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Locke Lord LLP
Attorneys & Counselors

500 Capitol Mall, Suite 1800
Sacramento, CA 95814
Telephone: 916-930-2500
Fax: 916-930-2501
www.lockelord.com

John A. McKinsey
Direct Telephone: 916-930-2527
Direct Fax: 916-720-0443
jmckinsey@lockelord.com

July 31, 2013

Via E-Mail and Hand Delivery

California Energy Commission
1516 Ninth Street
Sacramento, CA 95814

Re: El Segundo Power Plant Project (00-AFC-14C)
Applicant's Letter dated July 31, 2013
to South Coast Air Quality Management District

Dear Sir/Madam:

On behalf of El Segundo Power Plant Project, enclosed please find for docketing Applicant's letter dated July 31, 2013, to South Coast Air Quality Management District.

Please don't hesitate to contact me if you have any questions regarding this filing.

Very truly yours,

John A. McKinsey

JAM:dh
Enclosure

sierra
research

1801 J Street
Sacramento, CA 95811
Tel: (916) 444-6666
Fax: (916) 444-8373
Ann Arbor, MI
Tel: (734) 761-6666
Fax: (734) 761-6755

July 31, 2013

Kenneth L. Coats
AQ Engineer II
South Coast Air Quality Management District
21865 E. Copley Drive
Diamond Bar, CA 91765

Subject: El Segundo Power Facility Modification Project
Facility ID #115663

Dear Mr. Coats:

On behalf of El Segundo Energy Center LLC, Sierra Research is pleased to submit the Supplemental Impact Analysis for the El Segundo Power Facility Modification Project. This analysis is required by federal and District Prevention of Significant Deterioration (PSD) rules.

If you have any questions regarding this matter, please do not hesitate to contact George Piantka at 760-710-2156 or me at 916-273-5139.

Sincerely,

Gabriel McAuliffe

for Tom Andrews

cc: Tom Chico, AQMD
Jillian Baker, AQMD
Craig Hoffman, CEC Project Manager
George Piantka, NRG
Ken Riesz, NRG
Steve Odabashian, NRG

Supplemental Ambient Air Quality Impact Analysis

Compliance of Combined Impact of Project and Nearby Sources with 1-Hour NO_2 NAAQS

Summary

An assessment of impacts from the El Segundo Power Facility Modification (ESPFM) Project plus background (including modeled impacts from non-project nearby sources) on ambient air quality has been conducted using EPA-approved air quality dispersion models, following the modeling protocol submitted to the District on June 11, 2013 and subsequent discussions with District staff.

Nearby sources to be included in the modeling were determined through consultation with District staff. All facilities within 10 km with NOx emissions greater than 10 tons/year were evaluated for inclusion. All sources other than the Chevron El Segundo refinery and the LADWP Scattergood Generating Station were determined to be too far from the project impact area to contribute to elevated concentrations. All non-emergency combustion sources at the refinery and power plant, as well as non-project combustion sources at the El Segundo power plant, were included in the modeling for this impact analysis.

The analysis demonstrates that the project will not cause or contribute to a violation of the 1-hour NO_2 National Ambient Air Quality Standard (NAAQS).

Background

An Ambient Air Quality Impact Analysis was previously prepared for the ESPFM project. That analysis was submitted to the District on April 10, 2013, and demonstrated that project impacts complied with all applicable requirements. However, because project NO_2 impacts exceeded the interim 1-hour NO_2 Significant Impact Level (SIL) of 7.5 $\mu g/m^3$, there was a potential for the project to cause or contribute to a violation of the 1-hour NAAQS within the project impact area indicated in Figure 1. A supplemental air quality impact analysis ("supplemental analysis") was required by the District to demonstrate that the project will not cause or contribute to a violation of that standard.

