



State Water Resources Control Board

JUL 1 0 2012

Ms. Katherine Rubin
Manager Wastewater Quality and Compliance
Los Angeles Department of Water and Power
111 North Hope Street, Room 1213
Los Angeles, CA 90012

Dear Ms. Rubin:

SUBJECT: INFORMATION REQUEST IMPLEMENTING THE WATER QUALITY CONTROL POLICY ON THE USE OF COASTAL AND ESTUARINE WATERS FOR POWER PLANT COOLING

On July 19, 2011, the State Water Resources Control Board (State Water Board) adopted amendments to the Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Policy). These amendments modified compliance dates for generating units owned and operated by Los Angeles Department of Water and Power (LADWP) that use once-through cooling (OTC) water technology. In accelerating compliance dates for some OTC units and delaying compliance dates for other OTC units, the State Water Board considered input from LADWP, stakeholders, and its formal advisory body, the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS). The State Water Board convened SACCWIS to ensure that these changes would not disrupt the electrical power supply. SACCWIS adopted Resolution 2011-0001 on July 5, 2011, in which it recommended deferring modifications to compliance dates for any units until additional information was provided by LADWP. Although the State Water Board nonetheless acted to modify specific compliance dates, it made these modifications subject to further review by SACCWIS during 2013 using new information to be developed in 2012 by LADWP. The State Water Board would consider amendments, if needed, for these units no later than December 31, 2013.

In light of the need for additional information, pursuant to the Policy and California Water Code section 13383, the State Water Board requests that LADWP undertake and report to the State Water Board by December 31, 2012 the following information:

 System and local capacity requirements with at least a ten-year forward horizon, using system planning assumptions consistent with the approved LADWP 2010 Integrated Resource Plan.

http://www.waterboards.ca.gov/water_issues/programs/ocean/cwa316/saccwis/docs/sa_res2011_0001.pdf

¹ SACCWIS Resolution 2011-001

- System and local capacity requirements with at least a ten-year forward horizon, with system planning assumptions that modify the LADWP 2010 Integrated Resource Plan to more fully incorporate the policy goals established in the California Clean Energy Future (CCEF) vision and Governor Brown's Jobs/Energy Plan.
- 3. Explicit identification of transmission system upgrades.
- 4. An examination and comparison of these different results over time for capacity requirements at Harbor, Haynes, and Scattergood, and the aggregate totals for all three generating stations.

Please see the attached suggested detailed description for studies that would illustrate this information. The State Water Board will facilitate a meeting with LADWP and the Inter-Agency Working Group (IAWG) of the SACCWIS agencies to review and establish clear expectations about this information request. Such a discussion may result in modifications to the studies suggested in the attachment, a schedule for the submission of these studies, and plans for the review of these studies by IAWG and SACCWIS (including briefings by LADWP).

Should you have any questions please feel free to contact Mr. Dominic Gregorio, Manager of the Watershed, Ocean and Wetlands Section, at (916) 341-5488 (dgregorio@waterboards.ca.gov), or Ms. Maria de la Paz Carpio-Obeso, Chief, Ocean Unit, at (916) 341-5858 (marpio-obeso@waterboards.ca.gov).

Sincerely,

Executive Director

Attachment

The following are suggested descriptions for studies that would illustrate the information being requested. The State Water Resources Control Board (State Water Board) will facilitate a meeting to review and establish clear expectations about this information request. Such a discussion may result in modifications to these study descriptions.

The State Water Board is providing the following descriptions of four studies that would illustrate the information requested. The State Water Board will facilitate a meeting with the Los Angeles Department of Water and Power (LADWP) and the Inter-Agency Working Group (IAWG) of the Statewide Advisory Committee on Cooling Water Intake Structures (SACCWIS) agencies to review and establish clear expectations about this information request. Such a discussion may result in modifications to the studies suggested in the attachment, a schedule for the submission of these studies, and plans for the review of these studies by IAWG and SACCWIS (including briefings by LADWP).

