DOCKETED

Docket Number:	13-AFC-01
Project Title:	Alamitos Energy Center
TN #:	202843
Document Title:	AEC Data Request Set 3 (Nos 69-70)
Description:	N/A
Filer:	Cenne Jackson
Organization:	CEC / Keith Winstead
Submitter Role:	Commission Staff
Submission Date:	7/29/2014 2:06:42 PM
Docketed Date:	7/29/2014

CALIFORNIA ENERGY COMMISSION
1516 NINTH STREET
SACRAMENTO, CA 95814-5512
www.energy.ca.gov

July 29, 2014

Stephen O'Kane
AES Southland, LLC
690 Studebaker Road
Long Beach, CA 90803

Regarding: **ALAMITOS ENERGY CENTER (13-AFC-01)**
DATA REQUESTS SET 3 (Nos. 69-70)

Dear Mr. O'Kane,

Pursuant to Title 20, California Code of Regulations, section 1716, the California Energy Commission staff requests the information specified in the enclosed data requests. The information requested is necessary to: 1) more fully understand the project, 2) assess whether the facility will be constructed and operated in compliance with applicable regulations, and 3) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner. This set of Data Requests (Nos. 69-70) is being made in the technical area of Transmission System Engineering. Written responses to the enclosed data requests are due to the Energy Commission staff on or before August 29, 2014.

If you are unable to provide the information requested, need additional time, or object to providing the requested information, please send a written notice to the Committee and me within 20 days of receipt of this request. The notification must contain the reasons for the inability to provide the information or the grounds for any objections (see Title 20, California Code of Regulations, section 1716 (f)).

If you have any questions regarding the enclosed data requests, please call me at (916) 654-5191.

Sincerely,

Original signed by:
Keith Winstead, Siting Project Manager
Siting, Transmission and Environmental
Protection Division

Enclosure (Data Request Packet)
cc: Docket (13-AFC-01)

ALAMITOS ENERGY CENTER
(13-AFC-01)

Energy Commission Staff's Data Requests Set 3 (Nos. 69-70)

July 29, 2014

Technical Area: Transmission System Engineering
Author: Ajoy Guha, P. E. and Mark Hesters

INTRODUCTION:

Staff has reviewed the California Independent System Operator (California ISO) letters of May 24 and August 1, 2012 addressed to the applicant. The letters responded to the applicant's request dated March 9, 2012 to the California ISO to review the Alamitos Energy Center (AEC) project in order to determine if the total generating capability and electrical characteristics of the project would be substantially unchanged in accordance with section 25.1 of the California ISO tariff. In their May 24, 2012, initial review after performing a System Impact Study (SIS) with a Western Electric Coordinating Council (WECC) 2012 heavy summer load flow case, the AEC repowering project did not meet the criteria to forgo the interconnection process due to its higher short circuit duty impacts on six downstream Southern California Edison (SCE) substations. However, the August 1, 2012, California ISO letter stated that the applicant worked with SCE and the California ISO to change the proposed generation step-up (GSU) transformer impedances to resolve the short circuit duties in SCE substations. Based on the revised GSU transformer impedances, generator data and new interconnection configuration at the SCE Alamitos West and East 230 kV switchyard buses, the California ISO agreed that in accordance of section 25.1.2.1 of the California ISO tariff, the AEC would forgo the California ISO interconnection process as the total generation capability and electrical characteristics are substantially unchanged. However, the letter also stated the generating capability of the AEC project as 1,893 MW net output (representing 98 percent of the existing Alamitos Generating Station plant capacity), which is not consistent with the 1,936 MW net generating capacity submitted in the proposed AEC Application of Certification (AFC) to the Energy Commission.

In addition, the applicant has not yet submitted the project switchyards' one line diagrams with updated percentage impedances of the GSU transformers and the SCE 230 kV switchyard with any changes in configuration of its buses, circuit breakers with associated disconnect switches, and transmission outlets after decommissioning and disconnecting all existing Alamitos Generating Station (AGS) generator units, The complete descriptions of interconnection facilities are required in order to analyze the AEC's continuing compliance with applicable laws, ordinances, regulations and standards (LORS).

BACKGROUND

The California ISO letter of August 1, 2012, informed the applicant that the California ISO analysis found the total generating capability of the repowered AEC project "substantially unchanged" and resulted in 1,893 MW net generating output (representing 98 percent of the existing Alamitos Generating Station plant capacity), which is not consistent with 1,936 MW net generating capacity of the proposed AEC project as applied for in the AFC to the Energy Commission (The August 1, 2012 California ISO letter to the applicant, page 2).

DATA REQUESTS

1. Please provide a letter or study report from the California ISO or SCE that analyzes the AEC repower project at 1,936 MW or is otherwise consistent with the AFC.

BACKGROUND

In reply to staff's earlier inquiry, the applicant's representative informed staff that the final percentage impedances of the generator step-up (GSU) power transformers etc. would be coordinated by the applicant and be analyzed by California ISO/SCE during final engineering of the interconnection facilities (i. e. AEC four switchyards and the East and West busses of the SCE Alamitos 230 kV switchyard) as required under the Large Generator Interconnection Agreement (LGIA) (Email dated April 23, 2014 from Robert Smith of the AES).

DATA REQUESTS

2. On completion of pre-LGIA final analysis of the interconnecting facilities by California ISO/SCE, please provide the following:
   a. The final analysis report including the short circuit study report.
   b. The electrical one-line diagrams, figures 3.1-1a and 3.1-1b for four Alamitos switchyards with all updates including final percentage impedances of the GSU transformers.
   c. The electrical one-line diagram of the East and West busses of the SCE Alamitos 230 kV switchyard, figure 3.1-1c with all updates, including configuration of buses and circuit breakers with associated disconnect switches, their types and/or ampere ratings, and leveled transmission outlets, considering decommissioning and disconnection of all the existing AGS generator units.