Methodology

This supplemental air quality impact analysis combines background ambient air quality levels with modeled impacts from the project to determine whether compliance can be demonstrated. Background ambient air quality levels are comprised of measured regional background concentrations (from ambient monitoring data) and modeled net impacts from nearby sources. Nearby sources are point sources that are large enough and close enough to potentially cause a significant concentration gradient in the impact area.[1] Such sources have the potential to cause local impacts within the impact area that are not picked up by the ambient monitor.

This supplemental analysis used dispersion modeling to determine the hourly ground-level NO_2 impacts in the project impact area from the Project, the non-project sources at El Segundo Power, and nearby sources. Modeled impacts were added to the background NO_2 concentration of 109.6 $\mu g/m^3$, which is the maximum value observed at the ambient monitoring station located at the LAX (Westchester Parkway) monitoring station during the period 2009-2011. The results were compared with the 1-hour NO_2 NAAQS of 100 ppb (188 $\mu g/m^3$).

Other than adding nearby sources, and limiting the evaluation to the project's impact area, the modeling methodology was identical to that used in the Air Quality Impact Analysis previously submitted. Key aspects of this supplemental modeling analysis are summarized below. Please see the previously submitted Air Quality Impact Analysis and Modeling Protocols for more detail.

Model Selection – The air quality impact analysis was performed using the American Meteorological Society/Environmental Protection Agency Regulatory Model Improvement Committee (AERMIC) model, also known as AERMOD (current version 12345). The AERMOD model is a steady-state, multiple-source, Gaussian dispersion model designed for use with stack emission sources situated in terrain where ground elevations can exceed the stack heights of the emission sources (i.e., complex terrain). The model is capable of estimating concentrations for a wide range of averaging times (from 1 hour to 1 year). Inputs required by the AERMOD model include the following:

- Model options;
- Meteorological data;
- Source data; and
- Receptor data.

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[1] Appendix W to 40 CFR Part 51 Paragraph 8.2.3(b): "*Nearby Sources:* All sources expected to cause a significant concentration gradient in the vicinity of the source or sources under consideration for emission limit(s) should be explicitly modeled. The number of such sources is expected to be small except in unusual situations. Owing to both the uniqueness of each modeling situation and the large number of variables involved in identifying nearby sources, no attempt is made here to comprehensively define this term. Rather, identification of nearby sources calls for the exercise of professional judgement by the appropriate reviewing authority (paragraph 3.0(b)). This guidance is not intended to alter the exercise of that judgement or to comprehensively define which sources are nearby sources."

Model options refer to user selections that account for conditions specific to the area being modeled or to the emissions source(s) to be examined. Examples of model options include use of site-specific vertical profiles of wind speed and temperature; consideration of stack and building wake effects; and time-dependent exponential decay of pollutants. The model supplies recommended default options for the user for some of these parameters.

AERMOD uses hourly meteorological data to characterize plume dispersion. The representativeness of the data is dependent on the proximity of the meteorological monitoring site to the area under consideration, the complexity of the terrain, the exposure of the meteorological monitoring site, and the period of time during which the data are collected. The District provided a meteorological data set for this analysis appropriate for use with AERMOD. The data set combined surface meteorological data (e.g., wind speed and direction, temperature) from the District's LAX Airport monitoring station and upper air data from the Marine Corps Air Station Miramar (MCAS Miramar) in San Diego.

Receptor Grid Selection and Coverage – Receptor and source base elevations were determined from USGS National Elevation Dataset (NED) data in the GeoTIFF format at a horizontal resolution of 1 arc-second (approximately 30 meters). All coordinates were referenced to UTM North American Datum 1983 (NAD83), Zone 11. The AERMOD receptor elevations were interpolated among the DEM nodes according to standard AERMAP procedure. For determining concentrations in elevated terrain, the AERMAP terrain preprocessor receptor-output (ROU) file option was chosen; hills were not imported into AERMOD for CTDM-like processing.

