

Scattergood Generating Station

UNIT 3 REPOWERING PROJECT

FINAL ENVIRONMENTAL IMPACT REPORT

Prepared by:

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Scattergood Generating Station Unit 3 Repowering Project

Los Angeles, California



Los Angeles Department of Water and Power 111 North Hope Street Los Angeles, California 90012

August 2012

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AUGUST 2012 ii

CHAPTER 1: INTRODUCTION/OVERVIEW

1.1 ORGANIZATION OF THE DOCUMENT

This document is the Final Environmental Impact Report (EIR) for the Scattergood Generating Station Repowering Project (SGS Repowering Project). It includes the public review comments on the Draft EIR and the lead agency's response to those comments in accordance with the California Environmental Quality Act (CEQA) Guidelines Sections 15088, 15089, and 15132. The State Guidelines for the Implementation of CEQA (CEQA Guidelines) Section 15132 stipulates that the Final EIR must include the following elements:

- The Draft EIR or a revision of that draft.
- Comments and recommendations received on the Draft EIR either verbatim or in summary form.
- A list of persons, organizations, and public agencies that commented on the Draft EIR.
- The response of the lead agency to significant environmental points raised in the review and consultation process.
- Any other information added by the lead agency.

This Final EIR includes the following sections:

Chapter 1 provides an overview of the Final EIR and the project environmental review process, along with a summary of the project and alternatives.

Chapter 2 provides a list of comment letters received on the Draft EIR, copies of the written comments (numerically coded for reference), and the lead agency's responses to the comments.

Chapter 3 contains all corrections and additions to the Draft EIR, including Appendix H, which presents construction data used in project analysis. Any changes in the text are indicated by underline/strikeout revisions.

Appendix I includes the Mitigation Monitoring and Reporting Program (MMRP) required by CEQA Guidelines Section 15097.

The Draft EIR (both the primary volume and the appendices), as issued for public review on May 17, 2012, is incorporated herein by reference and not included in its entirety within this Final EIR. The Draft EIR is revised as shown in Chapter 3 of this Final EIR. Both this document and the Draft EIR, as revised in Chapter 3, comprise the Final EIR.

1.2 ENVIRONMENTAL REVIEW PROCESS

The Los Angeles Department of Water and Power (LADWP) issued a Notice of Preparation (NOP) of the Draft EIR on January 27, 2011 that formally announced the preparation of an environmental document for the SGS Repowering Project.

The NOP with a CEQA Initial Study was sent to city, county, and State agencies for notification and review, and the NOP was sent to approximately 200 residents, occupants, and landowners in the vicinity of Scattergood Generating Station. The NOP was also distributed to the State of California Governor's Office of Planning and Research (State Clearinghouse). In addition to a letter from the State Clearinghouse acknowledging compliance with review requirements, six comment letters were received during the scoping period, which began on January 27, 2011, and ended on February 25, 2011. A public scoping meeting was held on February 16, 2011 to allow an additional opportunity for public input. The

comments received during the NOP review process were considered by the lead agency in determining the scope of issues to be addressed in the Draft EIR.

Upon completion and finalization of the Draft EIR, it was circulated for the CEQA-mandated 45-day public review period, which began on May17, 2012, and ended on July2, 2012. In accordance with CEQA Guidelines Section 15085, a Notice of Completion was filed with the State Clearinghouse on May17, 2012. The Notice of Availability (NOA) of a Draft EIR was filed with the Los Angeles City and County Clerks on May 15, 2012 and May 16, 2012, respectively. The NOA was mailed to 23 agencies and organizations and 374 interested individuals. A legal notice of availability of the Draft EIR and public meetings was published in the *Los Angeles Times* on May 17, 2012.

The City of Los Angeles Board of Water and Power Commissioners (Board) will consider the SGS Repowering Project for approval at a regularly scheduled meeting (the specific date of the meeting is to be announced). The Board will hold a public hearing regarding the project and must certify the Final EIR prior to making any decision regarding the approval of the proposed project.

The Board will consider all information in the record, including the Draft EIR, comments, responses to comments, Findings of Fact, the MMRP, and any testimony, prior to making its decision. The Board will consider staff recommendations, including:

- A recommendation as to whether the Final EIR document has been completed in accordance with CEQA and should be certified by the Board;
- a recommendation regarding approval of the proposed project;
- a recommendation regarding adoption of the MMRP; and
- a recommendation regarding findings and possible conditions that may override significant environmental impacts of the project.

Should the Board approve the proposed project, LADWP will file a Notice of Determination (NOD) with the Los Angeles City Clerk and County Clerk and the State Clearinghouse. The filing of the NOD would complete the CEQA environmental review process.

1.3 SUMMARY OF PROPOSED PROJECT AND ALTERNATIVES

1.3.1 Proposed Project and Objectives

LADWP proposes to remove the existing SGS electrical generation Unit 3 from operation and replace its generating capacity with modern high-efficiency generation units constructed within the SGS property boundaries. Existing Unit 3 is a natural gas-fired steam boiler generation unit that was put into operation in 1974. It has a maximum gross generating capacity of 460 megawatts (MW).

Two potential generating system scenarios have been evaluated to replace Unit 3. Generation Scenario 1 would include a single combined cycle generating system (CCGS) with natural gas-fired combustion turbine generator paired with a heat recovery steam generator that would provide steam to drive a steam turbine generator to satisfy base load demand, and a simple cycle generating system consisting of two high-efficiency natural gas-fired combustion turbine generators to satisfy peak load demand. Scenario 2 would consist of two CCGSs, one to meet base load demand and one for peak load demand. The generation units that would replace Unit 3 under the proposed project would have a gross generating capacity of up to 590 MW, depending on which scenario is chosen.

As part of the proposed project, LADWP would also physically and permanently derate (i.e., reduce the generating capacity of) the existing SGS generation Unit 1 by the necessary amount such that there would be no increase in the total gross generating capacity of the station. The proposed project would also

include other improvements to various components of the generating station's facilities including, but not limited to, improvements to the generator cooling system, modernization of pollution control systems, improvements to the SGS water and wastewater system, switching facility improvements, and decommissioning and removal of Unit 3 stack and generating equipment.

SGS is located at 12700 Vista Del Mar in the City of Los Angeles. Primary access is obtained from Vista Del Mar on the western boundary of the SGS property. Secondary access is obtained from Grand Avenue, which separates the 65-acre SGS property into northern and southern parcels. Dockweiler State Beach is located to the west of SGS and Vista Del Mar. The approximately 130-acre Hyperion Treatment Plant, which also services the City of Los Angeles, is located to the north of SGS. Residential neighborhoods are located to the northeast and east of SGS, and a 1.5-square-mile Chevron Corporation oil refinery is located to the south of SGS.

The goal of the proposed project is to improve the LADWP generation system's efficiency, reliability, and flexibility. Specific objectives related to this goal include:

- Achieving a net reduction in air pollutant emissions at SGS by repowering pursuant to the May 2003 Settlement Agreement between LADWP and the South Coast Air Quality Management District (SCAQMD), as amended (September 2011)
- Reducing the consumption of natural gas relative to the amount of energy produced and, as a result, also reducing the production of greenhouse gases (GHGs)
- Providing for the energy demands of the City of Los Angeles
- Providing for base load generation requirements to help meet the basic demand for energy in the service area
- Facilitating the integration of intermittent renewable power resources into the LADWP generation system
- Increasing the reliability of the electrical power generation system
- Eliminating the need to use ocean water for cooling the proposed generation units, thereby reducing the use of ocean water for generator cooling at SGS

1.3.2 Environmental Impacts, Mitigation Measures and Residual Effects

The Draft EIR for the project was prepared in accordance with CEQA as amended (Public Resource Code Section 21000 et seq.) and the CEQA Guidelines as amended (California Code of Regulations Section 15000 et seq.). The Draft EIR complies with the requirements of CEQA Guidelines Sections 15080 through 15097 regarding the EIR process.

