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August 4, 2015

John Chillerni, President
NRG Oxnard Energy Center, LLC
100 California Street, Suite 650
San Francisco, California 94111

Re: Puente Power Project (15-AFC-01); Data Requests, Set 1 (Nos. 1-46)

Dear Mr. Chillerni:

Pursuant to Title 20, California Code of Regulations, section 1716(a), the City of Oxnard 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, 3) assess whether the project will result in significant environmental impacts, 4) assess whether the facilities will be constructed and operated in a safe, efficient and reliable manner, and 5) assess potential mitigation measures.

In this Set 1, Data Requests are being made in the technical area of Air Quality. Written responses to the enclosed data requests are due to the City staff on or before September 3, 2015.

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 City and me within 20 days of receipt of this notice. 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 17.16(f)).

If you have any questions regarding the enclosed data requests, please call me at (415) 552-7272.

Very truly yours,

SHUTE, MIHALY & WEINBERGER LLP

Ellison Folk

Encl.

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STATE OF CALIFORNIA

Energy Resources
Conservation and Development Commission

In the matter of: Application for Certification of the **PUENTE POWER PROJECT**	DOCKET NO. 15-AFC-01 **CITY OF OXNARD'S DATA REQUESTS, SET 1**

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AIR QUALITY

Background: SUPPORTING INFORMATION

The AFC, Appendix C-2, provides emission estimates for operation of the Project; Appendix C-6 provides emission estimates for construction of the Project; and Appendix C-8 provides emission estimates for non-criteria pollutant emissions. These estimates are contained in a large number of Excel spreadsheets presented in pdf format, thus obscuring the underlying calculations. The calculations, which sometimes extend over several linked spreadsheets, are difficult to follow without access to the underlying calculations. While most spreadsheets can be reverse engineered, presuming all assumptions are documented, this is intensely time consuming. Interested parties should not bear this burden when the information is readily available to the applicant. Further, this information has been frequently provided on request by applicants in other CEC proceedings. Finally, some calculations cannot be verified because not all inputs are shown in the printouts.

Data Request 1: CEC staff in Data Request Set 1, Data Request 2, requested "original spreadsheet files" for Appendix C-2 and C-8. We request all information provided in response to CEC Data Request 2. In addition, to the extent not covered by CEC Data Request 2, please provide all Excel spreadsheets used to support the emission estimates in the AFC, Appendices C-2, C-6, and C-8, in their native electronic format and unprotected (i.e., showing formulas), if necessary under confidential cover and/or pass-word protected. It is neither unusual nor unreasonable for interveners to request and for the Applicant to make available Excel spreadsheets containing emission estimates and calculations. See, for example, the following CEC proceedings: Victorville 2 Solar Gas-Hybrid Power Project:[1] Blythe Solar Power Project;[2] Palen Solar Power Project[3]; Bullard Energy Center[4]; and Riverside Energy Resource Center.[5] Further, the Commission ruled on Intervener Sierra Club's motion to compel data responses in the Hydrogen Energy California case that "[i]t makes sense to us that the underlying data and formulae would

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[1] Construction and operational criteria pollutant and TAC emission estimates were provided on CD as password-protected Excel spreadsheets in response to California Unions for Reliable Energy ("CURE") data requests.

[2] Operational emissions were provided as unprotected Excel spreadsheets in response to CEC staff data requests.

[3] Construction and operational emission estimates were provided as unprotected Excel spreadsheets in response to CEC staff data

[4] Operational emission estimates were provided as unprotected Excel spreadsheets in response to CEC staff data requests.

[5] Estimates for startup, shutdown, maintenance emissions from turbines and emissions estimates for on-road vehicle travel were provide as unprotected Excel spreadsheets in response to CURE data requests.

be useful to Sierra Club in undertaking such verification" and granted Sierra Club's motion to compel the data request requesting "all Excel spreadsheets used to support the emission estimates in the AFC…in the native electronic format and unprotected (i.e. showing formulas)…".[6]

Data Request 2: Please provide all responses and data produced in response to staff and intervener data requests for all issue areas.