In the original Air Quality Impact Analysis, Cartesian coordinate receptor grids were used to provide adequate spatial coverage surrounding the project area for assessing ground-level pollution concentrations, to identify the extent of significant impacts, and to identify maximum impact locations. A 250-meter resolution coarse receptor grid was developed and extended outwards at least 10 km (or more as necessary to calculate the significant impact area). For the full impact analyses, a nested grid was developed to fully represent the maximum impact area(s). This grid has 25-meter resolution along the facility fence-line in a single tier of receptors composed of four segments extending out to 100 meters from the fenceline, 100-meter resolution from 100 meters to 1,000 meters from the fenceline, and 250-meter spacing out to at least 10 km from the most distant source modeled, not to exceed 50 km from the project site. Additional refined receptor grids with 25-meter resolution were placed around the maximum first-high and maximum second-high coarse grid impacts and extended out 1,000 meters in all directions. Concentrations within the facility fenceline were not calculated.

This supplemental analysis only includes receptor locations at which the interim NO_2 significant impact level of 7.5 $\mu g/m^3$ was exceeded by the project alone (see Figure 1), as determined by the modeling performed for the Air Quality Impact Analysis previously submitted.

Meteorological Data Selection – The District provided a five-year meteorological dataset (2005 through 2009) already processed by AERMET to generate AERMOD-compatible meteorological data for air dispersion modeling. The surface meteorological data were recorded at the District's LAX Airport monitoring station, and the upper air data were recorded at the MCAS Miramar (No. 03190). This is the same meteorological data used for the original Air Quality Impact Analysis. Please see that report for more details about the meteorological data.

Nearby Source Selection – Identification of non-project sources to be included in characterization of background concentrations for the compliance demonstration begins by developing a list of facilities with emissions above a threshold. The threshold that is selected for this purpose is low enough to ensure that potentially significant sources are not overlooked. The geographical area included in the search is large enough to ensure that sources that may have a significant impact anywhere in the project's impact area are identified.

The District provided a list of facilities to be considered for inclusion in this supplemental impact analysis based upon the factors described above. Following EPA guidance, the District included facilities that were within 10 km of the project site. Based upon past modeling experience, the District included only facilities with annual NOx emissions greater than 10 TPY. These facilities are listed in Table 1, and shown in Figure 2.

Following District guidance, facilities with a Q/D of 2.5 or less (i.e., Northrup Grumman, AES Redondo Beach, and Hollywood Park Land) were excluded from the supplemental analysis. Modeling experience indicates that such facilities do not cause a significant concentration gradient outside the range.

After initial Q/D screening, the decision to include or exclude a specific facility is based on a number of considerations. The purpose of the analysis is to identify non-project sources that might contribute to a modeled violation at a time and place where the project has a significant impact; the size of the non-project source is important. A preliminary analysis that evaluated the combined impact of project and regional background, but no non-project sources, indicated that the project would raise the design value only

Table 1 Candidates for "Nearby Sources"						
Facility Name	Facility ID	UTME	UTMN	(D) Distance from ESP, km	(Q) Annual NOx Emissions (2010), TPY[a]	Q/D, TPY/km
El Segundo Power, LLC	(ID 115663)	368445	3753001	0.0	12.3	--
LADWP Scattergood Generating Station	(ID 800075)	368031	3754000	1.1	27.8	**25.7**
Chevron Products Co.	(ID 800030)	369675	3753138	1.2	638.7	**516.1**
Air Liquide Large Industries U.S., LP	(ID 148236)	369675	3753138	1.8	15.5	8.5
LA City, Dept. of Airports	(ID 800335)	369984	3756847	4.1	47.2	11.4
United Airlines Inc.	(ID 9755)	371687	3756793	5.0	13.2	2.6
So Cal Gas Co. Playa Del Rey Storage Facility	(ID 8582)	367204	3758789	5.9	24.7	4.2
Northrup Grumman Systems Corp.	(ID 800409)	372899	3751320	4.8	10.1	2.1
AES Redondo Beach	(ID 115536)	370809	3746603	6.8	10.7	1.6
Hollywood Park Land Co.	(ID 145829)	376268	3757143	8.9	13.7	1.5

a. California Air Resources Board Facility Search Tool at *http://www.arb.ca.gov/ei/disclaim.htm,* 2010 emissions.

