

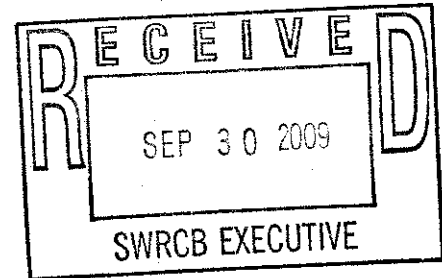


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September 30, 2009

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



Subject: Comment Letter – OTC Policy

Dear Ms. Townsend:

We are providing comments to the Staff's proposed "Water Quality Control Policy of the Use of Coastal and Estuarine Waters for Power Plant Cooling" (draft OTC Policy) and the Supplemental Environmental Document (SED) on behalf of the NRG Energy Inc.'s ("NRG") California-based steam generating power plants. We appreciate the opportunity to comment on these documents.

NRG owns and operates one of the country's largest and most diverse power generation portfolios providing more than 24,000 megawatts (MW) of generation capacity. In California, we operate three California coastal power plants – El Segundo Generating Station in El Segundo, Encina Power Station in Carlsbad, and Long Beach Generating Station in Long Beach, which in total have the capacity to generate nearly 1900 MW. El Segundo and Encina utilize ocean water for cooling via existing intake structures, but NRG retired Long Beach's ocean water cooling system.

NRG is keenly interested in a state policy that proposes to phase out once through cooling (OTC) power plants in California. OTC plants in California account for approximately 21,000 MW and approximately 16,000 MW of that generation comes from gas-fueled steam generators. El Segundo generates 670 MW from two steam boilers and Encina generates 950 MW from five steam boilers that provide reliable electricity to the respective load centers. NRG is actively pursuing repowering at El Segundo and Encina station using air-cooled condensers and eliminating ocean water cooling for the MWs replaced. The NRG design incorporates a balance of cleaner, more efficient fast-start natural gas-fueled generation. NRG is also actively developing new renewable (wind and solar) energy sources in California. Despite these efforts, we recognize the critical role that these existing steam boilers provide during the transition to a balance of new renewable generation shaped and supported by new natural gas-fueled generation, in particular in California where permitting challenges and delays affect the development of new energy sources.

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We also recognize the merits of the State Water Resources Control Board (SWRCB) for obtaining input from the California Energy Commission (CEC), the California Public Utilities Commission (CPUC), the California Coastal Commission (CCC), the California State Lands Commission, the California Air Resources Board, and the California Independent System Operator (CAISO) when developing the draft OTC Policy. We believe the development of the current draft OTC Policy would have benefited from more inter-state agency workshops leading up to the release of the draft OTC Policy. The process to which the proposed advisory council will review implementation plans and incorporate bi-annual Integrated Energy Policy Report findings into the compliance schedule for this policy is not well defined at this point. Thus, we encourage the SWRCB to initiate additional inter-state agency workshops regarding OTC Policy and its implementation.

The SWRCB's stated intent is to protect marine and estuarine life from the impacts of once-through cooling without disrupting the critical needs of the State's electrical generation and transmission system. To assess potential impacts to marine and estuarine life at El Segundo and Encina, NRG conducted Impingement Mortality and Entrainment (IM&E) characterization studies in 2005 and 2006 and submitted the reports to the Los Angeles and San Diego Regional Water Quality Control Boards in January 2008. The 1977 EPA guidance for assessing Adverse Environmental Impacts (AEI) was used in evaluating the results of the IM&E characterization studies. The information from these and other recent studies obtained from most of the power plant in California addresses some of the questions regarding levels of significance and relative magnitude of the impact at the California OTC plants raised by Board members. Based on the findings from these recent IM&E studies at El Segundo and Encina, there was no evidence that OTC resulted in AEI to fish and shellfish populations using EPA guidelines for these assessments. We recommend that results from these recent IM&E studies for El Segundo and Encina and any other California OTC plants be considered in the SED, where such results may otherwise not have been analyzed. Furthermore, we recommend that such characterization studies need not be repeated as part of the implementation of the OTC Policy.

We feel development and implementation of an OTC Policy should account for both the environmental and economic impacts of compliance. Specifically, we have the following additional comments regarding the draft OTC Policy:

- **Cost-Benefit Analysis** - the draft OTC Policy requires closed cycle wet cooling or its equivalent as best technology available (BTA). The SWRCB should first complete a comprehensive cost-benefit analysis of meeting closed cycle cooling performance standards (Track 1) statewide and alternatively complying with Track 2, if and where possible at existing coastal generating stations. A similar study as that prepared by NERA ("Costs and Benefits of California Draft Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling, September 2009") should be considered before selecting closed loop wet cooling as BTA. (Retrofitting Encina was not specifically considered as Tetra Tech had not analyzed the costs of retrofitting in their 2008 study.) We believe such a test will demonstrate that retrofitting these coastal OTC plants with closed loop cooling will be wholly disproportionate to the cost versus environmental benefit. When considering El Segundo and Encina, compliance with Track 1 will cost hundreds of millions of dollars, if

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such changes could be permitted and built on spaced-constrained sites adjacent to nearby residences.

- **Wholly Disproportionate Demonstration** – the draft OTC Policy restricts application of wholly disproportionate demonstration to fossil-fuel plants with heat rates of 8500 BTU/KWhr or less and to nuclear power plants. We believe the wholly disproportionate demonstration should be expanded to any of the plants captured in this draft OTC Policy, including El Segundo and Encina.
- **Compliance Timing** – the draft OTC Policy has targeted compliance years of 2015 for El Segundo and 2017 for Encina. Target compliance dates for these facilities should be predicated on successful completion of the repowering permitting and development at both generating facilities. Unfortunately, permitting of natural-gas fueled, fast-start combined cycle generation using air cooling at either facility has taken far longer than the statutory mandate (one-year completion) for the CEC Application for Certification (AFC) process and the local air districts' processes. Specifically, the South Coast Air Quality Management District's permit moratorium, which affects the completion of permits for electrical generating facilities in the Los Angeles Basin that rely on SCAQMD Rules 1304, 1309.1 and 1315, has delayed El Segundo's repowering project by more than 1 year, and the resolution to this permit delay will not be solved in the immediate future. The city of Carlsbad are among the intervenors to the repowering of a portion of Encina to a more environmentally beneficial plant that will prompt the retirement of a portion of the existing OTC generation; this intervention despite the environmental benefits of the repowering project has likewise delayed the CEC and air district permitting processes. Thus, the targeted compliance schedules must remain flexible, accounting for delays in permitting of new generation that would otherwise replace OTC generation, address demand and planning reserve capacity, and support future renewable energy sources. Compliance schedules must also account for the key attributes of the existing OTC generating capacity at the respective facilities – attributes that include location within the respective load center and ramping rate.

We thank you again for the opportunity to comment on the draft OTC policy. We look forward to future modifications to the policy and subsequent workshop(s). If you have any questions, please contact me 760-710-2156.

Sincerely,



George L. Piantka
Director, Environmental Business
NRG West Region

