| DOCKETED                |  |  |
|-------------------------|--|--|
| Docket Number:          | 13-AFC-01                                  |  |
| Project Title:          | Alamitos Energy Center                     |  |
| TN #:                   | 201591                                     |  |
| <b>Document Title:</b>  | AES Alamitos Incomplete Letter             |  |
| Description:            | N/A  |  |
| Filer:                  | Cenne Jackson                              |  |
| Organization:           | South Coast Air Quality Managment District |  |
| Submitter Role:         | Commission Staff                           |  |
| <b>Submission Date:</b> | 1/23/2014 10:55:53 AM                      |  |
| Docketed Date:          | 1/23/2014                                  |  |

January 21, 2014

Stephen O'Kane Vice President AES Southland Development, LLC 690 N. Studebaker Road Long Beach, CA 90803

**SUBJECT:** Permit Applications for the Alamitos Energy Center Project, located at

690 N. Studebaker Road, Long Beach, CA 90803 (Facility ID 115394)

Dear Mr. O'Kane:

The South Coast Air Quality Management District (SCAQMD) received permit applications for the Alamitos Energy Center (AEC) project on December 20, 2013. As a first step in our review process, we have briefly evaluated the applications to determine whether they are complete and ready for review. Based on our initial review of the submitted materials it has been determined that although the information provided is substantial and sufficient to initiate processing of the applications, a few additional pieces of information are necessary before the application package can be considered complete. The reference application numbers for this project and our initial review determination are provided in the table below:

| Equipment                            | Application | Completeness<br>Determination |
|--------------------------------------|-------------|-------------------------------|
| Title V/RECLAIM Significant Revision | 559347      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559378      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559380      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559381      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559382      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559383      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559384      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559385      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559386      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559387      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559388      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559390      | Deemed Incomplete             |
| Mitsubishi Gas Turbine               | 559392      | Deemed Incomplete             |
| SCR/CO Catalysts                     | 559350      | Deemed Incomplete             |
| SCR/CO Catalysts                     | 559352      | Deemed Incomplete             |
| SCR/CO Catalysts                     | 559353      | Deemed Incomplete             |

| SCR/CO Catalysts             | 559354 | Deemed Incomplete |
|------------------------------|--------|-------------------|
| SCR/CO Catalysts             | 559355 | Deemed Incomplete |
| SCR/CO Catalysts             | 559356 | Deemed Incomplete |
| SCR/CO Catalysts             | 559357 | Deemed Incomplete |
| SCR/CO Catalysts             | 559358 | Deemed Incomplete |
| SCR/CO Catalysts             | 559360 | Deemed Incomplete |
| SCR/CO Catalysts             | 559374 | Deemed Incomplete |
| SCR/CO Catalysts             | 559376 | Deemed Incomplete |
| SCR/CO Catalysts             | 559377 | Deemed Incomplete |
| Aqueous Ammonia Storage Tank | 559349 | Deemed Incomplete |
| Aqueous Ammonia Storage Tank | 559351 | Deemed Incomplete |
| Oil/Water Separator          | 559395 | Deemed Incomplete |
| Oil/Water Separator          | 559396 | Deemed Incomplete |
| Oil/Water Separator          | 559397 | Deemed Incomplete |

In order to deem the application package complete, the following additional information is requested:

## Rule 1304(a)(2) - Electric Utility Steam Boiler Replacement Exemption

- 1. Rule 1304(a)(2) specifies that upon the approval of the SCAQMD Executive Officer, an exemption to the modeling and offset requirements of Rule 1303(b)(1) and (b)(2), respectively, shall be allowed for electric utility steam boiler replacements provided "the new equipment must have a maximum electrical power rating that does not allow basinwide electricity generating capacity on a per-utility basis to increase". Otherwise, the increased capacity must be offset.
  - a. In order to determine compliance with Rule 1304(a)(2), SCAQMD has reviewed the information provided in the application package for AEC, as well as the Huntington Beach Energy Project and the Redondo Beach Energy Project since there is an overlap between these projects. The AEC application package identified that 45 MW will be applied to the AEC project from Huntington Beach Generating Station Units 1 and 2. Please outline in detail the construction, demolition, start-up, and commercial operation for the three projects (Huntington Beach Energy Project, Redondo Beach Energy Project, and the AEC). The table provided should include the MW changes (compared on a net and gross basis) for each phase for all units owned by the AES Corporation to demonstrate that the generating capacity will not increase.
  - b. SCAQMD Rule 1313(d) allows a start-up period up to a maximum of 90 days for simultaneous operation of the new source, which will be a replacement, for an existing source on the same or contiguous property. In addition to the table requested in 1(a), please outline a comprehensive shutdown schedule for each subject unit.

## Greenhouse Gas (GHG) BACT Analysis

- 2. The GHG BACT Analysis provided in Appendix 5.1D "Criteria Pollutant and Greenhouse Gas BACT Analysis" concluded that thermal efficiency was the only feasible and cost-effective option and that it was concluded that a rate of 1,089 lbs-CO2/MWh (gross) was BACT for GHG emissions.
  - a. In order to compare the value to the BACT determinations made for similar facilities, please calculate the emission rate in net MWh, identifying heat rates at various operating loads, start-up and shutdown periods, and at the different configurations (1 on 1, 2 on 1, and 3 on 1), as well as the amount of hours the facility expects to operate at each configuration.

## Application Numbers 559395, 559396, and 559397 – Oil/Water Separators

1. The filing fee submitted for the Oil/Water Separator applications were for schedule B equipment; however, the correct basic equipment category should be schedule C - Oil/Water Separator ≥ 10,000 gpd. The correct filing fee should be \$7,017.70 (\$3,508.86 + 2 x \$1,754.43). Please remit the difference of \$2,580.90 (\$7,017.70 - \$4,436.80 already paid) referencing A/Ns 559395, 559396, & 559397 to Permit Services.

Please note that in addition to the information required above, SCAQMD may request additional information pertaining to the applications. If you have any questions regarding your permit applications please call the undersigned at (909) 396-2662 or contact Mr. Andrew Lee, Senior AQ Engineering Manager, at (909) 396-2643 or <a href="mailto:alee@aqmd.gov">alee@aqmd.gov</a>.

Sincerely,

Mohsen Nazemi, P.E. Deputy Executive Officer Engineering & Compliance

MN:AYL:CDT:JTY:MS

cc: Keith Winstead, CEC