11.1 μg/m^3—from 109.6 μg/m^3 to 120.7 μg/m^3.[2] The standard is 188 μg/m^3. In order to result in a violation, a non-project source (or combination of non-project sources) would therefore have to have an impact of more than 67 μg/m^3 at the same time and place as the project's significant impact—about five times as great as the project's impact.

Because the averaging time is short (hourly for NO_2), a non-project source would need to be on the same (windward) side of the project impact area as the project in order to impact the project impact area at the same time. Described below are the factors taken into account while reviewing the list of candidate sources.

- *Proximity*: Current EPA guidance[3] suggests that "emphasis on determining which nearby sources to include in the modeling analysis should focus on the area within about 10 kilometers of the project location in most cases."

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2 Ambient Air Quality Impact Analysis (April 2013), Table 5.

3 Memo, T. Fox (EPA) to Regional Air Division Directors, "Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 Ambient Air Quality Standard," March 1, 2011, p. 12-16.

- *Size*: In order to affect the analysis, the candidate source or sources must have an impact 5 times as great as the project's impact at the same time and place as the project.

- *Location Relative to Impact Areas*: For short-term impacts, a non-project facility must be on the same side of the impact area as the project in order to have an impact at the same time and place as the project.

- *Location Relative to the Ambient Monitor*: Sources upwind of the ambient monitor are more likely to be adequately reflected in ambient monitoring data.

- *Operating Schedule*: The variability of source operation, and the frequency of relatively high emission operations, can affect the source's contribution to significant concentration gradients. In this case, high emissions from peaking power plants are likely to align with startup emissions from the project.

Based upon previous modeling, the extent of the project's significant NO_2 impact was determined to be 1.4 km for an annual emission rate of 92 TPY. The ratio of emissions-to-distance to the limit of significant impacts for the project (also referred to as Q/D) is 92/1.4 TPY/km, or 66. This ratio was used as a rough screening tool for estimating the potential impact of other facilities relative to the project. A facility with about the same emissions and about the same stack height can be expected to have similar impacts at a given distance. Because a non-project facility would need to have a much higher impact than the project in order to result in noncompliance, this screening level was a useful starting point for considering non-project facilities.

It should be noted that the distance over which a facility might have a significant impact for short-term standards (e.g., hourly NO_2) is determined by short-term maximum emission rates rather than annual emission rates. In fact, the ESPFM impact area is determined by the peak emission rates that occur during startup and shutdown of all three project turbines at the same time. District emission inventories report annual emission rates. If a candidate facility is operated such that the ratio of peak emissions to average emissions is much higher than for ESPFM, use of the ratio of annual emissions distance to screen for impact is less appropriate. For this reason, facilities that were screened out because the annual emission-to-distance ratio was 66 TPY/km or lower were examined to determine if there was a likelihood that short term emission rates would be much higher than annualized emission rates.

For the reasons discussed above, the applicant, after consulting with District staff, excluded United Airlines (Q/D = 2.6), the Playa del Rey Storage Facility (Q/D = 4.2), Air Liquide (Q/D = 8.5), and the LA City Dept. of Airports (Q/D = 11.4) from the supplemental analysis. The applicant included the Chevron refinery (Q/D = 516.1) due to the magnitude and proximity of its emissions, and the Scattergood Generating Station (Q/D = 25.7), due to its proximity; the fact that peak emissions are likely to occur at the same time as peak emissions from the project's sources; and recent permit activity.

Source Emissions and Stack Parameters – The District provided emission rates and stack parameters for Scattergood and Chevron for use in this analysis. The District recommended the use of EPA default values for in-stack NO_2/NOx ratios for all sources at Scattergood and Chevron.