The Draft EIR analyzed potentially significant environmental impacts of the proposed project. Potential cumulative impacts, which are the effects of the proposed project in conjunction with past, present, and reasonably foreseeable future projects in the surrounding area, were also analyzed. The Draft EIR found that the proposed project would not result in significant environmental impacts that could not be reduced to less than significant with implementation of mitigation measures, with the exception of the temporary air quality impacts associated with project construction and commissioning.

Table 1-1 summarizes the potential impacts of the proposed project evaluated in detail in the Draft EIR, indicating the level of significance of the impacts based on the analysis conducted for the EIR, listing the feasible mitigation measures necessary to lessen significant impacts, and establishing the level of significance after application of mitigation measures. Table 1-1 incorporates changes to the wording of the mitigation measures implemented as part of the Final EIR preparation and in response to the comments received on the Draft EIR.

Based on the analysis, construction emissions for the proposed project and cumulative projects for nitrogen oxide (NO_x) are expected to remain significant following implementation of feasible mitigation measures. Though the impacts could be reduced somewhat by application of feasible measures, sufficient emission reductions could not be achieved so as to reduce the significant NOx emissions to less than significant.

The commissioning phase impacts of the proposed project would exceed the applicable volatile organic compound (VOC), carbon monoxide (CO), NOx, particles smaller than 10 microns in diameter (PM_{10}), and particles smaller than 2.5 microns in diameter ($PM_{2.5}$) significance thresholds and, therefore, generate significant VOC, CO, NOx, PM_{10} , and $PM_{2.5}$ impacts, both individually and cumulatively. No feasible mitigation measures are available to reduce these impacts to less than significant.

1.3.3 Alternatives

The Draft EIR identified and evaluated alternatives to the proposed project as a means to reduce or avoid the potentially significant environmental impacts. The alternatives evaluated are as follows:

Alternative 1 – No Project Alternative

Alternative 2 – Modify Existing Unit 3 (rather than decommissioning and demolition)

Alternative 3 – Construct New Units at Alternative Locations Outside of SGS

Alternative 4 – Develop Alternative Energy Sources

Alternative 5 – Purchase Additional Energy

Alternative 1 is technically feasible, but it would violate the formal Settlement Agreement between LADWP and SCAQMD, and it would not meet the majority of the proposed project objectives. It would also result in greater long-term impacts related to air quality and ocean water once-through cooling. Alternative 2 is likely infeasible because it would require the removal of SGS Unit 3 from service prior to the replacement of its generation capacity; furthermore, Alternative 2 would not generally meet the objectives of or reduce the impacts related to the proposed project. Alternative 3 is technically feasible and would attain most of the basic objectives of the proposed project; however, it may create similar or greater short-term construction-related impacts at an alternative location, and it would likely result in additional significant long-term impacts not created by the proposed project. Alternative 4 is considered essentially infeasible because its implementation has already been accounted for in the consideration of need for the proposed project. Alternative 5 is technically feasible, but it would only partially attain the project objectives, and it may result in environmental impacts that cannot be reasonably ascertained but may be similar or greater to those related to the proposed project.

In accordance with Section 15126.6(e)(2) of the CEQA Guidelines, the proposed project has been determined to be the environmentally superior alternative because it would result in the least impact to the physical environment that can be reasonably ascertained. Table 1-2 provides a summary of the alternatives to the proposed project.

Table 1-1. Summary of Impacts and Mitigation Measures

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
Aesthetics/Visual Resources			
VIS-1. The proposed project would not have a	Less than significant impact	None	N/A
substantial adverse effect on a scenic vista.			
Air Quality			
AQ-1. The proposed project would conflict with or obstruct implementation of the applicable air quality plan; would violate any air quality standard or contribute substantially to an existing or projected air quality violation; or would result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under any applicable federal or State ambient air quality standard.	Construction: Significant regional air quality impacts for NOx, PM ₁₀ , and PM _{2.5} ; Significant localized NO ₂ , PM ₁₀ and PM _{2.5} impacts Commissioning: Significant regional air quality impacts; Less than significant localized impacts Operation: Less than significant regional air quality impacts; No significant localized impacts	 AIR-A During project construction, all internal combustion engines/construction equipment operating on the project site shall meet EPA-Certified Tier 3 emissions standards, or higher, according to the following: From January 1, 2012, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations On or after January 1, 2015: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, control technology documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. AIR-B In the event a Tier 3 or Tier 4 engine is not available for any off-road engine larger than 50 horsepower, that engine shall be equipped with a diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" if, among other reasons: 	Construction: Significant and unavoidable impacts Commissioning: Significant and unavoidable impacts Operation: N/A

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		There is no available soot filter that has been certified by either CARB or the EPA for the engine in question; or The construction equipment is intended to be on site for 10 days or less. The use of a soot filter may be terminated immediately if one of the following conditions exists: The use of the soot filter is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in backpressure; The soot filter is causing or is reasonably expected to cause	
		significant engine damage; or 3. The soot filter is causing or is reasonably expected to cause a significant risk to workers or the public. AIR-C All construction equipment shall be properly maintained and the engines tuned to the engine manufacturer's specifications.	
		AIR-D Prohibit construction equipment from idling longer than five minutes and post signs prohibiting idling longer than five minutes at the facility entrance and near areas where construction equipment is operating.	
		AIR-E The engine size of construction equipment shall be the minimum practical size to support the required scope of work for the equipment.	
		AIR-F Use electric welders instead of gas or diesel welders in portions of the facility where electricity is available.	
		AIR-G Use on-site electricity rather than temporary power generators in portions of the facility where electricity is available.	
		AIR-H Suspend all construction activities that generate air pollutant emissions during first stage smog alerts.	
		AIR-I Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment to the extent feasible.	

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		AIR-J The testing and maintenance of the black start generators shall be prohibited during the commissioning of electrical generation units.	
AQ-2: The proposed project would not result in exposure of sensitive receptors to substantial pollutant concentrations.	Less than significant impact	None	N/A
Biological Resources			
BIO-1. The proposed project would not have a substantial adverse effect, either directly or through habitat modifications, on the federally listed as endangered El Segundo blue butterfly.	No impact	None	N/A
Cultural Resources			
CR-1. The proposed project would not cause a substantial adverse change in the significance of a historical resource.	No impact	None	N/A
CR-2. The proposed project would indirectly or directly destroy a unique paleontological resource or site or unique geologic feature.	Significant impact	 CR-A: The project owner shall retain a qualified vertebrate paleontologist to design and implement a paleontological resource mitigation monitoring program to mitigate impacts to significant nonrenewable resources. This plan should include a grading observation schedule to be maintained when grading in bedrock units to further evaluate the fossil resources of the site. This monitoring and mitigation plan shall be consistent with Society of Vertebrate Paleontology SVP (1994) standard guidelines for the mitigation of construction-related adverse impacts on paleontological resources, as well as the requirements of the designated museum repository for any fossils collected (SVP 1994). Specific components to be included in the monitoring program include the following: 1. A construction worker education program to inform the workforce about the potential for discovery of paleontological resources will include: a. procedures to follow if resources are discovered during any construction-related activities, including order of notification of appropriate construction personnel and LADWP officials, and redirection of construction activities while the find is evaluated; b. a description of known resources in the area; and c. instruction that these resources are protected by law and 	Less than significant

