

**STATE WATER RESOURCES CONTROL BOARD  
BOARD MEETING SESSION – DIVISION OF WATER QUALITY  
JULY 19, 2011**

**ITEM 7**

**SUBJECT**

CONSIDERATION OF A RESOLUTION TO ADOPT A PROPOSED AMENDMENT TO THE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING

**DISCUSSION**

On May 4, 2010, the State Water Resources Control Board (State Water Board) adopted the statewide “*Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling*” (Policy) under [Resolution No. 2010-0020](#). The Policy was approved by the Office of Administrative Law (OAL) on September 27, 2010 and became effective on October 1, 2010.

The Policy establishes uniform, technology-based standards to implement federal Clean Water Act section 316(b), which requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available (BTA) for minimizing adverse environmental impact. State Water Board staff applied best professional judgment in determining BTA.

The Policy applies to the 19 existing power plants located along the California coast that withdraw coastal and estuarine waters for cooling purposes, using a single-pass system known as once-through cooling (OTC). Cooling water withdrawals cause adverse impacts when larger aquatic organisms, such as fish and mammals, are trapped against a facility’s intake screens (impinged) and when smaller life forms, such as larvae and eggs, are killed by being drawn through the cooling system (entrained).

The Policy is implemented through National Pollutant Discharge Elimination System (NPDES) permits. Section 3.A of the Policy required the owner or operator of an affected fossil-fueled power plant to submit an implementation plan to the State Water Board by April 1, 2011. The implementation plan must identify the selected compliance alternative, describe the general design, construction, or operational measures that will be undertaken to implement the alternative, and propose a realistic schedule (including any requested changes to the default final compliance dates identified in the Policy) for implementing these measures that is as short as possible.

The State Water Board has received implementation plans from all owners and/or operators as requested, including implementation plans for the three OTC power plants that are owned and operated by the Los Angeles Department of Water and Power (LADWP)<sup>1</sup>. These facilities are the Harbor Generating Station (Harbor GS), Haynes Generating Station (Haynes GS), and the Scattergood Generating Station (Scattergood GS). In its submissions, LADWP commits to repowering all its OTC plants with more efficient facilities that use closed-cycle cooling, which requires no seawater intake or discharge. LADWP also states that it is not able to comply with some of the final compliance dates required in the Policy, but could comply earlier for some units.

---

<sup>1</sup> The submitted implementation plans are posted on the State Water Board’s web site at [http://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/powerplants/](http://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/powerplants/)

State Water Board staff has reviewed LADWP's implementation plan and its suggested schedule revisions<sup>2</sup>. Staff has also met with representatives from the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) agencies and entities to determine whether extended deadlines for LADWP pose an electric grid reliability concern. SACCWIS considered the matter at a public meeting on July 5, 2011 ([resolution attached](#)).

Based upon its review, State Water Board staff proposes to amend the default final compliance deadlines for the LADWP power plants found in Table 1 in Section 3.E of the Policy as follows:

Harbor GS Unit 5	12/31/2031 (previously 12/31/2015)
Haynes GS Units 1 and 2	12/31/2027 (previously 12/31/2019)
Haynes GS Units 5 and 6	12/31/2013 (previously 12/31/2019)
Haynes GS Unit 8	12/31/2035 (previously 12/31/2019)
Scattergood GS Units 1 and 2	12/31/2024 (previously 12/31/2020)
Scattergood GS Unit 3	12/31/2015 (previously 12/31/2020)

In addition to amending the default compliance deadlines for LADWP, the amendment would add a paragraph to Section 2.C of the Policy that would impose special requirements for any fossil-fueled power plant with a compliance plan that extends beyond December 31, 2020. The owner or operator would need to commit to eliminating the use of OTC for all units at the facility. The owner or operator would also be required to conduct a study or studies, singularly or jointly with other facilities, to evaluate new technologies or improve existing technologies to reduce impingement and entrainment. The results of the study and a proposal to minimize entrainment and impingement must be submitted to the Chief Deputy Director for approval no later than December 31, 2015. Implementation of the proposal must be completed no later than December 31, 2020.

