expiration dates

3. Los Angeles Department of Water and Power (LADWP) Grid Reliability Report Process update

4. Extension process update to match current practice

5. Non-substantive administrative changes
Timeline of Grid Reliability Concerns

March 8, 2019 – Statewide Advisory Committee for Cooling Water Intake Structures (SACCWIS) Annual Meeting

June 20, 2019 – CPUC Rulemaking (R.)16-02-007

July 20, 2019 – CAISO’s 2021 Limited Local Capacity Technical Study

August 23, 2019 – SACCWIS Reconvened

November 7, 2019 – CPUC Decision (D.)19-11-016

November 19, 2019 – Information Item to the State Water Board

January 23, 2020 – SACCWIS Reconvened
SACWIS Considerations

• Causes of projected shortfall:
  • Shifts in peak energy use
  • Changes in the method for calculating qualifying capacity of wind and solar resources
  • Increasing uncertainty on imported energy
  • Unanticipated retirements of non-OTC generating units
  • New information received after the November 19 information item
  • Community updates and concerns
SACCWIS Recommendations

January 23, 2020 SACCWIS Meeting

• Alternative 1: No action
• Alternative 2: Extend all four plants for three years
• Alternative 3:
  • Alamitos and Huntington Beach for three years until December 31, 2023
  • Redondo Beach for two years until December 31, 2022
  • Ormond Beach for one year until December 31, 2021
• Alternative 4: SACCWIS’s Preferred Recommendation
  • Alamitos, Huntington Beach, and Ormond Beach for three years until December 31, 2023
  • Redondo Beach for one year until December 31, 2021
Impacts of Compliance Date Extensions

- Frequency of Power Plant Operation
- Impacts to Marine Life
- Mitigation of Impingement and Entrainment Impacts
- Land Use Impacts
  - Ormond Beach
  - Redondo Beach
- Air Quality Impacts
- Other Regulatory and Permitting Requirements
Impacts of Compliance Date Extensions

Frequency of Power Plant Operation

• Average operating capacity over the last three years was 4.8%

• Power plants likely to be used as “peakers”

• Newer, more efficient resources will be used first

• Expect operations to be at or below use from the last three years
Impacts of Compliance Date Extensions

Impacts to Marine Life

- Baseline established in the 2010 Final Substitute Environmental Document
- Historic and Projected OTC Water Use
  - SACCWIS Alternative 4

![Graph showing impacts over time with lines representing different data sets: Design Flow Rates – State Water Board Compliance Schedule, Design Flow Rates – Owner Actions and Proposals, Actual Flow Data from EPA, and Projected Flow Data for 2020-2024 based on Alternative 4's extension of Alamitos, Huntington Beach, Ormond Beach, and Redondo Beach.]

- SONGS outage and retirement
Mitigation of Impingement and Entrainment Impacts

- Annual interim mitigation payments from October 2015 until final compliance with the OTC Policy
- Entrainment payment is multiplied by a 3% escalator each year to account for inflation
- If compliance dates are extended, power plants will be required to continue annual interim mitigation payments until final compliance
Land Use Impacts – Ormond Beach

• Negotiated agreement between GenOn and City of Oxnard – approved in January 2020

• Up to $25 million from GenOn to fund demolition and remediation

• Both entities support a 3-year extension of Ormond Beach
Impacts of Compliance Date Extensions

Land Use Impacts – Redondo Beach

• City of Redondo Beach opposed to an extension of the compliance date
  • Prop-68 grant money will be retained

• AES recently finalized sale of property
  • Supports a 3-year compliance date extension
  • Agreement for AES to contribute funds towards redevelopment if the compliance date is extended to 2023
Air Quality and Other Impacts

• Power plants likely to be used as “peakers”

• Impacts expected to be at or below recent levels

Conclusion: Impacts from continued operation of power plants are expected to be at or below baseline considered in 2010 environmental analysis
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Administrative Compliance Date Change - Diablo Canyon

• Proposes to amend the compliance dates of Units 1 and 2 to match expiration dates of the NRC licenses

• Current compliance date for both units: December 31, 2024

• NRC license expiration dates:
  • Unit 1 – November 2, 2024
  • Unit 2 – August 26, 2025

• Known discrepancy in 2010 when the OTC Policy was adopted
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Administrative Updates

• Los Angeles Department of Water and Power (LADWP) Grid Reliability Reporting Process
  • In 2014, the State Water Board approved LADWP’s request to change their due date to January 31 of each year

• Clarifying the Extension Process
  • Revise OTC Policy to accurately reflect current practice

• Non-substantive changes to improve readability
  • Compliance with California Government Code Section 11546.7 document accessibility requirements
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Project Timeline

- SACCWIS Meeting
  - March 8, 2019
- Release of CAISO’s 2021 Limited Local Capacity Technical Study
  - July 11, 2019
- SACCWIS Meeting
  - August 23, 2019
- CPUC Approves Decision (D.) 19-11-016
  - November 7, 2019
- City of Oxnard City Council Meeting
  - January 21, 2020
- SACCWIS Meeting
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- CPUC Issues a Ruling in Rulemaking (R.) 16-02-007
  - June 20, 2019
- State Water Board Consideration for Adoption and Public Hearing
  - July 21, 2020
- Public Comment Period Starts
  - March 18 – May 11, 2020
- Public Board Workshop
  - April 21, 2020
- Re-Release of Documents
  - Early July 2020
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Thank you!

Submit comment letters by noon on May 11, 2020 to:
commentletters@waterboards.ca.gov

Further information:
https://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/

Project contacts:

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