Listed below are the operating assumptions used in developing the stack parameters and emission rates for each emissions unit and averaging period for the refined modeling analysis.

- Combined cycle turbine in startup, simple cycle turbines at base load and mild temperature;[4]
- All other non-project emission units at El Segundo Power were assumed to be operating at capacity.
- Stack parameters and emissions for all other emission units were specified by the District.

Emission rates and stack parameters used in the modeling are shown in Table 2.

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[4] The April AQIA used the more conservative operating scenario where all three turbines are in startup mode. The AQIA used that case because the AQIA also needed to demonstrate compliance with state ambient air quality standards, which are not to be exceeded. The present analysis, however, addresses only the NAAQS, which is statistically based. EPA guidance states "Given the implications of the probabilistic form of the 1-hour NO2 NAAQS discussed above, we are concerned that assuming continuous operations for intermittent emissions would effectively impose an additional level of stringency beyond that intended by the level of the standard itself. As a result, we feel that it would be inappropriate to implement the 1-hour NO2 standard in such a manner and recommend that compliance demonstrations for the 1-hour NO2 NAAQS be based on emission scenarios that can logically be assumed to be relatively continuous or which occur frequently enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations. EPA believes that existing modeling guidelines provide sufficient discretion for reviewing authorities to exclude certain types of intermittent emissions from compliance demonstrations for the 1-hour NO2 standard under these circumstances." (Tyler Fox, *Additional Clarification Regarding Application of Appendix W Modeling Guidance for the 1-hour NO_2 National Ambient Air Quality Standard*, March 1, 2011) The present analysis is based on the operating scenario where Unit 9 is in startup and Units 11 and 12 are operating at full capacity. This scenario was selected because (a) turbine startups are expected to occur frequently enough to contribute significantly to the annual distribution of daily maximum 1-hour concentrations; (b) simultaneous startup of all three turbines is expected to be a rare event; and (c) startup of Unit 9 results in higher project impacts than startup of Units 11 and 12.