Data Request 3: Please provide a copy of the NRG Generation Unit Repowering request submitted to CAISO on December 13, 2013; additional supporting materials submitted on January 9, 2014; new data submitted on January 27, 2015; and all related information and correspondence. RDA at 97.

Data Request 4: Please provide a copy of RAPA bid and all related documents including correspondence with SCE.

Background: PM2.5/PM10 EMISSIONS

The AFC estimates a net increase in PM2.5 emissions of 9.8 ton/yr. AFC, Table 4.1-22. The PSD significance threshold for PM2.5 is 10 ton/yr. AFC, Table 4.1-11 & 40 CFR 52.21 (b)(1)(23). If PM2.5 emissions equal or exceed 10 ton/yr, Prevention of Significant Deterioration (PSD) review is required for this pollutant and thus PSD review for greenhouse gas emissions (GHG) is triggered. The PM2.5 emissions are underestimated and are not adequately supported. When these errors are corrected, PSD review is triggered for PM2.5.

Data Request 5: The PM2.5/PM10 emissions from the new gas turbine during normal operation (10.6 lb/hr) are based on a letter from the turbine vendor. AFC, Appx. C-2, pdf 38. Please provide the following information on this letter: (1) Is this a formal vendor guarantee for the life of the turbine or does it only apply under new and clean conditions? (2) If the subject letter is not the formal vendor guarantee, please provide the formal vendor guarantee for emissions from the new turbine for all criteria pollutants; (3) Do the PM10 and PM2.5 emission rates include both filterable and condensable particulate matter? If not, please justify any exclusion. (4) Please provide stack tests conducted on GE 7HA.01 gas turbines to confirm the accuracy of the PM10 and PM2.5 emission rate of 10.6 lb/hr.

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[6] Committee Ruling on Intervener Sierra Club's Motion to Compel Data Responses, Docket 08-AFC-8A, November 2, 2012, See: http://docketpublic.energy.ca.gov/PublicDocuments/Regulatory/08-AFC-8A/2012/NOV/TN%2068326%2011-02-12%20Committee%20Ruling%20on%20Intervenor%20Sierra%20Club%27s%20Motion%20to%20Compel%20Data%20Responses.pdf.

Data Request 6: The BACT analysis concludes that the lowest PM10 emission rate permitted for simple cycle turbines is 5.0 lb/hr, which scales to this project, based on heat input, to 13.4 lb/hr. AFC, Appx. C-3, p. 14. Please provide all evidence that supports the claim that the GE7HA.01 turbine can meet the lower PM10/PM2.5 emission rate of 10.6 lb/hr used in emission calculations.

Data Request 7: The AFC should have rounded up the increase in PM2.5 emissions of 9.8 ton/yr to the same number of significant figures as the factor with the least number of significant figures in its calculations and in the significance threshold, which is one. The properly rounded increase in PM2.5 emissions is 10 ton/yr, which equals the PSD significance threshold of 10 ton/yr. Please identify and support all justifications for not rounding up PM2.5 emissions to 10 ton/yr.

Data Request 8: The PM2.5/PM10 emission calculations assume 9.00 lbs/hr during GT startup and 9.98 lb/hr during GT shutdowns. AFC, Appx. C-2, pdf 53, 54, 56. These emission rates are unsupported. Please provide a vendor guarantee, stack test, or other reliable primary data that supports these startup/shutdown emission rates.

Data Request 9: The PM2.5/PM10 emissions from the new diesel generator are based EPA nonroad compression-ignition engine exhaust emission standards for model year 2015 (0.04 g/kW-hr, included in the AFC, Appx. C-2 at pdf 50 and highlighted in yellow. The footnote to this emission factor indicates "[a]t least 50 percent of a manufacturer's engine production must meet these standards during each year of the phase in. Engines not meeting these standards must meet the applicable phase-out standards." The AFC contains no guarantee that the subject diesel generator would be a 2015 model that meets this standard for PM2.5/PM10 or any other pollutant. Please provide a commitment as a mitigation measure to be incorporated in the AFC that the new diesel generator will meet a PM2.5/PM10 emission rate of 0.04 g/kW-hr.

