



Linda S. Adams  
Secretary for  
Environmental Protection

# State Water Resources Control Board

## Executive Office

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Arnold Schwarzenegger  
Governor

NOV 17 2010

Dr. Michael M. Hertel  
Southern California Edison  
2244 Walnut Grove Avenue  
Rosemead, CA 91770

Dear Dr. Hertel,

### SPECIAL STUDIES AND IMMEDIATE AND INTERIM REQUIREMENTS FOR THE ONCE-THROUGH COOLING WATER POLICY APPLICABLE TO THE SAN ONOFRE NUCLEAR GENERATING STATION

On May 4, 2010, the State Water Resources Control Board (State Water Board) adopted a *Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling* (Policy) under Resolution No. 2010-0020. The Policy (copy enclosed) 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. The Policy was approved by the Office of Administrative Law on September 27, 2010 and is effective as of October 1, 2010.

Section 3.D of the Policy contains special provisions for the existing nuclear-fueled power plants that use once-through cooling water technology, including the San Onofre Nuclear Generating Station. These Policy provisions require the owner or operator of a nuclear facility to undertake special studies to investigate alternatives for the facility to meet Policy requirements. In order to facilitate State Water Board review of these alternatives, the special studies must evaluate the facility's ability to achieve compliance with Track 1 requirements, with consideration of factors such as engineering constraints, space constraints, permitting constraints, and public safety considerations. The special studies must also identify costs and environmental impacts of various alternatives.

Pursuant to Section 13267(f) of the California Water Code, you are directed to propose a list of three potential independent third parties with engineering experience with nuclear power plants. I will select from your proposals one party who will conduct the special studies specified in Section 3.D of the Policy. For each proposed third party entity, please include a summary of the qualifications and experience, as well as a statement that the entity proposed has no affiliation with Southern California Edison. As provided in the Policy, I will establish a Review Committee to oversee the special studies by January 1, 2011.

*California Environmental Protection Agency*

In addition, you must also comply with the *Immediate and Interim Requirements* in Section 2.C of the Policy. You must submit proposed methods for compliance with the *Immediate and Interim Requirements* to the State Water Board no later than April 1, 2011 and must address the following requirements:

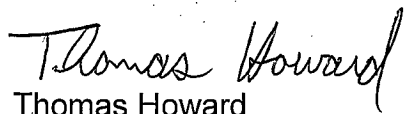
1. No later than October 1, 2011, an existing power plant with an offshore intake (such as the San Onofre Nuclear Generating Station) shall install large organism exclusion devices having a distance between exclusion bars of no greater than nine inches, or install other exclusion devices deemed equivalent by the State Water Board. You must provide your planned method of compliance with this requirement, including the design and schedule for installation of the exclusion device by April 1, 2011.
2. No later than October 1, 2011, a unit that is not directly engaging in power generating activities or critical system maintenance must cease intake flows, unless you demonstrate to the State Water Board that a reduced minimum flow is necessary for operations. Therefore, by April 1, 2011, you must provide information regarding when it is likely that each unit in your facility may not be generating power, or when you are performing critical system maintenance that would result in the cessation of intake flows. This information may be provided in terms of likely months when there will be no intake flow, with the understanding that if a need for power arises, that intake flows will re-start, as long as appropriate documentation is later provided regarding that unexpected power demand. If a reduced minimum flow is necessary for operations during the period when power is not typically generated, then you must define specifically why that is the case and provide an estimate of minimum flows as compared to historic flows during corresponding months of 2000-2005, for periods when power is not typically generated.
3. If your facility has not achieved final compliance by October 1, 2015, or your final compliance date is later than October 1, 2015, you must, commencing on October 1, 2015, implement measures to mitigate the interim impingement and entrainment impacts resulting from the cooling water intake structure(s), and continuing up to and until the facility achieves final compliance with the requirements of the Policy. If you do not plan to achieve final compliance by October 1, 2015, you must submit, no later than April 1, 2011, the specific measures that will be undertaken to comply with this additional requirement. The options you may choose from include:
  - a. A demonstration that existing mitigation efforts, including any projects that are required by state or federal permits as of October 1, 2010, compensate for the interim impingement and entrainment impacts; or
  - b. A demonstration that the interim impacts will be compensated for by providing funding to the California Coastal Conservancy, which will work with the California Ocean Protection Council to fund an appropriate mitigation project. It is the preference of the State Water Board that this option be selected; or
  - c. A proposal for the development and implementation of a mitigation project for the facility, which would compensate for the interim impingement and entrainment

- A. A demonstration that existing mitigation efforts, including any projects that are required by state or federal permits as of October 1, 2010, compensate for the interim impingement and entrainment impacts; or
- B. A demonstration that the interim impacts will be compensated for by providing funding to the California Coastal Conservancy, which will work with the California Ocean Protection Council to fund an appropriate mitigation project. It is the preference of the State Water Board that this option be selected; or
- C. A proposal for the development and implementation of a mitigation project for the facility, which would compensate for the interim impingement and entrainment impacts. Included in this proposal must be a description of how the habitat production foregone method, or a comparable alternate method, is to be used to determine the habitat and area, based on replacement of the annual entrainment, for funding the mitigation project.

Please submit an original and an electronic copy (in pdf format) of the required documents to Mr. Philip Isorena, Chief, NPDES Unit, Division of Water Quality, State Water Resources Control Board, 1001 I St., 15<sup>th</sup> Floor, Sacramento, CA 95814, [pisorena@waterboards.ca.gov](mailto:pisorena@waterboards.ca.gov).

Please feel free to contact Mr. Renan Jauregui at (916) 341-5505 ([rjauregui@waterboards.ca.gov](mailto:rjauregui@waterboards.ca.gov)) or Ms. Joanna Jensen at (916) 341-5582 ([jjensen@waterboards.ca.gov](mailto:jjensen@waterboards.ca.gov)) if you have questions about this request for information.

Sincerely,

  
Thomas Howard  
Executive Director