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		that there is a strict prohibition against collection or disturbance of any paleontological resource. 2. Excavation into the older Quaternary alluvial deposits, including the stratigraphic equivalents of the Palo Verdes Sand or San Pedro Formations, that possess a high paleontological sensitivity rating shall be monitored by a professional paleontologist. Areas to be monitoring during construction shall be determined after review of detailed geologic boring information. 3. Procedures shall be established for identification, salvage, analysis, curation and accession into a museum repository with permanent retrievable storage of any significant fossil specimens and data recovered. 4. A Paleontological Resources Report (PRR) shall be prepared, with an appended itemized inventory of specimens, upon completion of monitoring and evaluation. The report, inventory, and record of accession, when submitted to LADWP, will signify completion of the program to mitigate impacts to paleontological resources.	
Greenhouse Gas Emissions		100000.	
GHG-1. Annual mass GHG emissions from construction, circuit breaker leakage, and blackstart generator operation would not exceed the GHG mass emission threshold established by the SCAQMD of 10,000 MT/yr CO ₂ e.	Less than significant impact	None	N/A
GHG-2: Operation of the CTGs would not exceed the base-load performance standard of 1,100 lbs CO ₂ per MWh.	Less than significant impact	None	N/A
Hazards and Hazardous Wastes			
HAZ-1. The proposed project is located within two miles of LAX and would result in a safety hazard for people residing or working in the area and using airport services.	Significant impact	HAZ-A: Prior to construction of the proposed generation units and/or prior to demolition of the Unit 3 stack, LADWP will submit plans for these components to the FAA for hazard determination pursuant to 14 CFR Part 77. LADWP will implement hazard markings or other requirements established through the review process during construction and/or demolition.	Less than significant

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
HAZ-2. The demolition of existing facilities would create a significant hazard to the public through emission and handling of hazardous materials at the site. A preschool is located within one-quarter mile of the SGS site boundary.	Significant impact	HAZ-B: Asbestos surveys will be completed for buildings to be demolished that were constructed prior to 1980 as required under National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines and pursuant to SCAQMD Rule 1403. In addition, NESHAP guidelines require that all potentially friable asbestos-containing materials be removed prior to building demolition. HAZ-C: A lead survey of painted surfaces and soil around buildings constructed prior to 1978 will be completed prior to demolition. Requirements in the California Code of Regulation will be followed during demolition activities, including employee training, employee air monitoring, and dust control. Any debris or soil containing leadbased paint or coatings will be disposed of at landfills that meet acceptance criteria for the waste being disposed. HAZ-D: To quantify the amounts of waste to be generated and protect public health during removal, LADWP will prepare a detailed Waste Management Program prior to start of demolition activity. The purpose of the program is to create procedures for proper storage, labeling, packaging, recordkeeping, manifesting, use of waste minimization principles, and disposal of hazardous materials and waste. The following will be included: • A description of each hazardous waste component. • Waste container and label requirements. • Accumulation, handling, transport, treatment, and disposal procedures for each waste that protects public health. • Waste minimization procedures, including recycling opportunities. • Preparedness, prevention, contingency, and emergency procedures for each waste that protects public health. • Waste minimization procedures, including recycling opportunities. • Preparedness, prevention, contingency, and emergency procedures for each waste that protects public health. • All facility employees will receive awareness training for hazardous waste segregation, accumulation, and labeling; inspection of satellite accumulation areas; spill contingencies; and waste minimization proced	Less than significant

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		Procedures to minimize the generation of hazardous waste. Employees will be trained in procedures to reduce the volume of hazardous wastes generated at the project. The procurement of hazardous materials will be controlled to minimize the storage of surplus materials on site and to prevent unused materials from becoming "off-specification."	
HAZ-3 The demolition of existing facilities would not create a significant hazard to the public and the environment through the routine transport, use, or disposal of hazardous materials.	Less than significant impact	None	N/A
Noise			
NOISE-1. Construction of the proposed project would expose persons to or generate noise levels in excess of City (or other applicable) standards and create a substantial temporary increase in ambient noise levels in the vicinity of the project.	Significant impact	NOISE-A: All construction equipment shall be properly maintained and equipped with mufflers and other suitable noise attenuation devices. NOISE-B: Grading and construction contractors shall endeavor to use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment). NOISE-C: The construction contractor shall ensure that all stockpiling and vehicle staging areas are located away from noise-sensitive receivers, to the extent feasible. NOISE-D: The construction contractor shall plan work such that activities that generate high noise levels will not be started outside the hours codified in the Los Angeles and El Segundo Municipal Codes, and all reasonable efforts to conclude work in progress prior to the hours listed in these codes will be taken by the construction	Less than significant
		contractor. NOISE-E: A public liaison for project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and shall be required to implement reasonable measures to address the concern. Prior to the outset of construction activity for the proposed project, LADWP or its contractor shall notify the City of	

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		El Segundo and residents, businesses, and other uses located within 1,000 feet of SGS. The notification shall include the contact information for the project public liaison.	
NOISE-2. Operation of the proposed project would not expose persons to or generate noise levels in excess of City (or other applicable) standards or create a substantial permanent increase in ambient noise levels in the vicinity of the project.	Less than significant impact	None	N/A
NOISE 3. Construction and operation of the proposed project would not expose people to excessive groundborne vibration.	Less than significant impact	None	N/A
Traffic and Transportation			
TRANS-1. The proposed project would not conflict with an applicable plan, ordinance, or policy for establishing measures of effectiveness for the performance of the circulation system at study intersections and on study roadway segments during construction.	No impact	None	N/A
TRANS-2. Construction activity would not exceed the level of service standards established by the county congestion management agency for designated roads or highways.	No impact	None	N/A
TRANS-3. The proposed project would not create a safety hazard during construction relative to utilizing a new gate on Grand Avenue for construction.	Less than significant impact	None	N/A
Water and Wastewater			
WATER-1. The proposed project would not result in the construction of new or expanded water supply facilities that would cause a significant environmental effect.	Less than significant impact	None	N/A

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
WATER-2. The proposed project would not require the construction of new storm water drainage facilities or expansion of existing facilities, nor would it substantially degrade water quality affecting current or future uses.	Less than significant impact	None	N/A
WATER-3. The proposed project would not require the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	No impact	None	N/A
WATER-4. The project would not result in a violation of NPDES permit requirements for industrial wastewater, or otherwise exceed wastewater treatment requirements of the applicable RWQCB.	No impact	None	N/A

Table 1-2. Summary of Alternatives

Alternative	Feasibility	Attainment of Objectives of Proposed Project	Elimination/Substantial Reduction of Proposed Project Impacts	Additional Impacts
1 – No Project	Technically feasible, but would violate SCAQMD Settlement Agreement	 Would not achieve a net reduction in air pollutant emissions Would not reduce the consumption of natural gas or the production of GHGs Would not facilitate integration of intermittent renewable power resources into LADWP generation system Would provide for the energy demands of the City of Los Angeles Would not increase the reliability of the electrical power generation system Would not reduce the use of ocean water cooling at SGS 	Would eliminate short-term and unavoidable construction impacts to air quality at SGS Would eliminate short-term but mitigable construction impacts to paleontological resources Would eliminate short-term but mitigable construction impacts related to hazards Would eliminate short-term but mitigable construction impacts related to noise Would avoid long-term but mitigable impacts to aircraft navigation	Would result in greater long-term impacts to air quality Would result in greater long-term impacts related to fuel consumption and the production of GHGs Would result in greater long-term impacts related to ocean water cooling system
2 – Modify Existing Unit 3	Infeasible because it would likely require removal of Unit 3 from service prior to replacement of generation capacity	Not applicable due to infeasibility	Not applicable due to infeasibility	Not applicable due to infeasibility
3 – Construct New Units at Alternative Location Outside SGS	Technically feasible, but potentially cost- prohibitive and may violate SCAQMD Settlement Agreement	 Would achieve a net reduction in air pollutant emissions Would reduce the consumption of natural gas and the production of GHGs Would facilitate integration of intermittent renewable power resources into LADWP generation system Would provide for the energy demands of the City of Los Angeles May not increase the reliability of the electrical power generation system Would reduce the use of ocean water cooling at SGS 	Would eliminate short-term and unavoidable construction impacts to air quality at SGS Would eliminate short-term but mitigable construction impacts to paleontological resources Would eliminate short-term but mitigable construction impacts related to hazards Would eliminate short-term but mitigable construction impacts related to noise Would avoid long-term but mitigable impacts to aircraft navigation	Would result in similar or greater short-term construction-related impacts at alternative location Would likely result in significant long-term impacts to aesthetics, noise, safety May result in other long-term impacts to resources (biological, cultural, traffic, localized air quality) that cannot be reasonably ascertained