Data Request 10: The PM2.5/PM10 emission factor used to estimate PM2.5/PM10 emissions from the new diesel generator is 0.02 g/bhp-hr. AFC, Appx. C-2, pdf 40. However, the emission factor reported in the attached non-road Diesel EPA Tier 4 certification standard, at Appx. C-2, pdf 50, is 0.04 g/kwh, which converts to 0.03 g/bhp-hr. Please explain the origin of and support the 0.02 g/bhp-hr emission factor used to calculate PM2.5/PM10 emissions from the new diesel generator.

Data Request 11: Appendix C-2, pdf 57 to 64, contains a netting analysis for PM10/PM2.5. The baseline PM10/PM2.5 emissions, occurring in 2012 to 2013, were calculated using VCAPCD inventory emission factors. Appx. C-2, pdf 57. Please provide stack tests or other reliable primary data sources that support these emission factors.

Data Request 12: The netting analysis for all criteria pollutants is based on the average emissions occurring in 2012 and 2013. AFC, pp. 4.1-21Appx. C-2, pdf 63. The AFC

asserts without any support that "[t]his 2-year period was determined to be the most representative because it best reflects the current market conditions of the electricity system in the project area." The average fuel use in 2012 and 2013 was higher than in any other two year period within the six year look-back period of 2009 to 2014 and higher even then the current year. The selection of these two high years inflates the baseline, resulting in a lower net emission increase than if, for example, 2010 to 2011 were used. If any other two year period in the look-back period were used, the net increase in PM2.5 emissions would be significant, assuming all other AFC assumptions. Please justify the choice of 2012 to 2013 as the baseline years for PM2.5/PM10. Your justification should include a discussion of "current market conditions" that support your choice, explained within the framework of PSD.

Data Request 13: If warranted by any of your responses to data requests 5 to 12, please conduct a PSD analysis for PM2.5 emissions.

Data Request 14: The PM2.5/PM10 emission calculations do not include malfunction emissions. Please revise the emission calculations to include an estimate of malfunction emissions.

Data Request 15: The AFC, Table 4.1-23, reports a net emission change for PM2.5/PM10 of -28.7 ton/yr. The supporting emission calculations in Appendix C-2 report a net emission change for PM2.5/PM10 of +9.8 ton/yr. AFC, Appx. C-2, pdf 64. Please resolve this discrepancy and provide corrected emission tables.

Data Request 16: The AFC indicates that the Applicant will review options to mitigate the net emission increase for ROC, PM10, and PM2.5. AFC, p. 4.1-41. Please identify the methods that will be used to mitigate these emissions.

Background: NOx EMISSIONS

The AFC estimates a net increase in NOx emissions of 31.2 ton/yr. AFC, Table 4.1-22. The PSD significance threshold for NOx is 40 ton/yr. AFC, Table 4.1-11 and 40 CFR 52.21 (b)(1)(23). If NOx emissions equal or exceed 40 ton/yr, Prevention of Significant Deterioration (PSD) review is required for this pollutant. The NOx emissions are underestimated and are not adequately supported. When the omissions and underestimates are corrected, NOx emissions likely will equal or exceed 40 ton/yr, thus triggering PSD review for NOx.

The AFC indicates that during a CTG startup, there are approximately 30 minutes with elevated emissions (emissions higher than during normal operation), followed by 30 minutes of normal operating emissions. Similarly, the AFC indicates that during a CTG shutdown, there are approximately 48 minutes of normal operation, followed by 12 minutes with elevated emissions. AFC, p. 4.1-19. The AFC also reports 98.7 lb/hr of NOx during CTG startups, 22.7 lb/hr of NOx during shutdowns, and 23.4 lb/hr during

normal operation. AFC, Tables 4.1-18 and 4.1-19. These estimates are internally inconsistent.

