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J.B. Owe

February 12, 2016

Mr. Thomas Howard
Executive Director
State Water Resources Board
Division of Water Quality, 15th Floor
1001 I Street
Sacramento, CA 95814



Re: Once Through Cooling Policy Implementation Plan Update for Encina Power Station, NPDES CA0001350, Order R9-2006-0043; Letter dated December 16, 2015

Dear Mr. Howard,

Cabrillo Power I LLC (Cabrillo), owner of the Encina Power Station (EPS) and wholly owned subsidiary of NRG Energy, Inc. (NRG), submits its response to the State Water Resources Control Board's (SWRCB) December 16, 2015 letter in which the SWRCB requested the most current information for EPS pursuant to the Use of Coastal and Estuarine Water for Power Plant Cooling (OTC Policy) and California Water Code §13383. Cabrillo reported the future compliance mechanisms and electrical generation goals to the SWRCB in letters submitted January 30, 2013, November 7, 2013, and April 23, 2015. Cabrillo respectfully re-states and clarifies its position to the questions, which were posed by the SWRCB in the December 16, 2015 letter.

- 1. The SWRCB asked what mechanism is being used to bring these units into compliance? NRG previously stated its intent to comply by retiring Units 1, 2, 3, 4, and 5 if or when the new Carlsbad Project comes online, or by December 31, 2017. Is this still the intent? How will the plans for compliance change in the event that the new Carlsbad is not developed?*

Cabrillo continues to intend to comply with the once through cooling (OTC) compliance deadline of December 31, 2017 following Track 1, which will include the retirement of Units 1, 2, 3, 4 and 5, and replacement of generation at Encina with the Amended Carlsbad Energy Center Project (ACECP) (Docket 07-AFC-06). The ACECP is permitted through the California Energy Commission (CEC) for six natural gas-fired, General Electric LMS 100 combustion turbines with a 632 MW nominal output, and includes the decommissioning and demolition of existing EPS Units 1 through 5. The California Public Utilities Commission (CPUC) has approved a Power Purchase Tolling Agreement for units that are permitted under the ACECP. Cabrillo's OTC compliance plans are neither contingent nor related to the contractual issues related to

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the appeal of the CPUC's approval of the Power Purchase Tolling Agreement. Cabrillo has stated previously to SWRCB and in testimony at CPUC proceedings that it plans to retire Units 1, 2, 3, 4, and 5 as the new generation comes online or by December 31, 2017, whichever is sooner. Regardless of the status of the ACECP, Cabrillo intends to retire EPS no later than December 31, 2017 and does not seek an extension of this deadline.

2. What actions have been taken to obtain permits, obtain contracts or meet other regulatory obligations to implement the compliance mechanism identified above?

Carlsbad Energy Center LLC, a wholly owned subsidiary of NRG, intends to replace Units 1-5 with the ACECP at the eastern portion of EPS. Carlsbad Energy Center LLC filed a Petition to Amend (PTA) its previously CEC-approved license in May 2014. The CEC issued its Final Staff Assessment for the ACECP on February 17, 2015 and Air Quality Errata and Complete Proposed Conditions of Certification on April 16, 2015 which incorporated public written comments and verbal comments heard during the April 1-2, 2015 Evidentiary Hearings. The San Diego Air Pollution Control District (District) issued the revised Final Determination of Compliance (FDOC) on April 17, 2015 which incorporated public comments from Carlsbad Energy Center LLC, CEC staff, and other parties to the ACECP. The CEC Presiding Member's Proposed Decision (PMPD) for the ACECP was released on June 9, 2015, recommended approval of the ACECP, and included the respective Conditions of Certification for the amended license. The ACECP was approved on July 30, 2015 at a special CEC Business meeting in Sacramento by a Commission vote of 3-1; the CEC's decision was docketed on August 3, 2015, and the CEC issued its Notice of Decision on August 4, 2015. On August 6, 2015, the District issued its Notice of Issuance for the FDOC serving as an Authority to Construct the ACECP. A Petition for Reconsideration of the CEC's July 30, 2015 Decision approving Amended CEC were heard by the CEC Commission on September 23, 2015, and requested that the California Department of Fish & Wildlife (CDFW) review the PMPD and the final Decision within 30 days. CDFW submitted comments to the CEC in its November 5, 2015 response letter, where CDFW concluded that no changes to the CEC's August 3, 2015 approval Decision of ACECP is necessary. Any biological resources issues discussed by CDFW in its evaluation would be addressed in the compliance plan developed for the project for construction and operations of ACECP. At the November 12, 2015 CEC Business Meeting, the CEC adopted a decision closing the Petition for Reconsideration proceeding with no changes or modifications to the initial CEC decision. Given that no party appealed the CEC's decision issued on November 12, 2015, the licensing of ACECP is now complete.

