Docket Number:	08-AFC-09C
Project Title:	Palmdale Energy Project (Formerly Palmdale Hybrid Power Plant) - Compliance
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<b>Document Title:</b>	Palmdale Data Requests Set 3
<b>Description:</b>	Palmdale Energy Project (PEP) Data Requests Set 3 (65-68)
Filer:	Eric Veerkamp
Organization:	California Energy Commission
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## CALIFORNIA ENERGY COMMISSION

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



January 15, 2016

Mr. Scott A. Galati, President Dayzen, LLC 455 Capitol Mall Ste. 315 Sacramento, CA 95814

Subject: PALMDALE ENERGY PROJECT (08-AFC-9C) - PETITION TO AMEND

DATA REQUEST - SET 3 (No. 65 through 68)

Dear Mr. Galati,

California Energy Commission (Energy Commission) staff has reviewed the Petition to Amend for the Palmdale Energy Project and requires additional information to supplement the environmental analysis pursuant to Title 20, California Code of Regulations, Section 1769(a)(1)(E). The information requested is necessary to: 1) more fully understand the proposed project changes; 2) assess whether the proposed project changes would result in significant environmental impacts; and 3) assess whether the facilities would be constructed and operated in a safe, efficient, and reliable manner.

This data request (Set 3 No's. 65-68) is being made in the area of Air Quality. A written response to the enclosed data request is due to Energy Commission staff on or before February 15, 2016.

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, the grounds for any objections, or the reason additional time is needed. If you have any questions regarding the enclosed data request, please call me at (916) 654-4611, or email me at eric.veerkamp@energy.ca.gov.

Sincerely,

Eric Veerkamp Compliance Project Manager

Enclosure: Data Request

Technical Area: Air Quality Author: Wenjun Qian

# BACKGROUND: EXHAUST PARAMETERS OF THE EMERGENCY GENERATOR

Appendix Table 4.1A-5 shows that the emergency generator engine stack would have exhaust temperature of 759°F (677.04 Kelvin) and exhaust volume flow rate of 10,908.7 actual cubic feet per minute (ACFM). Appendix Table 4.1A-5 also shows that the stack diameter of the emergency generator would be 0.6667 feet (ft), and the exhaust velocity would be 521 ft/s (158.76 m/s), which is exceptionally high. The applicant used these parameters in the impacts modeling analysis of the emergency generator engine.

Modeling analysis using high exhaust temperatures and velocities would normally lessen ground-level impacts. Staff would like to understand how the modeled parameters were derived. Staff would like to have corresponding vendor data to verify the modeling parameters.

## **DATA REQUESTS**

- 65. Please provide detailed calculations to show how the modeled parameters for the emergency generator engine stack were derived, or otherwise describe how these data were selected and justify their use.
- 66. Please provide vendor data to verify the modeling parameters.
- 67. Please update the modeling analysis if any of the exhaust parameters need to be changed.

## TESTING OF THE EMERGENCY GENERATOR AND FIRE PUMP: BACKGROUND

The applicant's modeling analysis for 1-hour impacts was based on the assumption that testing of the fire pump and emergency generator engines would not take place during the same hour or during startup of the combustion turbines.

## **DATA REQUEST**

68. Please propose language for a condition of certification that would prevent readiness testing of the fire pump and emergency generator during the same hour or during a combustion turbine startup