Data Request 17: The emission calculations assume that hourly NOx shutdown emissions (22.7 lb/hr) are less than normal operating emissions (23.4 lb/hr). AFC, Table 4.1-18. This is technically infeasible as shutdown emissions include 12 minutes of higher than normal operating emissions (23.4 lb/hr) plus 48 minutes of normal operating emissions (23.4 lb/hr). Thus, there is an error in either the emission calculations or the statement of facts governing them. Our calculations indicate shutdown emissions should be at least 54.5 lb/hr,[7] which increases the net increase in NOx emission to 39 ton/yr, just 1 ton/yr shy of the NOx PSD significance threshold. Please check the NOx shutdown emissions and revise the NOx emission calculations, including the NOx netting analysis, to correct any errors.

Data Request 18: The AFC fails to disclose the emission rate assumed during the 30 minutes of elevated emissions during startup and the 12 minutes of elevated emissions during shutdown, or the source of these estimates.[8] Please disclose the assumed startup/shutdown elevated emission rates/concentrations and provide vendor guaranteed startup/shutdown emission curves (e.g., NOx in ppm versus load/time since start of startup and shutdown) to support these assumptions.

Data Request 19: The PSD netting analysis for NOx used baseline years of 2012 to 2013, during which NOx emissions from existing U1 and U2 averaged 4.9 ton/yr. AFC, Table C-2.14, pdf 64. However, if any other two year period in the six year look-back period from 2009 to 2014 were used, the baseline emissions would be much smaller, ranging from 0.66 to 2.17 ton/yr. AFC, Appx. C-2, Table C-2.13a, pdf 58. The use of any other two year period, coupled with the error in the shutdown NOx emissions discussed in Data Request 18, would result in a net increase in NOx emissions, pursuant to 40 CFR 52.21.b.23.i, that exceeds the PSD significance threshold for NOx of 40 ton/yr, triggering federal PSD review for NOx and thus, federal PSD review for GHG. The AFC asserts without any support that "[t]his 2-year period was determined to be the most representative because it best reflects the current market conditions of the electricity system in the project area." "Current market conditions" is not consistent with the concept of "baseline" prior to the start of construction under 40 CFR 52.21. Please justify the choice of 2012 to 2013 as the baseline years for NOx. Your justification

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[7] The elevated NOx emission rate assumed during startup: (0.5 hr)(23.36 lb/hr) + (0.5 hr)x = 98.68 lb/hr, where x is the emission rate in lb/hr assumed during the elevated portion of a startup. Solving this equation, x=174 lb/hr during the elevated portion of the startup. Thus, the startup emission rate of 98.68 lb/hr assumes 174 lb/hr of NOx emissions during the elevated portion of the startup.

[8] Our calculations indicate that the 30 minutes of elevated emissions during startup release 174 lb/hr.

should include a discussion of "current market conditions" as they relate to 40 CFR 52.21.

Data Request 20: If warranted by any of your responses to Data Requests 17 to 19, please conduct a PSD analysis for NOx emissions.

Data Request 21: Startup and shutdown emissions comprise about 35% of the total annual NOx emissions. Please explain how compliance with startup and shutdown emissions rates will be assured during facility operation. Will CEMS and/or stack tests be used to demonstrate compliance?

Data Request 22: The NOx emission calculations do not include malfunction emissions. Please revise the emission calculations to include an estimate of malfunction emissions.

Data Request 23: Please provide the raw NOx CEMS data for existing Units 1 and 2 relied on to estimate NOx emissions for the lookback period 2009 to 2014 (AFC, Table C-2.13a, pdf 58) in an unlocked Excel spreadsheet, including firing rate in MMBtu/hr and MW generated.

Data Request 24: The analysis to determine if a project is a major modification under VCAPCD Rule 26.1 concludes that 40.5 ton/yr of NOx offsets are required and that the applicant controls 52.7 tons/yr of offsets. AFC, Appx. C-2, Table C-2.15, pdf 65. The AFC also indicates the applicant has purchased sufficient offsets for the project. AFC, p. 4.1-41. Please provide copies of the offset certificates and supporting files for all NOx offsets you propose to surrender to meet VCAPCD Rule 26.1.