As discussed above, the CPUC approved a Power Purchase Tolling Agreement for units that are part of the ACECP. The CPUC's decision is subject to a court appeal, which we expect will be resolved during the second quarter of 2016.

3. *What will be the capacity of the facility once the new units are online and what is the likely time frame for the new facility to be online?*

The ACECP is permitted as a simple cycle generating facility consisting of six natural gas-fired, General Electric LMS 100 combustion turbines with a 632 MW nominal output, or an estimated 600 MW nominal net output. The Power Purchase Tolling Agreement approved by the CPUC contracts for the construction of five General Electric LMS 100 combustion turbines, with nominal output of 527 MW. Despite delays in CPUC approval, the goal remains to have the ACECP units on-line before the Encina units retire at the end of 2017.

4. *What actions have been taken to obtain permits, obtain contracts or meet other regulatory obligations to implement the compliance mechanism identified above?*

This question has been addressed in response 2.

5. *Please provide a detailed plan to achieve compliance with the required interim mitigation measures, including the status of all components.*

Cabrillo has already met the obligations associated with the interim mitigation measures as found in the OTC Policy Section 2.C (1) and Section 2.C (2). The requirement found at OTC Policy Section 2.C (1) which requires the installation of large organism exclusion devices having a distance between exclusion bars of no greater than nine inches is not applicable as Cabrillo does not have an offshore intake. Cabrillo has also determined that it continues to be in compliance with OTC Policy Section 2.C (2) as all once through cooling intake flows are associated with direct power generating activities or critical system maintenance. Of note, the Poseidon Desalination (Poseidon) Facility shares the common intake and circulating water pumps with Cabrillo. As a result there are often times when intake flow is needed solely for Poseidon operations, and does not constitute OTC flow for Cabrillo.

OTC Policy Section 2.C (3)(a-e) requires that the interim impacts of OTC impingement and entrainment be compensated through use of an existing mitigation project, development of a new mitigation project, or by providing funding to the California Coastal Conservancy which will work with the California Ocean Protection Council to fund an appropriate mitigation project.

Cabrillo intends to comply with this interim mitigation fee through exercising two of the options afforded in the OTC Policy. The first is a request made by Cabrillo concurrent with the update herein of its Implementation Plan; Cabrillo is seeking concurrence that a portion (304 MGD) of EPS' intake utilized by Poseidon Resources for the Carlsbad Desalination Project be credited as meeting impingement and entrainment mitigation objectives in accordance with OTC Policy Section 2.C (3)(c). In consultation with multiple resource agencies including the Regional Water Quality Control Board (Board) and the California Coastal Commission (Commission), the