State Water Board staff compared the amendment's and the Policy's effect on projected interim impingement mortality and entrainment. Staff has concluded that some additional interim impingement mortality and entrainment under the amendment as opposed to the existing Policy can be expected. However, the amendment would also result in complete elimination of OTC at several facilities, as well as the implementation of interim controls by December 31, 2020 to minimize entrainment and impingement.

## **POLICY ISSUES**

Should the State Water Board:

1. Certify the final Substitute Environmental Document ("Staff Report"), which includes the responses to comments, and direct the Executive Director or designee to transmit the Notice of Decision to the Secretary of Resources?
2. Adopt the attached amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling?
3. Authorize the Executive Director or designee to submit the amendment to OAL for review and approval?

---

<sup>2</sup> The Staff Report analyzing the amendment is posted on the State Water Board's web site at [http://www.waterboards.ca.gov/water\\_issues/programs/ocean/cwa316/docs/otc\\_july2011/otc\\_amendment\\_staff\\_report.pdf](http://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/docs/otc_july2011/otc_amendment_staff_report.pdf)

4. Direct the Executive Director or designee to make minor, non-substantive modifications to the language of the amendment, if OAL determines during its approval process that such changes are needed, and inform the Board of any such changes?

### **FISCAL IMPACT**

If the State Water Board adopts the proposed amendment, there will be costs associated with its administration. However, these costs are incurred with the required administration of the NPDES permits for the affected coastal power plants. These permitting costs are expected to be absorbable.

### **REGIONAL WATER BOARD IMPACT**

No. The Policy specifically assigns the responsibility for implementing the Policy, including the issuing of NPDES permits for the affected facilities, to the State Water Board.

### **STAFF RECOMMENDATION**

The State Water Board should:

1. Certify the final Staff Report, which includes the responses to comments, and direct the Executive Director or designee to transmit the Notice of Decision to the Secretary of Resources.
2. Adopt the attached amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling.
3. Authorize the Executive Director or designee to submit the amendment to OAL for review and approval.
4. Direct the Executive Director or designee to make minor, non-substantive modifications to the language of the amendment, if OAL determines during their review process that such changes are needed, and inform the Board of any such changes.

State Water Board action on this item will assist the Water Boards in reaching Goal 6 of the Strategic Plan Update: 2008-2012 to enhance consistency. In particular, approval of this item will assist in fulfilling Objective 6.1 to target consistency improvements in process and policy for Water Board enforcement activities to promote compliance.

# DRAFT

## STATE WATER RESOURCES CONTROL BOARD RESOLUTION NO. 2011-

### ADOPTION OF AN AMENDMENT TO THE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING

#### WHEREAS:

1. The State Water Resources Control Board (State Water Board) is designated as the state water pollution control agency for all purposes stated in the Clean Water Act, including water quality control planning and waste discharge regulation.
2. The State Water Board is responsible for adopting state policy for water quality control, which may consist of water quality principles, guidelines, and objectives deemed essential for water quality control.
3. On May 4, 2010, the State Water Board adopted the statewide "*Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling*" (Policy) under [Resolution No. 2010-0020](#). The Policy was approved by the Office of Administrative Law on September 27, 2010 and became fully effective on October 1, 2010.
4. The Policy establishes uniform, technology-based standards to implement federal Clean Water Act section 316(b), which requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact.
5. The Policy applies to 19 existing power plants located along the California coast, and is implemented through National Pollutant Discharge Elimination System (NPDES) permits, issued pursuant to Clean Water Act Section 402, which authorize the point source discharge of pollutants to navigable waters.
6. The State Water Board and Regional Water Quality Control Boards are authorized to issue NPDES permits to point source dischargers in California, including power plants subject to the Policy.
7. Section 3.A of the Policy required the owner or operator of an affected fossil-fueled power plant to submit an implementation plan to the State Water Board by April 1, 2011. The implementation plan must identify the selected compliance alternative, describe the general design, construction, or operational measures that will be undertaken to implement the alternative, and propose a realistic schedule (including any requested changes to the default final compliance dates identified in the Policy) for implementing these measures that is as short as possible.
8. The State Water Board has received implementation plans from all power plant owners and/or operators as requested by April 1, 2011, including implementation plans for the three power plants using once-through cooling (OTC) that are owned and operated by the Los Angeles Department of Water and Power (LADWP). These facilities are the Harbor Generating Station, Haynes Generating Station, and the Scattergood Generating Station. In its submissions, LADWP commits to repowering all their OTC plants with