Data Request 25: The BACT analysis identifies operating practices to minimize NOx, CO and VOC emissions during startup and shutdown and concludes these constitute BACT for these periods. However, these periods are excluded from the BACT emission limits. AFC, Appx. C-3, pp. 18-19, Table C-3.4. Please adopt these practices as mitigation measures and explain how compliance with these practices will be confirmed.

Background: Construction and Decommissioning Emissions

The AFC, Appendix C-6, includes construction emissions and air quality modeling of these emissions. However, the emissions are inadequately supported, the significance of the emissions are not discussed, and mitigation is not proposed for significant impacts.

Data Request 26: Construction and decommissioning emissions were estimated using the CalEEMod model. AFC, Appendix C-6, p. C-6-2. The specific version of this model is not identified. This model has been modified several times, including three releases in 2013: 2013.2, 2013.2.1, and 2013.2. These versions incorporated revised emission factors for entrained fugitive road dust emissions; incorporated the CARB's EMFAC2011 and OFFROAD databases; added nitrous oxide (N_2O) calculations from off-road and on-road sources; corrected the unmitigated fugitive dust emissions of PM10

from haul trucks, updated climate zone options; and modified the running loss equation for emissions of ROG from on-road vehicles to match emission factors (per vehicle trip instead of per mile driven).[9] Which version is relied on in the calculations in Appendix C-6? Please provide all CalEEMod model inputs and outputs in original electronic format if not otherwise provided in response to these data requests.

Data Request 27: The AFC refers the reader to Appendix C-6 for construction mitigation. AFC, p. 4.1-41. Appendix C-6, Sec. C-6.2, lists 13 "typical mitigation measures," which were assumed to be in place in the emission calculations. AFC, p. C-6-3 to C-6-5. However, all of these measures mitigate only particulate matter emissions, neglecting potentially significant NOx impacts. See Data Request 17, 19. Further, the AFC fails to specifically commit to implementing any of these mitigation measures, which were assumed to be in place in the emission calculations. Please expand the construction emission analysis to specifically commit to implement these "typical mitigation measures" plus any additional measures required to reduce NOx and PM10/PM2.5 impacts to a less than significant level.

Data Request 28: The AFC fails to make any findings as to the significance of the "mitigated" construction emissions, i.e., are the mitigated emissions still significant, requiring additional mitigation? Appendix C-6 includes ambient air quality modeling for construction emissions, but no conclusions are drawn from these analyses nor mitigation proposed, even though they are significant. See Data Request 39. Please discuss the significance of construction emissions, based either on the ambient air quality monitoring or established significance thresholds for construction emissions, such as those adopted by Ventura County and other nearby air pollution control districts.[10] The daily construction emissions reported in AFC, Table C-6-1, exceed the NOx construction significance thresholds of 24 to 25 lb/day established by Ventura, Shasta, Butte and Colusa counties and the PM10 significance threshold of 2.5 lb/day established by nearby San Luis Obispo County Air Pollution Control District. Thus, mitigated NOx and PM10 emissions are significant, requiring mitigation. This is consistent with the results of the air quality modelling. Thus, construction impacts are significant and must be mitigated. Please revise the AFC to evaluate the significance of the "mitigated" construction emissions and propose additional mitigation.

Data Request 29: The construction emission calculations assume that EPA Tier 4i engines would be used for the larger equipment (>75 hp) and EPA Tier 4 engines for the smaller equipment (<75 hp). AFC, p. C-6-4. Please specify this as a mitigation measure

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[9] CalEEMod, List of Revisions; Available at: http://www.aqmd.gov/docs/default-source/caleemod/Model/2013.2.2/revisions-2013-2-2.pdf?sfvrsn=0.

[10] BAAQMD, California Air District CEQA Significance Thresholds, Appendix A, Available at: http://www.baaqmd.gov/~/media/Files/Planning%20and%20Research/CEQA/Thresholds_Report_Revised_Appendices_082309.ashx?la=en.

to assure it is implemented.

Data Request 30: Unpaved/paved surface travel emissions were calculated based on CalEEMod statewide average silt content of 8.5% and silt loading of 0.1 g/m2. AFC, p. C-6-3. Please provide site-specific, measured values for silt content and silt loading.

