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February 12, 2016

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

RE: Information Requirements for the Alamitos Generating Station

Dear Mr. Howard,

This letter is in response to your December 16, 2015 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 per the compliance dates included in the OTC Policy. 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 awarded Power Purchase Agreements (PPA) for nominal 640 MW and 644 MW capacity combined-cycle gas turbines (CCGTs) with commercial operation dates of April 1, 2020 and March 1, 2020, respectively, criteria (2) will require the shutdown of three existing AES-AL units prior to the OTC Policy compliance date.

1. When does AES-SL anticipate the first fire and testing of AEC?

AES-SL anticipates first fire of the 640MW CCGT on 11/1/19

2. When is commercial operation expected of the new facility?

Commercial Operation for the 640MW CCGT is on 4/1/20, and the PPA begins on 6/1/20.

3. If there is a delay in repowering, will the early retirement of Alamos units 1, 2, and 5 also be delayed. Please explain.

The cause and type of delay would result in different outcomes. AES-SL is working diligently to ensure the schedule is achieved. If first fire of the 640MW CCGT is delayed, then it is reasonable to assume the retirement of Alamos units 1, 2, and 5 would also be delayed.

4. Please identify any period with a disruption in service between the shutdown of existing units and the commercial operation date of new units.

Alamos units 1, 2, and 5 will be shut down on 12/31/19. The new 640MW CCGT will reach commercial operation on 4/1/20. Consequently, there will be a disruption in total available capacity at the AES Alamos generating station between 12/31/19 and 4/1/20.

5. Please explain and verify that the new facility can be built without demolishing any of the existing units.

AEC is located on land that isn't occupied by the operating units. Please see attached general arrangement drawing of AEC.

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

6. Can AES-SL's confirm its understanding of SCAQMD's application of Rule 1304(a)(2), and whether other units may need to shut down early to provide offsets, or whether offsets for the second phase can be provided at a later time.

AES-SL's understanding of Rule 1304(a)(2) requires that generating capacity from the same facility must be permanently retired within 90 days of the new unit's first fire, whereas capacity from a different facility must be permanently retired prior to the new unit's first fire. Offsets for the second phase (400MW CT's) will be needed for the first fire of those units, which is subject to obtaining a power purchase agreement in the future.

7. Please provide an update to the summer peak capacity table.

Facility	Capacity	Retirement Date	Commercial Operation Date	Summer Peak MW		
				2019	2020	2021
Huntington Beach 1	225	10/1/2019		225	0	0
Huntington Beach 2	225	12/31/2020		225	225	0
Redondo Beach 5	178	12/31/2020		178	178	0
Redondo Beach 6	175	12/31/2020		175	175	0
Redondo Beach 7	505	10/1/2019		505	0	0
Redondo Beach 8	495	12/31/2020		495	495	0
Alamitos 1	175	10/31/2019		175	0	0
Alamitos 2	175	10/31/2019		175	0	0
Alamitos 3	332	12/31/2020		332	332	0
Alamitos 4	335	12/31/2020		335	335	0
Alamitos 5	498	10/31/2019		498	0	0
Alamitos 6	495	12/31/2020		495	495	0
New HBEP CCGT	644		3/1/2020		644	644
New HBEP SCGT	200					
New AEC CCGT	640		4/1/2020		640	640
New AEC SCGT	400					
<b>Total</b>				<b>3813</b>	<b>3519</b>	<b>1284</b>

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

A handwritten signature in blue ink, appearing to read "Jennifer Didlo". The signature is fluid and cursive, with the first name "Jennifer" written in a larger, more prominent script than the last name "Didlo".

Jennifer Didlo  
President  
AES-Southland



#### Legend

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|---|---|
| <span style="border: 2px solid yellow; display: inline-block; width: 20px; height: 10px;"></span> AGS Boundary  | <span style="border: 2px solid blue; display: inline-block; width: 20px; height: 10px;"></span> Construction Access Road  |
| <span style="border: 2px solid red; display: inline-block; width: 20px; height: 10px;"></span> AEC Site   | <span style="border-bottom: 2px solid green; display: inline-block; width: 20px;"></span> Proposed New Process/<br>Sanitary Wastewater Pipeline to First Point of Interconnection |
| <span style="background: repeating-linear-gradient(45deg, transparent, transparent 2px, red 2px, red 4px); display: inline-block; width: 20px; height: 10px;"></span> Parking/Laydown Construction Area | <span style="border-bottom: 2px solid brown; display: inline-block; width: 20px;"></span> Potential Sewer Upgrade   |
| <span style="background: repeating-linear-gradient(-45deg, transparent, transparent 2px, red 2px, red 4px); display: inline-block; width: 20px; height: 10px;"></span> Natural Gas Metering Station     |   |