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Poseidon Facility has an approved mitigation plan for the impingement and entrainment impact losses associated with the Agua Hedionda Lagoon (AHL) source water removal required for potable water product delivery. A Minimization Plan was submitted by Poseidon and included a Marine Life Mitigation Plan (MLMP). The MLMP sets forth a plan for mitigation and monitoring for impacts due to entrainment and impingement from the stand-alone operation of Poseidon Facility as means of complying with Water Code section 13142.5(b). Although the Poseidon Facility relies on Cabrillo's intake flow for its source water, the mitigation provided for in the Minimization Plan which incorporates the MLMP, is expected to fully offset projected entrainment and impingement losses for up to 304 MGD of source water withdrawn directly from the AHL under conditions of co-located operation. Following numerous revisions and considerations the Commission and Board approved the Minimization Plan and MLMP in early 2009. The Commission further revised the Coastal Development Permit No. E-06-013 (CDP) Special Condition 8 (revised in September 2009) which requires that the Poseidon Facility provide 66.4 acres of tidal wetland in one or two phases of construction (an initial phase of at least 42.5 acres followed by up to 23.9 acres). In February 2011, the Commission approved the Poseidon project proposal to restore coastal wetlands in south San Diego County's Otay River floodplain, which includes a 66-acre restoration site located in the South San Diego Bay Unit of the San Diego National Wildlife Refuge and is part of an ongoing restoration effort by the United States Fish and Wildlife Service (USFWS). The wetlands restoration site is managed and owned or leased by the USFWS exclusively for restoration of coastal wetlands and associated uplands. Due to the co-location of Cabrillo and the Poseidon Facility and the co-use of the AHL source water for both OTC flow and/or desalination, EPS would like the Board to consider that the mitigation which Poseidon is providing will satisfy up to 304 MGD of the EPS OTC flow interim mitigation fee requirements imposed by OTC Policy Section 2.C (3)(c). The Poseidon project mitigation is consistent and has met the requirements with OTC Policy Section 2.C (3)(c) which requires that the impacts of OTC impingement and entrainment be compensated for with the following language, "Developing and implementing a mitigation project for the facility, approved by the State Water Board, which will compensate for the interim impingement and entrainment impacts. Such a project must be overseen by an advisory panel of experts convened by the State Water Board." EPS recognizes that OTC flow which exceeds 304 MGD would not be covered under Poseidon's mitigation project, and EPS would be responsible to mitigate the differential of actual flow minus the 304 MGD mitigated Poseidon Facility flow through an agreed upon mitigation rate which would not exceed \$6.50 per million gallons.

6. *Does NRG have a contingency plan for achieving compliance in the event that some part of the project is delayed, such as some recent filings for reconsideration with the CEC are granted? Please explain.*

Cabrillo does not have a contingency plan nor does it intend to request that the SWRCB consider an extension or delay of the compliance deadline.

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7. If the project is delayed, are the existing units able to continue operating if the State Water Board were to extend the compliance deadline? Please explain.

Cabrillo is not considering or planning to extend the operational availability of Units 1, 2, 3, 4, or 5 past the December 31, 2017 compliance deadline. Programmatic and necessary maintenance schedules which are determined by the various Original Equipment Manufacturers (OEM) are forecasted and budgeted up to 5-years in advance to assure that the units are available and reliable. Cabrillo's annual maintenance schedules for 2016 and 2017 have been adapted and fully budgeted to assure that the units are available to the California Independent System Operator (CAISO) until the December 31, 2017 deadline. The OTC Policy accounts for the process for extensions of operations beyond the compliance date, including up to two 90-day extensions; however, Cabrillo is not considering actions to operationally extend Encina's operation past the December 31, 2017 deadline.

I anticipate the above information has addressed the SWRCB's questions regarding Encina Power Station's Implementation Plan. If you have any questions, comments, or concerns, please do not hesitate to contact me at george.piantka@nrg.com or (760) 710-2156, or Jerry Carter at jerry.carter@nrg.com or (760) 268-4011.

Sincerely,
Cabrillo Power I LLC



George L. Piantka, PE
Sr. Director, Regulatory Environmental Services
NRG Energy, West Region

cc: Jerry Carter, Cabrillo Power I LLC
Sheila Henika, Cabrillo Power I LLC
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