Data Request 31: The AFC indicates that the input to the CalEEMod model – the number, type, and engine rating of construction equipment – were based on information provided by the owner's engineer. AFC, p. C-6-4. Please provide all correspondence containing and/or relating to this information.

Background: Ambient Air Quality Modeling

The AFC includes ambient air quality modeling results for normal operation (Table 4.1-27, 4.1-29), the commissioning period (Table 4.1-30), for a comparison to PSD significance thresholds (Table 4.1-31), and for construction (Table C-6-5). These results indicate that the Project would result in significant NOx and PM10 ambient air quality impacts that are not acknowledged or mitigated in the AFC.

Data Request 32: The AFC concludes that "during normal operation, the results indicate that P3 would not cause or contribute to violations of state or federal air quality standards, with the exception of the 24-hour and annual state PM10 standards [Table 4.1-29]." The AFC then dismisses this significant impact, arguing "existing background concentrations already exceed state standards." AFC, p. 4.1-28. The significance test is "cause or contribute to violations of state or federal air quality standards." The Project clearly contributes to violations, which is a significant impact. Please explain how this significant impact will be mitigated.

Data Request 33: The AFC concludes that "during commissioning activities P3 would not cause or contribute to violations of state or federal air quality standards, with the exception of the 24-hour state PM10 standard [Table 4.1-30]." The AFC again dismisses this significant impact, arguing "existing background concentrations already exceed state standards." AFC, p. 4.1-29. The significance test is "cause or contribute to violations of state or federal air quality standards." The Project clearly contributes to violations, which is a significant impact. Please explain how this significant impact will be mitigated.

Data Request 34: The AFC argues that the "maximum project impact, combined with maximum background levels, are below the most stringent state and federal ambient air quality standards.." AFC, p. 4.1-29. However, AFC Tables 4.1-29 (normal operation) and Table 4.1-30 (commissioning), for both new equipment and new equipment plus Unit 3, contain errors for the 98th percentile values. All of the sums are wrong, and much higher than reported. For example, Table 4.1-29 shows the maximum 98th percentile NOx impact is 23.9 ug/m3 and the background is 67.8 ug/m3. The sum of these two equals 91.7 ug/m3, not 69.3 ug/m3, as shown in Table 4.1-29 for new equipment.

Similarly, Table 4.1-30 reports the maximum 98th percentile project impact is 70.5 ug/m3 and the background is 67.8 ug/m3. The sum of these two equals 138.3 ug/m3, not 95 ug/m3, as reported in Table 4.1-30 for new equipment. Thus, please check Tables 4.1-29 and 4.1-30 and provide corrected versions.

Data Request 35: The 98th percentile analysis of the 1-hour NOx standard in Table 4.1-29 adds the modelled impact to the background. The background was calculated as "the 3-year average of the 98th percentile, because that is the basis of the federal standard." AFC, Table 4.1-29, footnote a. This footnote is not adequate to determine whether the applicant followed established EPA guidance on making this determination.[11] Thus, please provide unlocked Excel spreadsheets or other calculations that disclose how the background 1-hour NOx concentration was determined for NOx impacts during normal operation, including all background ambient NOx data used in the calculations.

Data Request 36: The 98th percentile analysis of the 1-hour NOx standard in Table 4.1-30 adds the modelled impact to the background. The background was calculated as "the 98th percentile, because that is the basis of the federal language." AFC, Table 4.1-30, footnote a. This footnote differs from that on Table 4.1-29, excluding the "3-year average." This footnote is not adequate to determine whether the applicant followed established EPA guidance on making this determination, as set out in EPA 2014. Thus, please provide unlocked Excel spreadsheets or other calculations that disclose how the background 1-hour NOx concentration was determined for NOx impacts during the commissioning, including all background ambient NOx data used in the calculations.