Study 1 – LADWP Baseline Planning Study

A study of system and local capacity requirements with at least a ten-year forward horizon using system planning assumptions consistent with the approved LADWP 2010 Integrated Resource Plan. This study must be explicit about the quantitative impact of all known LADWP and state energy policies in both the underlying resource plan and the modeling of those resources in power flow and stabilities studies. Known state energy policies encompass the policy goals established in the California Clean Energy Future (CCEF) vision¹ and Governor Brown's Jobs/Energy Plan:²

- a. This ten-year study should begin with calendar year 2012 or 2013, updating and extended as necessary the load forecast in LADWP's 2010 Integrated Resource Plan.
- b. The ten-year local capacity plan should incorporate those state and local policies by reference along with explicit assumptions for any differences in those input assumptions regarding future loads. Such studies typically explain, support, and justify conclusions about the need for local capacity to satisfy the North American Electric Reliability Corporation (NERC) and the Western Electricity Coordinating Council (WECC) reliability standards for Balancing Authorities, and any local reliability standards or requirements established by LADWP for itself as a verticallyintegrated load serving utility.
- c. A system capacity study identifying the types and attributes of capacity additions (net capacity increases or repowering of existing facilities) that LADWP believes best suits its system capacity and energy needs, including any generating facilities needed to provide system energy, ancillary services, and all appropriate planning and operating capacity reserves.
- d. Flexible resources needed to firm renewable development, especially imports to the Balancing Area.

http://www.cacleanenergyfuture.org/2821/282190a82f940.pdf

² http://www.jerrybrown.org/jobs-california%E2%80%99s-future

Study 2 - Planning Using State Energy Policy

A study closely resembling Study 1 in its technical scope, but with system planning assumptions that modify the LADWP 2010 Integrated Resource to more fully incorporate the policy goals established in the CCEF vision³ and Governor Brown's Jobs/Energy Plan.⁴ This study should incorporate explicit input assumptions that modify LADWP's load forecast and resource plan presented in the 2010 Integrated Resource Plan. This ten-year study should begin with the same calendar year as the first study (2012 or 2013). This second study should be consistent to a substantial degree with achievement of the following state energy policy goals:

- a. Energy efficiency program impacts that satisfy AB 2021 (Levine, Chapter 734, Statutes of 2006), and any further incremental energy efficiency impacts consistent with the Air Resources Board AB32 Scoping Plan that would be achieved in the LADWP service area.
- b. Distributed generation (DG) development that satisfies a significant, achievable share of Governor Brown's statewide renewable distributed generation goal of 12,000 MegaWatts (MWe).
- Combined heat and power facility development that satisfies a significant, achievable share of Governor Brown's 6,500 MWe goal for the Combined Heat and Power (CHP).
- d. Central station renewable development that satisfies the renewable portfolio standard of 33 percent of applicable energy by 2020 established in Senate Bill 2 in the First Extraordinary Session (SB1x-2). Applicable energy is the base load forecast adjusted down for the impacts of the demand-side policy impacts of renewable DG (customer side of the meter), energy efficiency, and CHP.
- e. Demand response program development that reflects its high priority in the preferred resource loading order and has the beneficial characteristics of relieving transmission thermal overloads and/or system stability consequences of credible contingencies.

Study 3 – Transmission Planning

Study 3 is a study that explicitly identifies transmission system upgrades:

- Planned upgrades to the portion of the LADWP transmission system within the Los Angeles Basin itself.
- b. The schedule for these facility upgrades.
- Additional upgrades that could reduce the local capacity requirements at Haynes, Harbor and Scattergood.

It is likely that a recent report can satisfy items a) and b). This report should discuss and evaluate any local capacity requirements that might be reduced by virtue of improved transmission system elements. This study should document the advantages and disadvantages of other transmission projects that LADWP has evaluated, but chosen not to pursue as planned upgrades.

http://www.cacleanenergyfuture.org/2821/282190a82f940.pdf

⁴ http://www.jerrybrown.org/jobs-california%E2%80%99s-future

Study 4 - Comparison Study

This fourth study should explicitly examine different results over time between Study 1 and the combination of Study 2 and 3 for capacity requirements at Harbor, Haynes, and Scattergood and the aggregate totals for all three generating stations. Each of these three facilities currently has OTC capacity. The comparison study should highlight the extent to which differences between the two studies and other system requirements imply different types of resources (simple cycle combustion turbines, flexible combined cycle plants, and baseload combined cycle plants).