Alternative	Feasibility	Attainment of Objectives of Proposed Project	Elimination/Substantial Reduction of Proposed Project Impacts	Additional Impacts
Sources	Infeasible because its implementation has already been accounted for in the proposed project	Not applicable due to infeasibility	Not applicable due to infeasibility	Not applicable due to infeasibility
	Technically feasible, but potentially cost- prohibitive and may violate SCAQMD Settlement Agreement	 May not achieve a net reduction in air pollutant emissions May not reduce the consumption of natural gas and the production of GHGs Would not facilitate integration of intermittent renewable power resources into LADWP generation system Would partially provide for the energy demands of the City of Los Angeles Would not increase the reliability of the electrical power generation system Would reduce the use of ocean water cooling at SGS 	Would eliminate short-term and unavoidable construction impacts to air quality at SGS Would eliminate short-term but mitigable construction impacts to paleontological resources Would eliminate short-term but mitigable construction impacts related to hazards Would eliminate short-term but mitigable construction impacts related to noise Would avoid long-term but mitigable impacts to aircraft navigation	May result in additional but currently unpredictable and non-quantifiable impacts not created by the proposed project related to the production and transmission of purchased energy

CHAPTER 2: RESPONSE TO COMMENTS

2.1 INTRODUCTION

The Scattergood Generating Station Repowering Project (SGS Repowering Project) Draft Environmental Impact Report (EIR) 45-day review period began on May 17, 2012. During this public review period, a total of 7 written comments were received.

According to California Environmental Quality Act (CEQA) Guidelines Section 15088(a), "the lead agency shall evaluate comments on environmental issues received from persons who reviewed the Draft EIR and shall prepare a written response." This chapter of the Final EIR provides the lead agency's response to the comments received. Each comment letter is numbered and the individual responses are labeled accordingly. For example, Response 1-1 refers to the response to the first comment in comment letter 1. Comments were evaluated, and good faith, reasoned responses were prepared for substantive comments referencing significant environmental issues or issues relating to the adequacy of the EIR (CEQA Guidelines Section 15088). Those comments that did not address the adequacy of the Draft EIR, raise significant environmental issues, or request additional information/analysis are noted but did not receive a detailed response.

2.2 WRITTEN COMMENTS AND RESPONSES

Table 2-1 lists all the written comments from agencies, elected officials, organizations, and interested individuals.

Table 2-1. Written Comments from Agencies, Elected Officials, Organizations, and Interested Individuals

Letter	Agency/Organization	Date	
1	State of California Governor's Office of Planning and Research State Clearinghouse	July 5, 2012	
	Signed: Scott Morgan, Director	-	
2	Email letter from Individual	May 25, 2012	
	Signed: Gerhardt Van Drie, R.C.E., MPA	, ,	
3	Native American Heritage Commission	May 29, 2012	
	Signed: Dave Singleton, Program Analyst	- , - , -	
4	City of Los Angeles, Bureau of Sanitation June 5, 2012		
	Signed: Ali Poosti, Division Manager	04110 0, 2012	
	Heal the Bay		
5	Signed: Sarah Abramson Sikich, Coastal Resources Director	June 29, 2012	
	Dana Roeber Murray, Marine & Coastal Scientist	0011C 25, 2012	
	W. Susie Santilena, Environmental Engineer Water Quality		
6	South Coast Air Quality Management District	July 2, 2012	
	Signed: Ian McMillan, Program Supervisor	July 2, 2012	
7	City of El Segundo	July 2, 2012	
/	Signed: Kimberly Christiansen, AICP, Planning Manager	July 2, 2012	

2.2.1 Letter 1: State of California Governor's Office of Planning and Research, State Clearinghouse



STATE OF CALIFORNIA GOVERNOR'S OFFICE of PLANNING AND RESEARCH STATE CLEARINGHOUSE AND PLANNING UNIT



1-1

July 5, 2012

Julie Van Wagner
City of Los Angeles, Department of Water and Power
Env. Planning & Assessment
111 North Hope Street, Room 1044
Los Angeles, CA 90012

Subject: Scattergood Generating Station Unit 3 Repowering Project SCH#: 2011011079

Dear Julie Van Wagner:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. On the enclosed Document Details Report please note that the Clearinghouse has listed the state agencies that responding agency (ies) is (are) enclosed. If this comment package is not in order, please notify the State Clearinghouse and the comment of the State Clearinghouse number in future correspondence so the true may respond promptly.

Please note that Section $2110^{4} \rm{tc}$ of the California Public Resources Code states that:

"A responsible or other public exercity shall only make substantive comments regarding those activities involved in a project which are within an area of expertise of the agency or which are required to be carried out or approved by the agency. Those comments shall be supported by specific documentation."

These comments are forwarded for use in preparing your final environmental document. Should you need more information or clarification of the enclosed comments, we recommend that you contact the commenting agency directly.

This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act. Please contact the State Clearinghouse at (916) 445-0613 in you have any questions regarding the environmental review process.

Sincerely

Scott Morgan Director, State Clearinghouse

Enclosures cc: Resources Agency

1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044 (916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

Document Details Report State Clearinghouse Data Base

SCH# Project Title Lead Agency	Scattergood Generating Station Unit 3 Repowering Project					
Туре	EIR Draft EIR					
Description						
	necessary for the operation of the new generation units. Existing Unit 3 would also be demolished under the proposed project.					
Lead Agend						
Name	Julie Van Wagner					
Agency	City of Los Angeles, Department of Water and Power					
Phone	(040) 007 5005					
email	(213) 367-5295					
Address	Env. Planning & Assessment					
Address	111 North Hope Street, Room 1044					
City	Lee Annels					
	Olate 0/1 2/p 30012					
Project Loc	ation					
County	Los Angeles					
City	Los Angeles, City of					
Region						
Lat / Long	33° 55' 7" N / 118° 25' 39" W					
Cross Streets	12700 Vista Del Mar (Vista Del Mar and West Grand Avenue)					
Parcel No.	4131028900; 4131027901					
Township	Range Section Base					
Proximity to	0:					
Highways	Hwy 1, 105					
Airports	LAX					
Railways	A 100					
Waterways						
Schools	El Segundo Preschool					
Land Use	Industrial Power Generating/PF-1 (Public Facilities)/Public Facilities					
roject Issues	Aesthetic/Visual; Air Quality; Archaeologic-Historic; Biological Resources; Noise; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply					
Reviewing Agencies	Resources Agency; California Coastal Commission; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; California Highway Patrol; Caltrans, District 7; Air Resources Board, Airport/Energy Projects; State Water Resources Control Board, Divison of Financial Assistance; Regional Water Quality Control Board, Region 4; Department of Toxic Substances Control; California Energy Commission; Native American Heritage Commission; Public Utilities Commission					
ate Received	05/17/2012					

AUGUST 2012 2-3

Response to Letter 1: State of California Governor's Office of Planning and Research, State Clearinghouse

Response 1-1

This comment acknowledges that the Los Angeles Department of Water and Power (LADWP) has complied with the State Clearinghouse review requirements for draft environmental documents. One comment letter was submitted by a State agency that was included in the State Clearinghouse distribution (see Letter 3 from the Native American Heritage Commission). No further response to the State Clearinghouse letter is necessary because no issues related to the adequacy of the environmental impact analysis in the Draft EIR were raised.

2.2.2 Letter 2: Gerhardt Van Drie, R.C.E., MPA

Page 1 of 1

2-1

2-2

2-3

Van Wagner, Julie

From:

GVanDrie@aol.com

Sent:

Friday, May 25, 2012 10:08 AM

To:

Van Wagner, Julie

gvandrie@AOL.com

Subject: Scattergood Modification

Julie Van Wagner: Greetings: My wife, our 4 kids and I have lived within 1/10 mile of Scattergood at the west end of El Segundo for the past 45 years.