Data Request 37: Table 4.1-29 and 4.1-30 indicate that the new equipment and new equipment plus Unit 3 would violate the state 24-hour and annual average PM10 standards. The AFC dismisses these significant impacts, arguing "existing background concentrations already exceed state standards." AFC, p. 4.1-28. However, Ventura County is nonattainment for the State standard. CEC Data Request 2. Elsewhere, the AFC correctly notes that "PSD source emissions must not cause or contribute to an exceedance of any ambient air quality standard." AFC, p. 4.1-8. As the modeled PM10 concentrations contribute to an existing exceedance of the state PM10 standards, this is a significant impact that cannot be dismissed just because the background concentrations already exceed state standards. Thus, please recommend mitigation to eliminate this significant impact.

Data Request 38: The construction air quality analysis in Table C-6-5 for the 98th percentile 1-hour NOx emissions contains a calculation error. The total impact should be 213.5 ug/m3 (145.7 + 67.8 = 213.5), which exceeds the federal NOx standard of 188

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[11] Memorandum from R. Chris Owen and Roger Brode, Re: Clarification on the Use of ARMOD Dispersion Modeling for Demonstrating Compliance with the NO2 National Ambient Air Quality Standard, September 30, 2014 (EPA 2014).

ug/m3. Thus, construction NOx air quality NOx impacts are significant and unmitigated. Please revise Table C-6-5 to correct this error, modify the AFC to disclose a significant NOx construction impact, and propose NOx mitigation.

Data Request 39: The construction air quality analysis in Table C-6-5 indicates that both the 24-hour (72.7 v. 50 ug/m3) and annual PM10 (24.6 v. 20 ug/m3) modeled maximum impacts exceed state PM10 standards. These exceedances are not identified as significant construction impacts or mitigated in the AFC. Thus, please revise the AFC to acknowledge these impacts and propose mitigation to reduce them to a less than significant level.

Data Request 40: Please provide all of the modeling input and output files in original electronic format, relied on to estimate operation and construction air quality impacts described in AFC Section 4.1.3.3 and Appendix C-6.

Data Request 41: The in-stack NO2/NOx ratios used to model NOx emissions from the new gas turbine were provided by the turbine vendor. AFC, p. A-9. Please provide all communications between the turbine vendor and the applicant regarding these in-stack ratios, including supporting test data to verify their accuracy for the GE7HA.01 turbine.

Background: GREENHOUSE GAS EMISSIONS

The AFC argues that PSD review does not apply for GHG emissions, as the net emission change is below PSD significance thresholds for all criteria pollutants, except GHG emissions. AFC, p. 4.1-9. However, the Project triggers federal PSD review for both PM2.5 and NOx when the errors in the AFC's analysis are corrected. Thus, PSD review is also triggered for greenhouse gas emissions (GHG) as they exceed the significance threshold of 75,000 ton/yr (AFC, Table 4.1-11) by a significant amount (340,557 MT/yr). AFC, Table C-2.16.

Data Request 42: Please conduct a top down BACT analysis for GHG emissions that includes energy storage, energy efficiency, and rapid-start combined cycle gas turbines.

Data Request 43: Please provide all analyses that considered rapid start combined cycle turbines and energy storage options as project alternatives.

Background: HAZARDOUS AIR POLLUTANT (HAP) EMISSIONS

The AFC estimated HAP emissions using outdated emission factors from AP-42 and the CARB CATEF database. AFC Table C-8.1. Since these emission factors were published, many stack tests have been conducted on gas turbines similar to the GE 7HA.1 proposed for the project.

Data Request 44: Please provide stack tests obtained from the turbine vendor and from air district files to support normal operation and startup/shutdown HAP emissions.

Data Request 45: Please provide all information that supports NRG's assertion that all major stationary sources owned or operated by NRG Energy, Inc. in California are in compliance with all applicable federal Clean Air Act emissions limitations and standards.

Data Request 46: Attachment 2 to the response to Data Adequacy indicates that not all air districts with units were copied. Please explain these omissions.

DATED: August 4, 2015

SHUTE, MIHALY & WEINBERGER LLP

By: s/ Ellison Folk
ELLISON FOLK
EDWARD T. SCHEXNAYDER

Attorneys for the CITY OF OXNARD

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