



690 North Studebaker Road Long Beach, CA 90803 tel 562 493 7891 fax562 493 7320

April 23, 2015

Thomas Howard
Executive Director
State Water Resources Control Board
1001 | Street
Sacramento, CA 95814

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OMISION OF WATER QUALITY

RE:

Information Requirements for the Alamitos Generating Station

Dear Mr. Howard,

This letter is in response to your February 24, 2014 correspondence requesting additional information for the AES Alamitos Generating Station (AES-AL) Implementation Plan (IP). As stated in your letter, you wish to obtain further information and data input to conduct grid reliability analyses to determine the impact on local and system reliability.

As we have previously communicated, there are a number of significant assumptions that AES Southland (AES-SL) must consider in developing and executing our IP for AES-AL as well as our two other once-through-cooled (OTC) generating stations located in the Los Angeles basin local reliability area – AES Huntington Beach (AES-HB) and AES Redondo Beach (AES-RB). Given the uncertainty of these assumptions and the challenges associated with trying to predict the future, the AES-SL IPs and any updates to the IPs represent our best intentions at this time, but they are subject to change and cannot be construed as definitive plans. Future market developments and decisions by other state agencies will influence the ultimate actions of AES-SL and their timing.

Before addressing the State Water Resources Control Board's specific questions, AES-SL provides the following general comments which may help to simplify understanding the IPs. AES-SL currently intends to comply with the Statewide Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (OTC Policy) by utilizing Track 1 and shutting down and permanently retiring all generating units at AES-AL, AES-HB and AES-RB that utilize OTC. AES-SL does not currently plan to retrofit any of the existing units with alternate cooling technologies to comply with Track 1, or utilize any operational or technical measures to comply with Track 2. In the event additional new generating resources are needed in order to maintain a reliable supply of electricity, AES-SL intends to provide these new resources through competitive solicitations issued by the utility(s) and these resources would be constructed on one or more of the existing sites, but they will utilize air cooling and would not be subject to the OTC Policy.

With respect to timing, all six generating units at AES-AL are fully contracted through May 31, 2018 and will remain in operation at least through that date. Beyond May 31, 2018, there are three factors that will determine the ultimate retirement schedule. Specifically, each unit will be shutdown when one of the following occurs; (1) it is no longer economically practical to operate the units (without new contracts for capacity beyond May 31, 2018 it is unlikely AES would maintain the units to be available for spot market dispatch); (2) the unit needs to shutdown to enable a new replacement unit to begin its commissioning activities<sup>1</sup>; or (3) it reaches its OTC Policy compliance date<sup>2</sup>. Since AES-AL and AES-HB were recently awarded Power Purchase Agreements (PPA) for nominal 640 MW and 644 MW CCGTs with commercial operation dates of June 1, 2020 and May 1, 2020, respectively, criteria (2) will require the shutdown of two existing AES-AL units prior to the OTC Policy compliance date. The affected units and the required timing are discussed in the responses to SWRCB's specific questions provided below. The responses begin with question 2, since the answer will also address the IP update that was requested in question 1.

2. Is the implementation plan submitted to the State Water Board current? If not, please provide a detailed description of any changes.

As outlined above, the Implementation Plan for AES-AL is being updated to reflect recent events. Table 1 summarizes the current intended compliance action and schedule for each of the six units at AES-AL under the assumption that the PPAs for the new CCGT's at AES-AL and AES-HB are ultimately approved by the California Public Utilities Commission (CPUC).

Table 1
AES Alamitos Implementation Plan

Unit	Capacity (MWs)	Compliance Approach	Target Retirement Date	Comments
AL 1	175	Retirement	12/31/2020 <sup>1</sup>	OTC Policy compliance date. Will need to be permanently restricted to 136 MW on 12/1/2019 for new AES-AL CCGT
AL 2	175	Retirement	12/31/2020 <sup>1</sup>	OTC Policy compliance date
AL3	332	Retirement	12/31/2020 <sup>1</sup>	OTC Policy compliance date
AL 4	335	Retirement	12/31/2020 <sup>1</sup>	OTC Policy compliance date
AL 5	498	Retirement	11/30/2019 <sup>2</sup>	Accommodate new AES-AL CCGT
AL 6	495	Retirement	7/31/2019 <sup>3</sup>	Accommodate new AES-HB CCGT

<sup>&</sup>lt;sup>1</sup>Assumes unit remains economic and no extension of the OTC Policy compliance date is granted

<sup>&</sup>lt;sup>2</sup>Unit must be shutdown no later than 90 days after the first fire of the new AES-AL CCGT to qualify for emission offsets

<sup>&</sup>lt;sup>3</sup>Unit must be shutdown prior to first fire of new AES-HB CCGT to qualify for emission offsets

<sup>&</sup>lt;sup>1</sup> It is necessary to shutdown existing generation in order to provide interconnect capacity and access to emission offsets for the new generating unit.