Table 2
Emission Rates and Stack Parameters for Modeling

Facility	Source Type	ID	X (m)	Y (m)	Elevation (m)	Emission Rate (lb/hr)	Release Height (m)	Diameter (m)	Exit Velocity (m/s)	Exit Temp (K)	Sigma Y (m)	Sigma Z (m)	Length (m)
Scattergood	POINT	80007501	368058.3	3754068.0	10.4	6.89	91.4	9.14	3.88	300			
Scattergood	POINT	80007502	368053.6	3754130.0	11.3	27.5	64.92	5.79	19.45	366			
Scattergood	POINT	80007503	368145.4	3754122.1	31.7	17.9	30.48	4.11	28.75	661			
Scattergood	POINT	80007504	368194.2	3754004.0	31.7	17.9	30.48	4.11	28.75	661			
Chevron	POINT	80003001	369663.0	3752777.8	31.6	3.856	42.67	2.38	8.86	581			
Chevron	POINT	80003002	369187.3	3753481.4	35.1	5.5	22.25	2.82	1.90	417			
Chevron	POINT	80003003	369655.0	3753546.0	31.1	6.16	24.99	1.42	2.01	664			
Chevron	POINT	80003004	369655.0	3753538.0	31.1	1.928	24.99	1.51	1.06	633			
Chevron	POINT	80003005	370172.9	3752652.8	32.6	3.856	30.48	1.32	2.22	866			
Chevron	POINT	80003006	369507.0	3753619.9	31.1	90.128	47.24	3.05	8.22	641			
Chevron	POINT	80003007	369765.9	3753670.2	33.8	1.23	36.58	1.45	0.71	535			
Chevron	POINT	80003008	369510.1	3753357.6	31.7	6.018	30.48	2.90	6.74	483			
Chevron	POINT	80003009	369492.7	3753435.3	31.9	2.82	36.27	1.36	3.88	599			
Chevron	POINT	80003010	369756.0	3753596.0	32	14.28	52.12	2.21	1.34	469			
Chevron	POINT	80003011	369760.0	3753622.0	31.5	6.17	33.53	1.33	2.50	509			
Chevron	POINT	80003012	368993.0	3753605.0	35.9	1.928	35.66	1.55	2.72	516			
Chevron	POINT	80003013	368892.6	3753657.6	36.9	1.938	58.52	3.96	1.38	553			
Chevron	POINT	80003014	369835.0	3753077.6	31.4	1.69	39.62	1.22	4.08	745			
Chevron	POINT	80003015	370224.5	3752674.3	32.4	3.53	56.39	2.59	8.15	648			
Chevron	POINT	80003016	370072.0	3752651.2	37.3	1.928	31.09	1.33	0.85	746			
Chevron	POINT	80003017	370055.4	3752650.9	38.7	1.528	31.09	1.28	1.34	715			
Chevron	POINT	80003018	369641.5	3752869.9	29.6	5.784	44.5	2.15	14.07	551			
Chevron	POINT	80003019	370328.3	3752492.9	41.7	11.129	36.58	1.91	2.55	616			
Chevron	POINT	80003020	370327.7	3752466.6	43.4	12.187	36.58	1.91	2.72	622			
Chevron	POINT	80003021	370328.3	3752549.7	35.9	6.642	39.32	1.91	1.64	561			
Chevron	POINT	80003022	370328.0	3752522.1	39	6.467	39.32	1.91	1.29	561			
Chevron	POINT	80003023	368400.0	3753385.0	37	1.928	10.97	1.04	8.71	331			
Chevron	POINT	80003024	370241.6	3752622.5	32	14.63	54.86	3.93	2.69	583			
Chevron	POINT	80003025	370244.4	3752642.6	31.9	5.92	54.86	3.10	2.06	533			
Chevron	POINT	80003026	369334.5	3753599.8	27.6	0.25	4.57	0.91	0.36	1172			
Chevron	POINT	80003027	368724.2	3752717.8	40.6	0.25	4.57	0.84	0.58	1150			
Chevron	POINT	80003028	370542.2	3753131.9	30.8	0.03	4.57	0.34	1.01	1070			
Chevron	POINT	80003029	369420.9	3753391.8	30.8	1.473	10.67	0.81	0.89	1060			
Chevron	POINT	80003030	369901.7	3752365.8	29.6	43.8	4.27	0.10	23.76	778			
Chevron	POINT	80003031	369219.6	3753437.5	35.1	2.11	2.13	0.10	177.42	711			
Chevron	POINT	80003032	369515.0	3753144.0	35	3.856	45.73	1.80	2.60	550			
Chevron	POINT	80003033	369543.0	3753144.0	34	3.856	45.73	1.80	2.10	550			
Chevron	POINT	80003034	369724.0	3753182.0	32	3.856	46.04	2.50	1.60	553			
Chevron	POINT	80003035	368058.3	3754068.0	11.15	42.6	91.44	9.14	8.25	735			
Chevron	POINT	80003036	368079.8	3753961.4	1.22	41.18	100.58	7.12	8.25	735			
Chevron	VOLUME	80003037	369494.1	3753385.2	39.3	15.9	2.13				27.97	0.93	120.271
ESPFM	POINT	Unit 9, SU[1]	368282.9	3753052.8	6.1	81.8	64.008	6.10	12.41	371			
ESPFM	POINT	Unit 11	368301.2	3753007.8	6.1	4.8	45.72	3.38	36.84	705			
ESPFM	POINT	Unit 12	368303.6	3753001.8	6.1	4.8	45.72	3.38	36.84	705			
ESP	POINT	Unit 5	368191.9	3753219.5	6.1	8.4	64	6.10	14.20	441			
ESP	POINT	Unit 7	368224.2	3753149.1	6.1	8.4	64	6.10	14.20	441			

Note 1 Unit 9 in startup

Modeling Results and Analysis

A screening approach was used to evaluate cumulative impacts. Modeled impacts from project sources and the non-project sources described above were added to the maximum measured hourly average ambient background concentration from three years of continuous monitoring. Because the maximum measured value was used (rather than matching modeled concentrations with the corresponding measured concentrations on an hourly basis), the calculated impact will always be greater than or equal to the expected impact.

