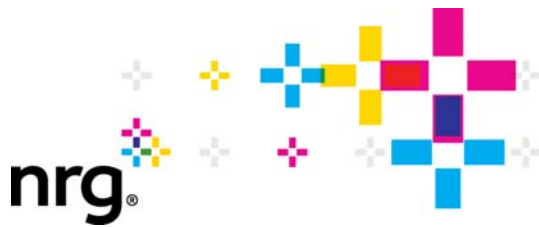


DOCKETED

Docket Number:	00-AFC-14C
Project Title:	El Segundo Power Redevelopment Project Compliance
TN #:	221064
Document Title:	NRG Letter Regarding El Segundo Energy Center Turbine Upgrade Response to Data Request
Description:	N/A
Filer:	Dale Rundquist
Organization:	NRG Energy, Inc.
Submitter Role:	Applicant
Submission Date:	9/6/2017 2:05:20 PM
Docketed Date:	9/6/2017



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August 31, 2017

Dale Rundquist
Compliance Project Manager
Siting, Transmission and Environmental Protection (STEP) Division
California Energy Commission
1516 Ninth Street, MS-2000
Sacramento, CA 95814

Subject: El Segundo Energy Center Project (CEC Docket No. 00-AFC-14C) – Response to Data Request

Dear Mr. Rundquist:

Thank you for your response to the Petition to Amend (Petition) that was submitted on August 15, 2017 to the California Energy Commission (CEC) by El Segundo Power, LLC (Petitioner) for the El Segundo Energy Center (ESEC) Project (CEC Docket No. 00-AFC-14C), located at 301 Vista Del Mar, El Segundo, California. With this letter, the Petitioner is providing the following responses to your comments on the Petition.¹

CEC Comment #1

Please provide estimates of the number of workers and vehicle trips associated with the proposed turbine upgrades.

- *The PTA only states that modifications “will not require extensive labor” (Socio), and “project related traffic and transportation, and associated onsite personnel for this modification will be akin to normal maintenance activities.”*
- *Staff needs to know what the traffic level is during maintenance to know if the traffic will be substantial or not.*

Petitioner Response:

The number of workers for normal operations was discussed in the Final Staff Assessment for the El Segundo Power Facility Modification Amendment (00-AFC-14C), August 2015 and was estimated to be 50 workers after the modifications associated with that Petition. As you know, that proposed Amendment was canceled in August 2016. But the analysis in that FSA was relevant. Our work force during normal operations of El Segundo Energy Center Units 5-8 is about 30 personnel. For this Petition, we anticipate approximately 30 additional personnel for the proposed upgrade for ESEC gas turbines, which is anticipated to take 2-3 weeks during spring 2018, as noted in the Petition. Conservatively, we would anticipate 60 vehicle trips per day (round trip) to the site for work force and that similar traffic levels as analyzed during the El Segundo Power Facility Modification Amendment are anticipated. We anticipate the work to be conducted using normal maintenance type vehicles/trucks, which can include the use of lower profile crane(s) to assist with the removal/placement of turbine equipment during the upgrade of the respective turbines. The onsite laydown and parking areas will be utilized during the turbine performance upgrade work.

¹ Comments on the Petition were received via email August 16, 2017.

CEC Comment #2

Please provide the stack exhaust temperatures before and after the upgrade (for assessing any change in visible plume potential).

Petitioner Response: Exhaust temperatures for the gas turbines before and after the proposed modifications are included in Attachment A to this letter.

If you have any questions or need further information, please do not hesitate to contact me at (760) 710-2156.

Best Regards,



George Piantka, PE
Sr. Director, Regulatory Environmental Services
NRG Energy, Inc.

Attachment

cc: Melissa Hillman, Sierra Research/Trinity Consultants
Ken Riesz, El Segundo Power, LLC

Attachment A

Exhaust Temperatures Before and After the Gas Turbine Upgrade Project

Table 1. Stack Temperatures before the Proposed Modifications

Performance Runs	1	2	3	4	5	6	7	8	9	10	14	15	21	25	26
Load Level, %	100%	100%	Pwr Aug	50%	100%	100%	Pwr Aug	50%	100%	100%	60%	50%	100%	60%	50%
Ambient Dry Bulb Temperature, °F	77.8	77.8	77.8	77.8	83.0	83.0	83.0	83.0	62.0	62.0	62.0	62.0	41.0	41.0	41.0
Ambient Relative Humidity (RH), %	49.5%	49.6%	49.6%	49.5%	46.9%	47.0%	47.0%	46.9%	70.0%	69.9%	69.9%	69.9%	75.9%	75.9%	75.9%
Stack Temperature, °F	354	358	361	336	351	356	360	334	363	361	345	340	369	350	346

Source: Turbine Performance Data Sheet from the Original 2007 ESEC permit documents.

Pwr Aug = Power Augmentation

Table 2. Stack Temperatures after the Proposed Modifications

Load Level, %	100%	100%	100%	100%	100%	75%	50%	75%	50%	75%	50%	75%	50%	75%	50%	100%	Pwr Aug	Pwr Aug	Pwr Aug
Ambient Dry Bulb Temperature, °F	37.0	49.0	59.0	85.0	90.0	37.0	37.0	49.0	49.0	59.0	59.0	85.0	85.0	90.0	90.0	77.8	77.8	59.0	90.0
Ambient Relative Humidity (RH), %	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	60%	50%	50%	60%	60%
Stack Temperature, °F	341	339	336	335	336	338	336	335	333	331	331	322	320	321	318	334	332	338	328

Source: Heat Balance Runs Data for the 2017 Gas Turbine Upgrade.

Pwr Aug = Power Augmentation