Below the hill from us exists the Hyperion Treatment Plant.

Katheen Brown Rice, sister of Gov. Brown, and I started the Hyperion, El Segundo Citizens Committee and I was the first chairman thereof.

I first started doing wastewater research over 50 years ago while city engineer of a city in lowa. Some of my research was used by the Iowa State Dept. of Health at a national conference.

I have found a means for making use of the forces of buoyancy and gravity for mixing liquids and slurries. This technology is very appropriate for use at Hyperion and would save about 10 million dollars annually for the Hyperion and Scattergood operation. However, neither of these 2 units of the LA City have made any attempt to work with me to even do minor testing of this technology. Log onto www.aaaliquidmixer.com

In today's Times, I read that the LADWP Board has agreed on nearly doubling the utility's energy efficiency goal. The person at Hyperion that you should contact relative to improving efficiency can be reached at edick.ohanian@lacity.org

Gerhardt Van Drie, R.C.E., MPA

6/11/2012

Response to Letter 2: Gerhardt Van Drie, R.C.E., MPA

Response 2-1

The commenter makes a general statement about his family's location relative to Scattergood Generating Station and Hyperion Wastewater Treatment and states that he is a founding member of the Hyperion Citizens Committee. The commenter also generally discusses his background in wastewater research, including work as a former City Engineer in the state of Iowa. This comment does not address specific issues or concerns related to the adequacy of the environmental impact analysis in the Draft EIR. No response is necessary.

Response 2-2

The comment is noted but does not address specific issues or concerns related to the adequacy of the environmental impact analysis in the Draft EIR. However, it should be noted that SGS is connected to the Hyperion Wastewater Facility (Hyperion) in two primary ways. Hyperion provides excess digester gas generated during its wastewater treatment processes to SGS for use as a supplemental fuel source in SGS Generation Units 1 and/or 2, and SGS in turn provides steam to Hyperion for use in the solids digestion process. These activities are scheduled to cease in 2015, when a new power plant that will utilize excess digester gas as fuel will be completed at Hyperion. This is partly necessary because SGS Units 1 and 2 will eventually be removed from service under future repowering projects, and the replacement generation units will be incapable of burning digester gas. SGS has no other physical relationship to any treatment processes at Hyperion, including those processes that may involve mixing of wastewater liquids and slurries. The treatment of process water at SGS involves relatively minor quantities of lightly contaminated water, the treatment of which is focused on settling out impurities or clarifying the liquid, rather than mixing of slurries.

In addition, LADWP, which operates SGS and is the CEQA lead agency for the proposed project, does not have decision-making or oversight authority relative to wastewater treatment at Hyperion and cannot independently effect changes in operations at Hyperion. The feasibility of any energy-efficient wastewater treatment process at Hyperion is not an area of responsibility or expertise of LADWP staff.

Response 2-3

The comment is noted but does not address specific issues or concerns related to the adequacy of the environmental impact analysis in the Draft EIR. From an energy production and delivery perspective, LADWP is very concerned about energy efficiency, and, as noted in the comment, is expanding its energy efficiency goals. The Power Integrated Resource Plan (IRP), which is updated periodically, is the LADWP's long-range plan for securing adequate generation resources in order to meet its obligation to provide adequate and low-cost electric service to Los Angeles. The IRP lays out a balanced set of near-term actions and long-term goals, which include increasing renewable resources and energy efficiency. As mentioned above, LADWP does not have decision-making or oversight authority relative to wastewater treatment at Hyperion and cannot independently effect changes in operations at Hyperion.

2.2.3 Letter 3: Native American Heritage Commission

STATE OF CALIFORNIA

Edmund G. Brown, Jr., Governor

NATIVE AMERICAN HERITAGE COMMISSION

915 CAPITOL MALL, ROOM 364 SACRAMENTO, CA 95814 (916) 653-6251 Fax (916) 657-5390 Web Site www.nahc.ca.gov ds_nahc@pacbell.net



May 29, 2012

Ms. Julie Van Wagner

Los Angeles Department of Water & Power

111 North Hope Street, Room 1044 Los Angeles, CA 90012

Re: SCH#2011011079; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the "Scattergood Generating Station Unit 3 Repowering Project;" located in the Playa del Rey area of the Los Angeles County, California.

Dear Ms. Van Wagner:

The Native American Heritage Commission (NAHC), the State of California 'Trustee Agency' for the protection and preservation of Native American cultural resources pursuant to California Public Resources Code §21070 and affirmed by the Third Appellate Court in the case of EPIC v. Johnson (1985: 170 Cal App. 3rd 604).

This letter includes state and federal statutes relating to Native American historic properties of religious and cultural significance to American Indian tribes and interested Native American individuals as 'consulting parties' under both state and federal law. State law also addresses the freedom of Native American Religious Expression in Public Resources Code §5097.9.

The California Environmental Quality Act (CEQA – CA Public Resources Code 21000-21177, amendments effective 3/18/2010) requires that any project that causes a substantial adverse change in the significance of an historical resource, that includes archaeological resources, is a 'significant effect' requiring the preparation of an Environmental Impact Report (EIR) per the CEQA Guidelines defines a significant impact on the environment as 'a substantial, or potentially substantial, adverse change in any of physical conditions within an area affected by the proposed project, including ... objects of historic or aesthetic significance." In order to comply with this provision, the lead agency is required to assess whether the project will have an adverse impact on these resources within the 'area of potential effect (APE), and if so, to mitigate that effect. The NAHC did conduct a Sacred Lands File (SLF) search within the 'area of potential effect (APE) and Native American cultural resources were identified. This area is known to the NAHC to be very culturally sensitive.

The NAHC "Sacred Sites,' as defined by the Native American Heritage Commission and the California Legislature in California Public Resources Code §§5097.94(a) and 5097.96. Items in the NAHC Sacred Lands Inventory are confidential and exempt from the Public Records Act pursuant to California Government Code §6254 (r).

Early consultation with Native American tribes in your area is the best way to avoid unanticipated discoveries of cultural resources or burial sites once a project is underway. Culturally affiliated tribes and individuals may have knowledge of the religious and cultural significance of the historic properties in the project area (e.g. APE). We strongly urge that you make contact with the list of Native American Contacts on the attached list of Native American

3-1

3-2

3-3

contacts, to see if your proposed project might impact Native American cultural resources and to obtain their recommendations concerning the proposed project. Pursuant to CA Public Resources Code § 5097.95, the NAHC requests cooperation from other public agencies in order that the Native American consulting parties be provided pertinent project information. Consultation with Native American communities is also a matter of environmental justice as defined by California Government Code §65040.12(e). Pursuant to CA Public Resources Code §5097.95, the NAHC requests that pertinent project information be provided consulting tribal parties. The NAHC recommends avoidance as defined by CEQA Guidelines §15370(a) to pursuing a project that would damage or destroy Native American cultural resources and Section 2183.2 that requires documentation, data recovery of cultural resources.

3-3 cont.

Furthermore, the NAHC if the proposed project is under the jurisdiction of the statutes and regulations of the National Environmental Policy Act (e.g. NEPA; 42 U.S.C. 4321-43351). Consultation with tribes and interested Native American consulting parties, on the NAHC list, should be conducted in compliance with the requirements of federal NEPA and Section 106 and 4(f) of federal NHPA (16 U.S.C. 470 et seq), 36 CFR Part 800.3 (f) (2) & .5, the President's Council on Environmental Quality (CSQ, 42 U.S.C 4371 et seq. and NAGPRA (25 U.S.C. 3001-3013) as appropriate. The 1992 Secretary of the Interiors Standards for the Treatment of Historic Properties were revised so that they could be applied to all historic resource types included in the National Register of Historic Places and including cultural landscapes. Also, federal Executive Orders Nos. 11593 (preservation of cultural environment), 13175 (coordination & consultation) and 13007 (Sacred Sites) are helpful, supportive guides for Section 106 consultation. The aforementioned Secretary of the Interior's Standards include recommendations for all 'lead agencies' to consider the historic context of proposed projects and to "research" the cultural landscape that might include the 'area of potential effect.'