0 1,000 2,000  
Feet



**FIGURE 2.1-1**  
**Site Location Map**  
Alamitos Energy Center  
Long Beach, California  
October 2015



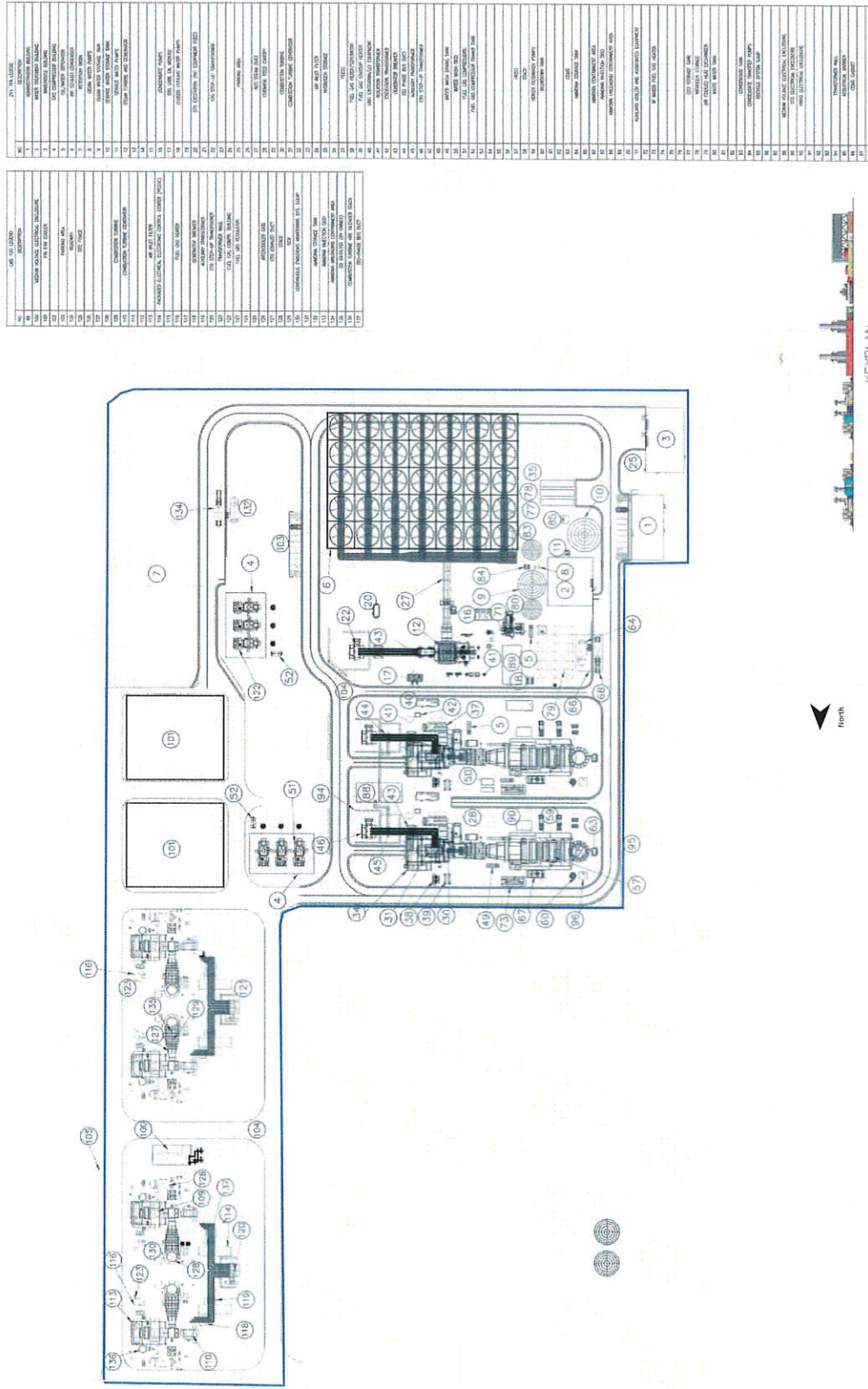


FIGURE 2.1-2  
General Arrangement  
Alamos Energy Center  
Long Beach, California  
October 2015