

#### **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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Engineering Geologist
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



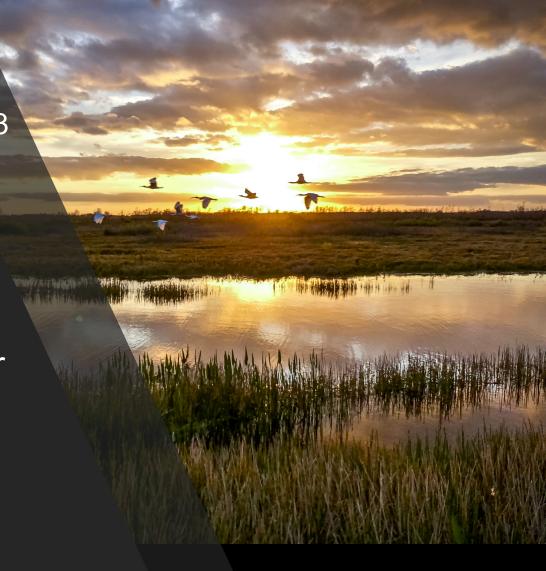
## OTC Policy History

- 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

#### **SACCWIS 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

- 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



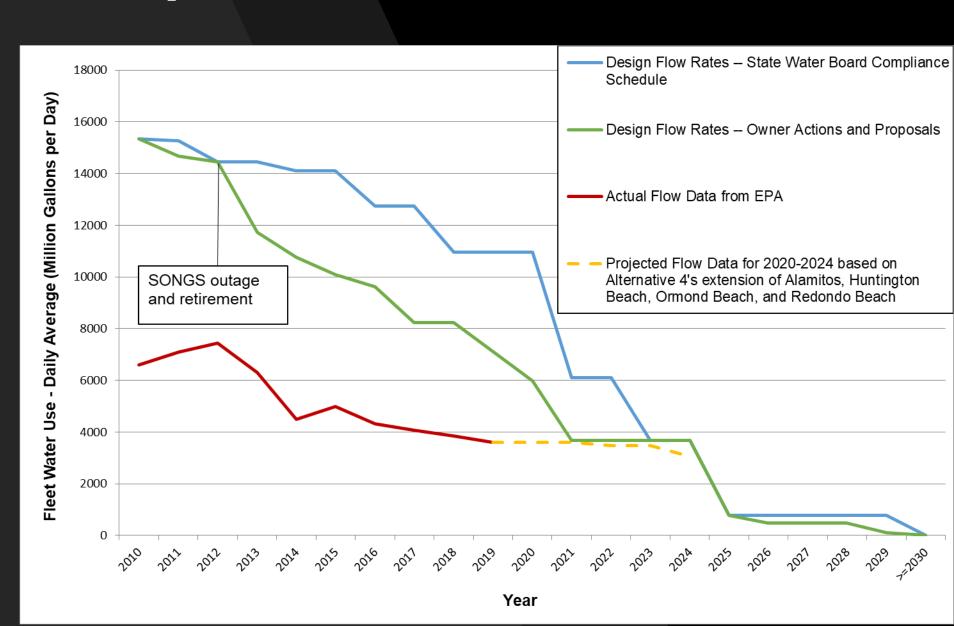
# Frequency of Power Plant Operation

- 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 to Marine Life**

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



# 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



# 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"

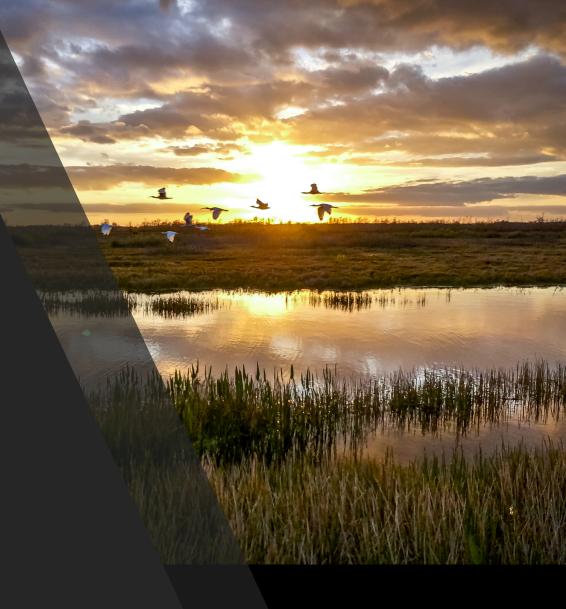
 Impacts expected to be at or below recent levels

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

#### Recap – Proposed Amendments

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

Early July 2020

## Thank you!

Submit comment letters by noon on May 11, 2020 to: <a href="mailto:commentletters@waterboards.ca.gov">commentletters@waterboards.ca.gov</a>

#### **Further information:**

https://www.waterboards.ca.gov/water\_issues/programs/ocean/cwa316/

#### **Project contacts:**

- Katherine Walsh at Katherine.Walsh@waterboards.ca.gov
- Julie Johnson at Julie.Johnson@waterboards.ca.gov