3-4

Confidentiality of "historic properties of religious and cultural significance" should also be considered as protected by California Government Code §6254(r) and may also be protected under Section 304 of he NHPA or at the Secretary of the Interior discretion if not eligible for listing on the National Register of Historic Places. The Secretary may also be advised by the federal Indian Religious Freedom Act (cf. 42 U.S.C., 1996) in issuing a decision on whether or not to disclose items of religious and/or cultural significance identified in or near the APEs and possibility threatened by proposed project activity.

Furthermore, Public Resources Code Section 5097.98, California Government Code §27491 and Health & Safety Code Section 7050.5 provide for provisions for inadvertent discovery of human remains mandate the processes to be followed in the event of a discovery of human remains in a project location other than a 'dedicated cemetery'.

3-5

To be effective, consultation on specific projects must be the result of an ongoing relationship between Native American tribes and lead agencies, project proponents and their contractors, in the opinion of the NAHC. Regarding tribal consultation, a relationship built around regular meetings and informal involvement with local tribes will lead to more qualitative consultation tribal input on specific projects.

3-6

Finally, when Native American cultural sites and/or Native American burial sites are prevalent within the project site, the NAHC recommends 'avoidance' of the site as referenced by CEQA Guidelines Section 15370(a).

2.

If you have any questions about this response to your request, please do not hesitate to contact me at (916) 653-6251.

Sincerely,

Dave Singleten Program Analyst

Cc: State Clearinghouse

Attachment: Native American Contact List

Native American Contacts

Los Angeles County May 29, 2012

LA City/County Native American Indian Comm Ron Andrade, Director 3175 West 6th St, Rm. 403 Los Angeles , CA 90020 randrade@css.lacounty.gov (213) 351-5324

(213) 351-5324 (213) 386-3995 FAX

Ti'At Society/Inter-Tribal Council of Pimu Cindi M. Alvitre, Chairwoman-Manisar 3094 Mace Avenue, Apt. B Gabrielino Costa Mesa, CA 92626 calvitre@yahoo.com (714) 504-2468 Cell

Tongva Ancestral Territorial Tribal Nation John Tommy Rosas, Tribal Admin.

Private Address

Gabrielino Tongva

tattnlaw@gmail.com

310-570-6567

Gabrieleno/Tongva San Gabriel Band of Mission Anthony Morales, Chairperson PO Box 693 Gabrielino Tongva

San Gabriel , CA 91778 GTTribalcouncil@aol.com

(626) 286-1632

(626) 286-1758 - Home

(626) 286-1262 -FAX

Gabrielino Tongva Indians of California Tribal Council Robert F. Dorame, Tribal Chair/Cultural Resources P.O. Box 490 Gabrielino Tongva

Bellflower , CA 90707 gtongva@verizon.net

562-761-6417 - voice 562-761-6417- fax

Gabrielino-Tongva Tribe

Bernie Acuna

1875 Century Pk East #1500 Gabrielino

Los Angeles , CA 90067 (619) 294-6660-work

(310) 428-5690 - cell (310) 587-0170 - FAX

bacuna1@gabrieinotribe.org

Gabrielino-Tongva Tribe Linda Candelaria, Chairwoman

1875 Century Pk East #1500 Gabrielino Los Angeles , CA 90067

lcandelaria1@gabrielinoTribe.org 626-676-1184- cell

(310) 587-0170 - FAX 760-904-6533-home

Gabrieleno Band of Mission Indians Andrew Salas, Chairperson

P.O. Box 393

Gabrielino GA 91723

Covina , CA

(626) 926-4131

gabrielenoindians@yahoo.

com

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

This list is applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2010011079; CEQA Notice of Completion; draft Environmental Imipact Report (DEIR) for the Scattergood Generating Station Unit 3 Repowering Project; located in the Playa del Rey area of Los Angeles; Los Angeles County, California.

3-7

Response to Letter 3: Native American Heritage Commission

Response 3-1

The comment presents introductory and background remarks and does not address specific issues or concerns related to the adequacy of the environmental impact analysis in the Draft EIR. No response is necessary.

Response 3-2

A Draft EIR was prepared for the SGS Repowering Project, and the lead agency has taken the necessary steps to determine that the project would not create a significant impact to archaeological and historic resources. See Draft EIR Chapter 4.2.4, Cultural Resources, and Draft EIR Appendix D, Archaeological and Historical Survey of the SGS, for a detailed discussion of impacts to cultural resources.

The CEQA Initial Study for the proposed project concluded that potentially significant cultural resources exist in the project area and that an evaluation of such resources should be conducted, including a site survey. This is consistent with the NAHC's Sacred Lands File search that concluded that the area of potential effect is known to be culturally sensitive. As discussed in the Draft EIR, to determine the nature of existing cultural resources, a records search was performed for the Scattergood Generating Station Unit 3 Repowering Project on October 25, 2010. The record search included an examination of the materials on file at the South Central Coastal Information Center at California State University, Fullerton, a unit of the California Historical Resource Information System. The 7.5' U.S. Geological Survey Venice topographic quadrangle was inspected to: 1) search for previously recorded cultural resources within the record search boundary; and 2) determine whether any prior cultural resources studies had been performed within the prescribed record search area. In addition, listings in the National Register of Historic Places, California Register of Historical Resources, California Historic Landmarks, California Points of Historic Interest, and California State Directory of Properties (a.k.a. historic resources inventory) were examined for the purpose of identifying historic properties. Several prehistoric sites within one mile of the project site were identified through the records search.

The SGS site was then surveyed for cultural resources. Based on the archival research and the site survey, two primary conclusions were made. Relative to prehistoric resources, the extensive disturbance to the original land surface during previous use for sand extraction and construction of the SGS facilities in the 1950s most likely disturbed or destroyed any prehistoric or historic archaeological resources, if any had ever been present. The very low probability of intact archaeological deposits means that the property does not have a potential to yield information important to the prehistory or history of the State or local area.

As noted in the Draft EIR, there is always a possibility that subsurface archaeological materials may be encountered during ground-disturbing activities associated with the proposed project. In the event that archaeological materials are encountered during ground-disturbing activities, LADWP would implement standard practices to comply with CEQA Guidelines Section 15064.5, including having the construction contractor cease activity in the affected area until the discovery can be evaluated by a qualified cultural resources specialist (archaeologist).

Response 3-3

As noted in Response 3-2, a cultural resources survey was conducted that included pertinent archival records search at the South Central Coastal Information Center in Fullerton and a site survey. No Native American tribal contacts were made for this project due to the highly disturbed nature of the project site and very low probability of the existence of *in-situ* cultural resources.

Response 3-4

No elements of the proposed project are subject to federal agency discretion, and therefore the proposed project is not subject to the National Environmental Policy Act, the National Historic Preservation Act, Council on Environmental Quality regulations, or other federal statutes identified by the NAHC in Comment 3-4. The proposed project does not include significant historic resources and would not be subject to 1992 Secretary of the Interior Standards for the Treatment of Historic Properties.

LADWP has treated certain elements of the cultural resources study as confidential in accordance with California Government Code, including retaining as confidential maps showing the location of existing cultural resources in the project area.

Response 3-5

The Cultural Resource Survey Report, Draft EIR Appendix D, acknowledges the possibility of inadvertent discovery of human remains during construction. Consistent with State law, LADWP implements standard construction practices that establish the process for contractors to follow in the event of such discovery. As discussed on page 30 of Appendix A of the Draft EIR, LADWP would cease construction activities at the point of discovery and call on the Los Angeles County Coroner to make a determination of origin and disposition of the remains pursuant to Public Resource Code Section 5097.98. If the remains were determined to be of Native American origin, the County Coroner would notify the NAHC, which would determine and notify a Most Likely Descendant (MLD). With the permission of the landowner and his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

Response 3-6

The NAHC's opinion concerning Native American consultation is noted. Based on cultural resources archival research and site survey, Native American burial sites are not prevalent (or not known to occur) at the project site and adjacent areas.

