

## **State Water Resources Control Board**

September 18, 2013

Mr. Eric Pendergraft AES Southland, LLC 690 North Studebaker Road Long Beach, CA 90803

Dear Mr. Pendergraft:

## INFORMATION REQUIREMENTS FOR ALAMITOS GENERATING STATION

On November 30, 2010 a letter was sent out by the State Water Resources Control Board's (State Water Board) Executive Director requiring the submittal of an Implementation Plan (Plan) by April 1, 2011. The letter outlined the required information to include in the Plan, including information on planned actions for compliance with the Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (Policy). If final compliance by October 1, 2015, is not feasible, interim mitigation measures must be identified in the plan.

Due to the current uncertainty as to conditions identified in implementation plans previously submitted from the Once-Through Cooling (OTC) power plants with a near term compliance deadline, further information and data input is necessary to conduct grid reliability analysis to determine the impact on local and system reliability.

Pursuant to the Policy and California Water Code section 13383, the State Water Board requires AES Southland to provide the most current information for Alamitos Generating Station (Alamitos) in the previously-submitted Plan if the following information is not up-to-date or is inaccurate:

1. The proposed mechanism to bring each unit into compliance: With extended compliance dates, additional California Public Utilities Commission (CPUC) procurement authorization, and power purchase agreements in place, the preferred compliance approach will be via Track 1. All six existing OTC units, total 2,010 Mega Watts (MW) will be retired and repowered/replaced with four new dry-cooled natural gas fired combined cycle 3-on-1 combined cycle power blocks (approximately 2000 MW). AES Southland's current implementation plan requires the extension of compliance dates for Units 3 and 4 to end of 2023 and Units 1 and 2 to end of 2026.

The construction of new power blocks is dependent upon several additional assumptions:





- a) Emission offset requirements can be achieved by reliance upon Southern California Air Quality Management District (SCAQMD) rule 1304(a) (2).
- b) The CPUC will authorize additional capacity procurement in the 2014 and 2016 Long-Term Procurement Plan (LTPP) proceedings.
- c) The schedule meets the offtaker's desired commercial operation dates. However, the entire AES Southland fleet repower project may become prohibitively expensive prompting abandonment of all or part of the Track 1 compliance path, if Rule 1304.1 is adopted.
- 2. What actions have been taken to obtain permits, obtain contracts or meet other regulatory obligations to implement the compliance mechanism identified above?

No Permits identified. AES Southland plans to submit an Application for Certification in 2013.

No long term contract that will enable financing is identified. The CPUC's Decision Authorizing Long-Term Procurement for Local Capacity Requirements (D.13-02-015) authorized the procurement of up to 1,200 MW of conventional natural gas-fired generation in the Los Angeles Basin to meet reliability needs after the retirement of all OTC generation in the local area. The amount of capacity authorized is not sufficient to repower Huntington Beach, Redondo Beach, and Alamitos. More authorization is required, possibly in the CPUC 2014 LTPP and 2016 LTPP to enable the repowering of Alamitos to go forward. However, the repowering of Alamitos could proceed more quickly than proposed if AES Southland can secure a long-term contract sooner.

The CPUC approved Resolution E-4584 on March 9, 2013 which replaces a capacity and tolling agreement between AES Southland (Alamitos, Redondo Beach and Huntington Beach) and JP Morgan (including JP Morgan's development consent rights) with a contract between AES and Southern California Edison. The contract extends through 2018. AES Southland plans to reduce its repowered capacity, if needed, to meet a plant wide limit of 100 tons per year of PM 2.5 to avoid providing offsets for PM 2.5. AES Southland identified new natural gas turbines that will operate at an economically viable capacity factor and meet the SCAQMD PM 2.5 Rule 1325. An Interconnection Request for new generating capacity has been submitted to the California Independent System Operator (CAISO).

3. The detailed schedule, technology, and MW capacity by unit:

AES Southland can construct approximately 1000 MW of air cooled combined cycle generation without demolishing any existing unit. AES Southland plans to build two 528 MW combined cycle units in 3-on-1 configurations without duct firing. These new units are considered a repower/replacement of Units 5 and 6, scheduled to retire by end of 2020 in compliance with the State Water Board OTC policy. The new units are expected to be online in 1<sup>st</sup> qtr. 2021.

AES Southland plans to repower/replace Alamitos Units 3 and 4 (667.9 MW) with a 528 MW combined-cycle unit in a 3-on-1 configuration without duct firing onto the footprint of Alamitos units 5 and 6. Units 3 and 4 seek compliance date extension to 4<sup>th</sup> quarter 2023 when the new unit is expected to be online. Units 3 and 4 will be retired, demolished.

AES Southland plans to repower/replace Alamitos Units 1 and 2 (349.6 MW) with a 528 MW combined-cycle unit in a 3-on-1 configuration without duct firing onto the footprint of

Alamitos units 3 and 4. Units 1 and 2 seek compliance date extensions to end of 2026, when the new unit is expected to be online. After the four new power blocks are on line, Units 1 and 2 will be the last units to retire.

4. If there are non-OTC units at a generation facility, indicate if compliance with the OTC policy will, in any manner, affect the operation of the non-OTC units; if so, how?

None identified.

In addition please respond to the following questions:

- 1. Has compliance with SCAQMD PM2.5 Rule 1325 prompted additional analysis that shows the combined capacity of the new units will likely be less than the combined capacity of the existing units?
- 2. AES Southland in their letter to the State Water Board dated March 31, 2013 requested State Water Board OTC compliance date extensions for Alamitos Units 1, 2, 3, and 4, but indicates that "Should the CAISO's planning assumptions change and AES-Southland can secure long-term CPUC approved contracts to support new generating capacity, the redevelopment of AES-Southland sites and the phasing of new generating units at the Alamitos could proceed more quickly than proposed in the attached development schedule." If the conditions are met, what is the most accelerated time-frame feasible for repowering the facility?

Submission of the above information is required no later than 60 days after the date of this letter.

Should you have any questions on this matter please feel free to contact Mr. Jonathan Bishop, Chief Deputy Director, at (916) 341-5820 (<a href="mailto:isbishop@waterboards.ca.gov">isbishop@waterboards.ca.gov</a>) or Dr. Maria de la Paz Carpio-Obeso, Chief of the Ocean Unit, at (916) 341-5858 (mcarpio-obeso@waterboards.ca.gov).

Sincerely,

Thomas Howard Executive Director

ECM# 1085023