<sup>&</sup>lt;sup>2</sup> Absent any extensions from the SWRCB, the AES-SL generating units must comply with the OTC Policy by December 31, 2020.

3. The State Water Board is aware that the Alamitos Generating Station has entered into a contract with Southern California Edison (SCE) in response to the San Onofre outage and corresponding CPUC Decision 14-03-004. This contract is currently under review by the CPUC. Do the plans for OTC compliance assume that this contract will be approved? How will plans for compliance change in the event that this contract is not approved by the CPUC?

Yes, the retirement dates in Table 1 assume the contracts with SCE for new CCGTs at AES-AL and AES-HB are approved by the CPUC. If the contracts are not approved, Unit 5 and Unit 6 at Alamitos could continue to operate through their OTC Policy compliance dates, assuming it remains economic to do so, and Unit 1 at Alamitos would not need to be derated to 136 MW on October 1, 2019.

4. What actions have been taken to obtain permits, obtain contracts or meet other regulatory obligations to implement the compliance mechanism identified above? What is the status of pending permit, including AFC with the CEC, application for Permit to Construct and Title V permits with the South Coast Air Quality Management District and interconnection requests with the California Independent System Operator?

AES-SL submitted an Application for Certification (AFC, Docket No. 13-AFC-01) to the CEC and an application for a Permit to Construct and Title V modification to the South Coast Air Quality Management District (SCAQMD) in December 2013 for the development of the Alamitos Energy Center (AEC) and has been progressing those applications through their respective approval processes. The AEC was originally proposed as a 1,995 MW CCGT facility consisting of four 3x1 power blocks. With the recent award of contracts by Southern California Edison (SCE) for 640 MW of 2x1 CCGT generation and 100 MW of battery energy storage, AES-SL will provide supplemental information to the CEC, and provide new applications to the SCAQMD and the City of Long Beach for a revised AEC that will consist of 640 MW CCGT, 400 MW of open cycle gas turbine peakers and 300 MW of battery energy storage, for a total of 1,340 MW of capacity. AES-SL has been developing the engineering design for the revised AEC and preparing the requisite information required by the CEC, SCAQMD and City of Long Beach and intends to file this information with the appropriate agencies in August 2015. The AEC units will utilize the California Independent System Operator's (CAISO's) repowering affidavit process for the interconnections.

AES-AL participated in SCE's recently concluded Request for Offers (RFO) and was awarded long term contracts for a new 640 MW CCGT and a 100 MW battery energy storage system. AES-AL intends to compete in future solicitations for both gas-fired generation and preferred resources to continue replacing existing units as they are retired. As such, AES-SL is pursuing approvals and permits for additional capacity beyond that which was awarded in SCE's RFO.

 Provide a detailed list of existing generation technologies and capacity by unit. Indicate how this will be affected by the approval or denial of Alamitos' pending application to contract with SCE.

Table 1 summarizes the existing capacity by unit at AES-AL. All units are natural gas-fired conventional steam turbine units that utilize once-through-cooling. If the pending Alamitos and Huntington Beach PPAs with SCE are denied, Unit 5 and Unit 6 at AES-AL will be able to continue operating until they reach their OTC Policy compliance dates assuming they remain economic and Unit 1 will not need to be derated to 136 MW on October 1, 2019.

AES-SL continues to take every possible action to move both the contracting and permitting process forward and maintain our commitments to provide reliable power and generating capacity while progressing as quickly as possible to comply with the OTC Policy. AES-SL has participated in the CPUC's Long Term Procurement Planning process, filed applicable permits, reduced OTC flows significantly and has responded to the contracting opportunities presented by the local utility. However, the electricity planning, contracting and development process in California is extremely lengthy and considerable uncertainty still exists in California's plans for maintaining electrical reliability in southern California. If there are delays in the CEC permitting process for AEC, contracts are not approved by the CPUC, future procurement authorizations are limited or postponed, or other planned transmission and generating capacity upgrades by the local utility are not completed or delayed, then our current proposed schedule will need to be further adjusted and other options considered, including the potential extension of OTC compliance deadlines for existing units. AES-SL wishes to extend an invitation to your organization to meet with the SACCWIS and explain in detail the constraints California is facing to maintain electrical reliability under the current regulatory structure.

If you have questions regarding this submittal, please contact Stephen O'Kane, AES-Southland, LLC at (562) 493-7840.

Sincerely

Jennifer Didlo President

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**AES-Southland**