Response 3-7

The commenter provides a list of recommended Native American contacts for the project area.

2.2.4 Letter 4: City of Los Angeles, Bureau of Sanitation

CITY OF LOS ANGELES

CALIFORNIA



ANTONIO R. VILLARAIGOSA MAYOR

June 5, 2012

DEPARTMENT OF PUBLIC WORKS

BUREAU OF SANITATION

ENRIQUE C. ZALDIVAR

TRACI J. MINAMIDE

VAROUJ S. ABKIAN ADEL H. HAGEKHALIL ALEXANDER E. HELOU ASSISTANT DIRECTORS

WASTEWATER ENGINEERING SERVICES DIV. 2714 MEDIA CENTER DRIVE LOS ANGELES, CA 90065 FAX: (323) 342-6210 OR 342-6211

File: SC.CE.

Julie Van Wagner, Environmental Planning and Assessment LOS ANGELES DEPARTMENT OF WATER AND POWER 111 North Hope Street, Room 1044 Los Angeles, CA 90012

Dear Ms. Van Wagner:

BOARD OF

PUBLIC WORKS

COMMISSIONERS

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VALERIE LYNNE SHAW COMMISSIONER

Scattergood Generating Station Unit 3 Repowering Project (SCH #201101179) -**Draft EIR**

This is in response to your May 15, 2012 letter requesting a review of your proposed project to replace the existing electrical generation unit with a modern high-efficiency generation units. The Bureau of Sanitation has conducted a preliminary evaluation of the potential impacts to the wastewater and stormwater systems for the proposed project.

4-1

WASTEWATER REQUIREMENT

The Bureau of Sanitation, Wastewater Engineering Services Division (WESD) has reviewed the request and found the project to be related to removing an existing electrical generation unit and upgrading its generating capacity with a modern and highefficiency unit only.

Based on the project description, we have determined the project is unrelated to sewers and therefore do not have sufficient detail to offer an analysis at this time. Should the project description change, please continue to send us information so that we may determine if a sewer assessment is required in the future.

4-2

If you have any questions, please call Kwasi Berko of my staff at (323) 342-1562.



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Julie Van Wagner, LOS ANGELES DEPARTMENT OF WATER AND POWER Scattergood Generating Station Unit 3 Repowering Project (SCH #201101179) – Draft EIR June 5, 2012
Page 2 of 3

STORMWATER REQUIREMENTS

The Bureau of Sanitation, Watershed Protection Division (WPD) is charged with the task of ensuring the implementation of the Municipal Stormwater Permit requirements within the City of Los Angeles. We anticipate the following requirements would apply for this project.

POST-CONSTRUCTION MITIGATION REQUIREMENTS

The project requires implementation of stormwater mitigation measures. These requirements are based on the Standard Urban Stormwater Mitigation Plan (SUSMP) and the recently adopted Low Impact Development (LID) requirements. The projects that are subject to SUSMP/LID are required to incorporate measures to mitigate the impact of stormwater runoff. The requirements are outlined in the guidance manual titled"Development Best Management Practices Handbook — Part B: Planning Activities". Current regulations prioritize infiltration, capture/use, and then biofiltration as the preferred stormwater control measures. The relevant documents can be found at: www.lastormwater.org. It is advised that input regarding SUSMP requirements be received in the early phases of the project from WPD's plan-checking staff.

GREEN STREETS

The City is developing a Green Street Initiative that will require projects to implement Green Street elements in the parkway areas between the roadway and sidewalk of the public right-of-away to capture and retain stormwater and urban runoff to mitigate the impact of stormwater runoff and other environmental concerns. The goals of the Green Street elements are to improve the water quality of stormwater runoff, recharge local ground water basins, improve air quality, reduce the heat island effect of street pavement, enhance pedestrian use of sidewalks, and encourage alternate means of transportation. The Green Street elements may include infiltration systems, biofiltration swales, and permeable pavements where stormwater can be easily directed from the streets into the parkways and can be implemented in conjunction with the SUSMP/LID requirements.

CONSTRUCTION REQUIREMENTS

The project is required to implement stormwater control measures during its construction phase. All projects are subject to a set of minimum control measures to lessen the impact of stormwater pollution. In addition for projects that involve construction during the rainy season that is between October 1 and April 15, a Wet Weather Erosion Control Plan is required to be prepared. Also projects that disturbed more than one-acre of land are subject to the California General Construction Stormwater Permit. As part of this requirement a Notice of Intent (NOI) needs to be filed with the State of California and a Storm Water Pollution Prevention Plan (SWPPP) needs to be prepared. The SWPPP must be maintained on-site during the duration of construction.

4-3

4-4

4-5

Julie Van Wagner, LOS ANGELES DEPARTMENT OF WATER AND POWER Scattergood Generating Station Unit 3 Repowering Project (SCH #201101179) – Draft EIR June 5, 2012 Page 3 of 3

If there are questions regarding the stormwater requirements, please call Kosta Kaporis at (213) 485-0586, or WPD's plan-checking counter at (213) 482-7066. WPD's planchecking counter can also be visited at 201 N. Figueroa, 3rd Fl, Station 18.

Ali Poosti, Division Manager

Wastewater Engineering Services Division

Bureau of Sanitation

cc: Kosta Kaporis, BOS Daniel Hackney, BOS Rowena Lau, BOS

Div Files\SCAR\CEQA Review\Final CEQA Response Ltrs\Scattergood Generating Station Unit 3 Repowering Project (SCH#201101179) Draft EIR

Response to Letter 4: City of Los Angeles, Department of Public Works, Bureau of Sanitation

Response 4-1

This comment presents introductory remarks and does not address specific issues or concerns related to the adequacy of the environmental impact analysis in the Draft EIR. No response is necessary.

Response 4-2

The Bureau of Sanitation is correct in its statement that the proposed project is unrelated to sewers and that a sewer assessment cannot be performed at this time. No changes to the sanitary sewer system serving the site are proposed under the SGS Repowering Project. The Draft EIR included a similar statement on page 4-7, Section 4.1.2, Effects Found Not To Be Significant, under the Utilities/Service Systems subheading.

Response 4-3

The Bureau of Sanitation states that the proposed project is required to incorporate measures to mitigate the impact of storm water runoff. As stated in the Draft EIR, the proposed project includes an extensive system to manage storm water runoff from both process and non-process areas of the site. All storm water that falls onto the Scattergood Repowering Project site is captured, treated as required, and disposed of in accordance with State and local permits. None of the storm water is discharged to the public storm water system or public rights-of-way.

In addition, LADWP is aware of the Standard Urban Stormwater Mitigation Plan (SUSMP) and Low Impact Development (LID) requirements and would develop and implement best management practices as required per the Los Angeles City's local LID ordinance, the Los Angeles Regional Board's SUSMP, and the Municipal Separate Storm Sewer System (MS4) permit.

Response 4-4

The Bureau of Sanitation's comments about the Green Street initiative are noted. As described in Response 4-3 above, the operation of the proposed project would not result in the discharge of storm water to public rights-of-way. Also, the project incorporates an internal system to collect and treat storm water flowing over areas of the site that could contain potential contaminants. Accordingly, implementation of green street design techniques relating to project site runoff to off-site areas would not be necessary or effective.

However, LADWP would provide some off-site improvements related to the new site entrance on Grand Avenue. These improvements would include adding turn lanes, relocating the sidewalk, and replacing existing street trees. The plan for these modifications would be prepared by the city's Department of Public Works, Bureau of Engineering and would incorporate appropriate green street design elements to the extent feasible.

