Public Comment Once Through Cooling Deadline: 5/20/08 by 12 p.m.



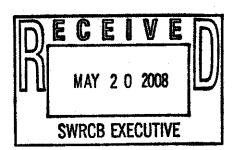
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May 20, 2008

Jeanine Townsend, Clerk to the Board State Water Resources Control Board 1001 I Street, 24th Floor Sacramento, CA 95814

SUBJECT: Comment Letter - Once Through Cooling Policy



Dear Jeanine Townsend:

NRG Energy, Inc. ("NRG") submits these comments on the State Water Resource Control Board's ("Board") March 2008 report entitled "Scoping Document: Water Quality Control Policy on the Use of Coastal and Estuarine Waters For Power Plant Cooling" ("Scoping Document"). NRG submits these on behalf of the El Segundo Generating Station ("ESGS") and the Encina Power Station ("EPS"). Both ESGS and EPS utilize once through cooling systems ("OTC") that would be affected by the Scoping Document.

During the recent scoping meetings, Board members requested that comments not only highlight some of the problems with the Board's draft policy, but also include constructive input on possible solutions. In that spirit, NRG provides three recommendations to improve the policy recommendation and introduce safeguards to assure that the Board's policy does not have unintended environmental, consumer impacts, and reliability consequences.

First, NRG is a firm believer that the most viable, economically sound, and environmentally superior compliance approach for the OTC issue is to repower OTC facilities with new, more efficient generating units using alternative cooling techniques. NRG has actively pursued repowering projects using air-cooling in Long Beach, El Segundo, and Carlsbad.

The OTC policy should recognize that repowering of OTC is desirable and feasible at many of the facilities identified in the Scoping Document. Repowering of existing sites offers many environmental and economic advantages as it provides for increased efficiency, improved greenhouse gas emissions performance, use of existing generation sites, and use of existing infrastructure (transmission, gas supply, etc) while maintaining reliable grid operations in addition to the advantage of allowing for the application of alternative cooling options. While

¹ ESGS is owned by El Segundo Power, LLC and EPS is owned by Cabrillo Power I LLC, both being subsidiary companies owned by NRG.

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repowering is favored by state policy makers and provides a good avenue to address water intake concerns, the Board's rules need to recognized and accommodate in the Scoping Document a need for sufficient timeline to accomplish plant repowering. The most significant challenges surround permitting the repowering project and the state procurement rules for new generation.

For a typical repowering project to move forward, several key steps must first take place:

Accept worthy load serving entity ("LSE") must first conduct a Request for Offers ("RFO") solicitation for new power generating resources;

2. The LSE must award a repowering project with a long term power contract in order to secure financing for the project;

3. The CPUC must approve the long term power contract;

4. The OTC unit that the repowering project intends to replace must be retired without adversely affecting electrical system reliability (i.e. phased shutdown, demolition, and construction of the repowering project);

5. The repowering project must complete the Large Generation Interconnection Procedure through the California Independent System Operator for interconnection into the grid.

6. The repowering project must obtain construction and operating permits, including approval of an Application for Certification ("AFC") to the California Energy Commission ("CEC") (for projects exceeding 50 MW in size), an air quality permit, and other permits.

The repowering project must work with local communities and NGOs to secure the above needed governmental approvals without strong objection or challenge.

This list is substantial and takes a lot of time to complete. While NRG has submitted applications to permit the repowering of a portion of its facilities, the timing and process are largely outside the control of the facility owner. Therefore, for repowering to exist as a real compliance alternative, the Board must build in timing and compliance flexibility to accommodate the complicated series of steps involved in updating older facilities.

SOLUTION: Establish repowering of OTC units as the preferred compliance alternative in the Scoping Document by creating a separate Track for this category (i.e. Track III). Do not mandate firm deadlines for completion of repowering and instead require firm dates for submitting key applications like an AFC with the CEC. Also, work with CPUC to require utilities to solicit Request for Offers by certain timelines and with the specific purpose of replacing the OTC units with new non-OTC resources.

Second, NRG applauds the Board for forming the multi-agency Statewide Task Force ("Task Force") to assist in the implementation of an OTC policy if approved by the Board. NRG agrees with the Board's purpose of the Task Force as stated in the draft OTC policy Section 1(H):

"To prevent disruption in the State's electrical power supply, [emphasis added] the State Water Board will convene a Statewide Task Force, which will include representatives from the California Energy Commission, the Public Utilities

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Commission, the State Coastal Commission, the California State Lands Commission, the California Air Resources Board, and the California Independent Systems Operator (Cal ISO). The Statewide Task Force will assist the Water Boards in reviewing implementation plans and schedules submitted by dischargers pursuant to this policy."

While NRG is encouraged by the Board's outreach to other state agencies, the Task Force must be included in the policy development to assure that the State's OTC regulation to not have unintended economic, grid reliability, or environmental consequences. If the Task Force is confined to a limited role in simply carrying out and implementing the Board's OTC regulations, the State and the Board will be unable to leverage the various entities expertise to assure that OTC regulations work consistently with boarder state policy objectives to assure grid reliability at reasonable cost to consumers.

SOLUTION: Enlist Task Force members to help <u>develop</u> the policy, as opposed to just help implement it, in order to avoid significant adverse impacts to the environment and to electrical reliability and cost. The scope of the Task Force's policy development work would be to recommend improvements to the OTC policy to mitigate potential premature facility shutdowns and other electric reliability impacts, enhance opportunities for repowering projects that replace OTC units, and avoid potential increases in greenhouse gas emissions.

Third, NRG believes the Track I and II compliance alternatives discussed in the Scoping Document are unnecessarily limited. For example, under Track I conversion to closed cycle cooling may not be feasible either due to economic, environmental, legal, social, or technological factors at most of the facilities. In addition, there are no effective and commercially available technological solutions for reducing impingement and entrainment at coastal plants in California as would be required under Track II.

Given the limitations of the requirements proposed under Track I and II, intake flow reduction remains the only form of compliance short of shutting down the facilities. Flow reduction is an effective and proven form of reducing impingement and entrainment as has been demonstrated by the OTC facilities that operate less frequently. In fact, these facilities have already reduced their intake flows down to the minimum level to maintain grid reliability. Significant further reduction is not possible. Therefore, for facilities that have already substantially reduced their intake level from their allowable permitted quantities, the Scoping Document should recognize the reductions that have already taken place for compliance purposes. Flow reduction should be recognized as a compliance path for facilities that take less water than authorized under their NPDES permits.

SOLUTION: Establish maximum permitted or design intake flow as the baseline for measuring Track II compliance.

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These are just a few suggestions that would go a long way toward establishing a feasible and cost effective compliance path for many of California's OTC units. These comments are meant to supplement my April 23, 2008 written comments as part of my responsibility on the Board's Expert Review Panel and which have more detailed responses to other aspects of the Scoping Document.

Thank you for the opportunity to comment on the Scoping Document. NRG hopes these comments are useful in determining the best path forward. If you have any questions or need additional information, please call me at (760) 710-2144.

Sincerely, NRG Energy, Inc.

Tim E. Hemig

Director, Regional Environmental Business