Table 3 shows the worst-case impacts from the modeled sources. Each column shows the maximum modeled impact using meteorological data from the indicated calendar year. Emissions from the Chevron combustion sources, which are distributed along, and on both sides of, the eastern edge of the project impact area, clearly dominate the results.

Table 3
Modeling Results

	Maximum NO_2 Concentration, $\mu g/m^3$				
Combustion Sources	2005	2006	2007	2008	2009
ESP Unit 9	13.1	12.7	13.2	13.0	13.2
ESP Units 11 &12	1.4	1.3	1.3	1.6	1.3
ESP Units 5 & 7	1.8	1.7	1.8	1.9	1.8
All 5 ESP units	14.6	14.2	14.7	14.6	14.7
Chevron	691.1	546.5	688.4	523.3	709.8
LADWP Scattergood	5.7	5.6	5.7	5.7	5.9
All sources	691.1	546.5	688.4	525.0	709.8
Background	109.6	109.6	109.6	109.6	109.6
All sources + Background	753.1	618.7	750.5	618.0	771.8

NOTES: Modeling results based on the emissions and stack parameters shown in Table 2. Table 3 shows maximum result in the project impact area for each individual category of combustion source for each calendar year of meteorological data. As a result, the overall maximum impacts ("All Sources", "All Sources + Background") are less than the sum of individual maximum impacts.

Table 3 shows total potential impacts well above the standard of 188 $\mu g/m^3$. Violations of the standard[5] are conservatively predicted, even though all of the Chevron emission

[5] The 1-hour NO_2 NAAQS is statistically based. A violation occurs when the 3-year average of the 98th percentile of the highest daily 1-hour average (eighth highest maximum daily 1-hour value, for a full data set) is above the 188 $\mu g/m^3$ standard.

sources are existing and no violations of the 1-hour NO_2 NAAQS have ever been recorded at the nearby LAX monitoring station.

A project's impact causes or contributes to an exceedance of the standard if, at the time and place of the exceedance, the project's impact is above the Significant Impact Level.[6] In order to determine whether project impacts cause or contribute to an exceedance of the standard, the model results were examined at every time and place where the standard was exceeded (i.e., at every receptor at which the standard was exceeded, for every hour during which the standard was exceeded at that receptor).

The project's impact was never above the SIL at a time and place the standard was exceeded.

Because the theoretical (never observed) exceedances within the project's significant impact area are associated with Chevron's combustion sources, the only time that they are modeled to occur is when the wind is from the east; most of the receptors at which these theoretical exceedances are modeled are on the eastern side of the impact area, close to Chevron. However, the project's impacts at those times are on the western side of the impact area, relatively farther from the Chevron sources, and at different receptors.

During the few hours when the theoretical impacts from Chevron's emission sources result in a predicted exceedance on the western side of the impact area, the project's impacts are below the SIL at those locations.

Conclusion

Because the project's predicted impact is never above the SIL at a time and place the standard is exceeded, the project will not cause or contribute to an exceedance of the 1-hour NO_2 NAAQS.

[6] 75 FR 64891. "Accordingly, a source that demonstrates that the projected ambient impact of its proposed emissions increase does not exceed the SIL for that pollutant at a location where a NAAQS or increment violation occurs is not considered to cause or contribute to that violation."