# DRAFT

more efficient facilities that use closed-cycle cooling, which requires no seawater intake or discharge. LADWP also requests changes to existing Policy compliance dates for its facilities on a unit-by-unit basis rather than facility-wide basis. LADWP commits to meeting the deadlines earlier than required for some of its power-generating units, in return for meeting the deadlines later than required for others of its OTC units.

9. The Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) was created by the State Water Resources Control Board (State Water Board) to advise the State Water Board on the implementation of the Policy to ensure that the implementation schedule takes into account local area and grid reliability, including permitting restraints. The SACCWIS is charged with reviewing the implementation schedules that were submitted by each power plant owner or operator on April 1, 2011. The Policy further requires SACCWIS to report to the State Water Board with its recommendations before October 1, 2011.
10. On December 14, 2010, the State Water Board considered, but did not approve, an amendment to the Policy affecting the LADWP facilities. Instead, the State Water Board requested that SACCWIS prioritize review of LADWP's implementation plan and report to the State Water Board with its recommendations by July 2011, if possible.
11. An interagency working group for SACCWIS has reviewed LADWP's implementation plan and its suggested schedule revisions to determine whether extended deadlines for LADWP pose an electric grid reliability concern. SACCWIS considered the matter at a public meeting on July 5, 2011.
12. The Resources Agency has approved the State Water Board's water quality control planning process as a "certified regulatory program" that adequately satisfies the California Environmental Quality Act (CEQA) requirements for preparing environmental documents. State Water Board staff has prepared an [Environmental Document](#) for the [amendment](#) (Appendix A) that contains the required environmental documentation under the State Water Board's CEQA regulations. (California Code of Regulations, title 23, section 3777.)
13. In preparing the Staff Report, the State Water Board has considered the requirements of Public Resources Code section 21159 and California Code of Regulations, title 14, section 15187, and intends these documents to serve as a Tier 1 environmental review. The State Water Board has considered the reasonably foreseeable consequences of adoption of the draft Policy Amendment; however, potential site-specific project impacts may need to be considered in any subsequent environmental analysis performed by lead agencies, pursuant to Public Resources Code section 21159.1.
14. Consistent with CEQA, the Staff Report does not engage in speculation or conjecture but, rather, analyzes the reasonably foreseeable environmental impacts related to methods of compliance with the draft Policy Amendment, reasonably foreseeable mitigation measures to reduce those impacts, and reasonably feasible alternative means of compliance that would avoid or reduce the identified impacts.
15. The amendment incorporates mitigation that reduces to a level that is insignificant any adverse effects on the environment. From a program-level perspective, incorporation of the mitigation measures described in the Staff Report will foreseeably reduce impacts to less than significant levels.

## **D R A F T**

16. State Water Board staff has responded to significant oral and written comments received from the public and made revisions to the proposed amendment and Staff Report as appropriate.
17. An amendment to a policy for water quality control does not become effective until adopted by the State Water Board and until the regulatory provisions are approved by the Office of Administrative Law (OAL).

THEREFORE BE IT RESOLVED THAT:

The State Water Board:

1. Certifies the final Substitute Environmental Document ("Staff Report"), which includes the responses to comments, and direct the Executive Director or designee to transmit the Notice of Decision to the Secretary of Resources.
2. Adopts the attached amendment to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling.
3. Authorizes the Executive Director or designee to submit the amendment to OAL for review and approval.
4. Direct the Executive Director or designee to make minor, non-substantive modifications to the language of the amendment, if OAL determines during its approval process that such changes are needed, and inform the State Water Board of any such changes.

### **CERTIFICATION**

The undersigned Clerk to the Board does hereby certify that the foregoing is a full, true, and correct copy of a resolution duly and regularly adopted at a meeting of the State Water Resources Control Board held on July 19, 2011.

---

Jeanine Townsend  
Clerk to the Board