Figure 1
Project 1-hour NO_2 Impact Area Above the SIL – ESPFM Sources Only

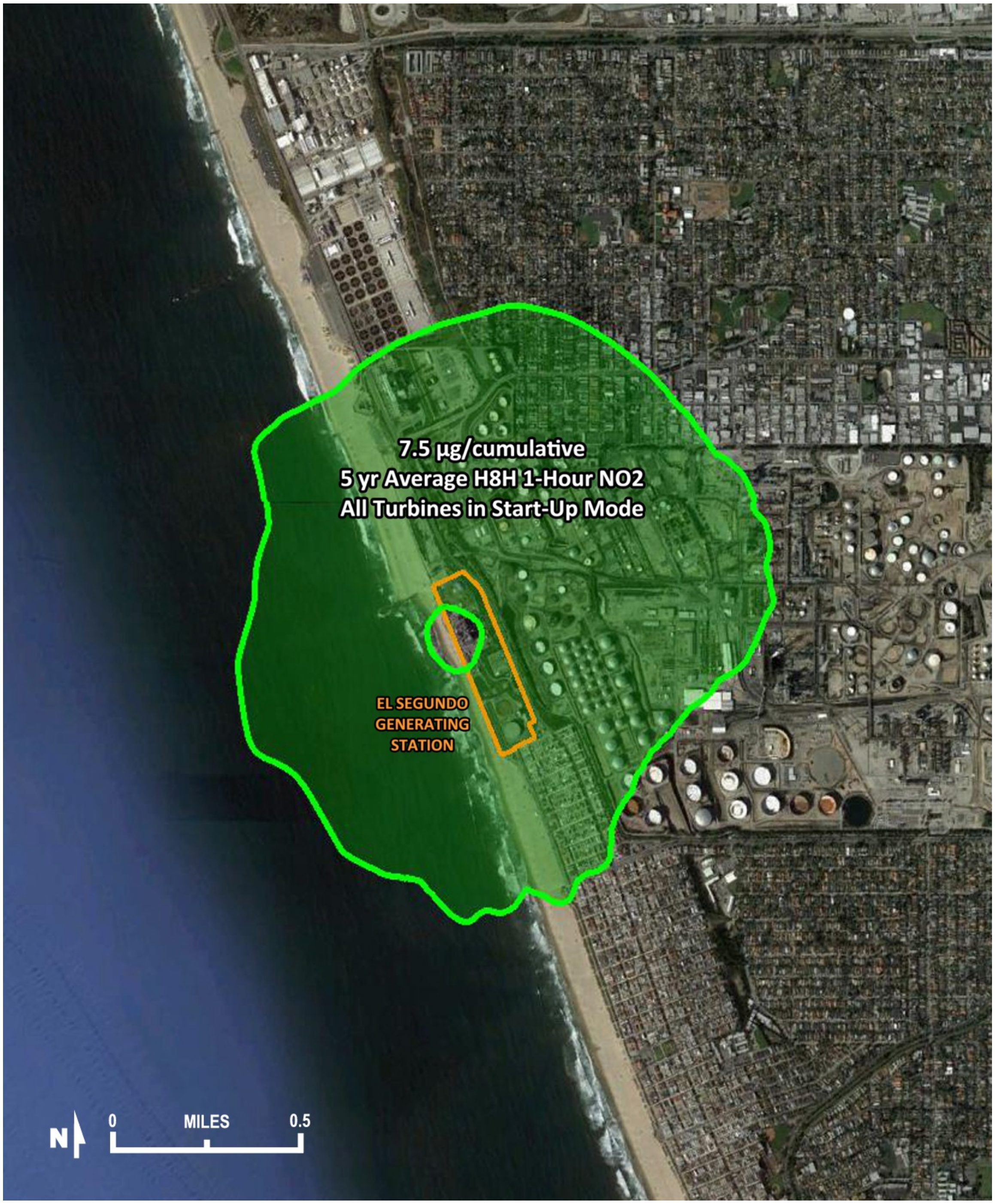

Figure 2
Facilities Considered for Supplemental Modeling