Response 4-5

The Bureau of Sanitation's comments about the construction storm water requirements are noted. LADWP is aware of the local, State, and federal requirements for storm water control related to construction activities. The Draft EIR, Chapter 2, Introduction (page 2-12), acknowledges that a general construction storm water permit from the State of California, Regional Water Quality Control Board

would be needed prior to construction. The Draft EIR, Chapter 4, Section 4.1.2, Hydrology and Water Quality (page 4-5), states that construction activities would comply with applicable requirements of the State Water Resources Control Board (SWRCB) and the Los Angeles Regional Water Quality Control Board. These permit compliance issues are a matter of law or regulation. To comply, LADWP would prepare permit documentation and apply for coverage under the Statewide Construction General Permit (NPDES No. CAS000002, Order No. 2009-0009-DWQ & Order No. 2010-0014-DWQ). The required permit documents to be developed by the State Certified Qualified Storm Water Developer, which would include the Notice of Intent and Storm Water Pollution Prevention Plan, would be uploaded to the State's Storm Water Multiple Application and Report Tracking System as required before commencement of construction.

2.2.5 Letter 5: Heal the Bay



1444 9th Street Santa Monica CA 90401 tel 310-451-1500 fax 310-496-1902

Heal the Bay.

June 29, 2012

Ms. Julie Van Wagner Environmental Planning and Assessment Los Angeles Department of Water and Power 111 North Hope Street, Room 1044

Via email: julie.vanwagner@ladwp.com

Re: Draft Environmental Impact Report, Scattergood Generating Station Unit 3 Repowering Project

Dear Ms. Wagner:

On behalf of Heal the Bay, a non-profit environmental organization with over 13,000 members dedicated to making the Santa Monica Bay and Southern California coastal waters and watersheds safe and healthy for people and local ecosystems, we welcome the opportunity to submit these comments on the Los Angeles Department of Water and Power ("LADWP") Draft Environmental Impact Report ("DEIR") for the Scattergood Generating Station Unit 3 repowering project. We support the proposed repower of Scattergood Generating Station Unit 3 to closed-loop dry cooling, under project operation 1.7.8 "Cooling System Components," as it will help LADWP achieve compliance with the State Water Board Once-through Cooling (OTC) Policy.

5-1

Biological Resources

Clean Water Act Section 316(b) requires that the location, design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact. In May 2010, the State Water Resources Control Board adopted a Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling ("State Water Board OTC Policy") to guide implementation of Clean Water Act section 316(b) at California coastal power plants. Repowering Unit 3 to closed-loop dry cooling instead of OTC helps to meet the compliance deadline within the State Water Board OTC Policy and is a good first step in converting the entire power plant to best technology available.

5-2

We are also supportive of the plans to reduce the flow at Units 1 and 2 as part of the repowering process. In addition, we appreciate your commitment to converting Units 1 and 2 to closed-cycle dry cooling, although we understand that this is out of the scope of this DEIR. Thank you for addressing the timeline for full Scattergood compliance with the State Water Board OTC Policy by stating that Unit 1 and 2 conversions will begin in 2020.

The DEIR mentions the positive impacts on biological resources by converting Unit 3 to dry cooling. We agree with the statement that the "elimination of ocean water cooling at SGS Unit 3 is consistent with the OTC Policy and would have generally positive impacts by virtue of the reduced flow and related reduction

5-3

Page 1



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Heal the Bay.

in entrainment and impingement of marine organisms."¹ (Chapter 2, Page 7 and Chapter 4, Page 3). However, as we asked in our previous letter, we are interested in knowing what the estimated marine life impacts of the power plant will be after the repowering of Unit 3. We recommend quantifying or including more detail about the beneficial or positive environmental impacts of the repowering project, rather than describing them as "substantial." (Chapter 2, Page 7 and Chapter 4, Page 3).

5-3 cont.

Water Quality

concentrations.

Since construction is anticipated to take 30 months, and will endure both wet and dry seasons, construction activities will likely result in the runoff of construction debris, sediment, and other pollutants on site. We urge LADWP to consider using low impact development practices as part of this project to infiltrate and/or capture and reuse stormwater to control against stormwater runoff. The project's proximity to the ocean may not allow infiltration if the water table is high, so capture and reuse could be a better solution. According to the DEIR, "all surface water from the site flows into catch basins located throughout the facility, and most of this flow is discharged through the ocean outfall. Rainwater that falls onto the facility below an elevation of 34 feet AMSL is directed to a settling basin or settling tank before discharge ... rainwater from non-process areas above an elevation of 34 feet AMSL is conveyed without the need for treatment to the outfall for disposal." (Chapter 4, Page 106). Based on this plan outlined in the DEIR, we recommend that the project utilize low impact development practices and stormwater capture. This will reduce the runoff of pollutants from the Scattergood site to storm drains and the Pacific Ocean.

Regarding treatment of wastewater, the DEIR states that "the current process and low-flow wastewater system includes collection and treatment of effluent in settling basins and tanks. The wastes include floor drain water that has passed through an oil/water separator; nonchemical metal cleaning wastes including boiler and preheater wash waters; reverse osmosis brine, boiler, and evaporator blow down; condensate polisher regeneration wastes; and laboratory and equipment drain wastes ... after sufficient holding time, all of the basins and tanks discharge at regulated rates directly to the ocean outfall." (Chapter 4, Page 107). From this, it appears that the basins provide basic settling/primary treatment, and then discharge at regulated rates through the ocean outfall, which utilizes dilution rather than providing any additional treatment. Doing this with basic rinse water would not be as concerning; however, we are concerned the boiler acid rinses, brine, and lab water could contain chemicals that degrade water quality even at low

The DEIR states that the project could result in an increase of wastewater from about 185,000 gpd currently, up to about 208,000 gpd ultimately, in which case a new waste discharge permit will be required, and that LADWP has already filed for this permit (Chapter 4, Page 112). While we understand "renewal of the SGS facility wastewater discharge permit (affecting the once-through cooling system) is an action that is a separate regulatory process with a timeline that is different from the proposed repowering project," we

5-6

5-5

Page 2

Los Angeles Department of Water and Power Scattergood Generating Station Unit 3 Repowering Project Draft Environmental Impact Report, May 2012. Available at: <a href="https://www.ladwp.com/ladwp/faces/ladwp/aboutus/a-financesandreports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-fr-reports/a-f



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Heal the Bay.

suggest that the DEIR evaluate options of diverting the wastewater to Hyperion for treatment in order to further mitigate potential impacts to water quality. (Chapter 2, Page 12).

The State Water Board and multiple federal and state agencies have recognized that once-through cooling causes significant, ongoing devastation to our valuable marine and coastal ecosystems and their inhabitants. We appreciate LADWP's efforts to repower Scattergood Unit 3 in to reduce marine life mortality consistent with the State Water Board OTC Policy timeline. Please feel free to contact us if you have any questions regarding our comments.

5-7

Sincerely,

Sarah Abramson Sikich Coastal Resources Director Dana Roeber Murray Marine & Coastal Scientist W. Susie Santilena Environmental Engineer in Water Quality

Page 3

Response to Letter 5: Heal the Bay

Response 5-1

The commenters make a general statement about the purpose of the Heal the Bay organization and state their support for the repowering of SGS Unit 3 with closed loop dry cooling. This comment does not address specific issues or concerns related to the adequacy of the environmental impact analysis in the Draft EIR. No further response is necessary.

Response 5-2

This comment mentions the specific intent of Clean Water Act Section 316(b) with respect to cooling water intake structures, and references the SWRCB's Water Quality Control Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling (once-through cooling policy; OTC Policy) as a key implementing feature of the Act. The commenters were also supportive of LADWP's efforts to comply with the OTC Policy for the proposed project as well as the future compliance with existing Units 1 and 2 at SGS. This support is noted. Since this comment does not address a specific concern related to the adequacy of the environmental impact analysis in the Draft EIR, no further response is necessary.

Response 5-3

The commenters state that they agree the proposed project would have positive impacts on marine biological resources related to the elimination of once-through ocean water cooling at SGS Unit 3 and that the action is consistent with the OTC Policy. However, additional detailed information was requested regarding the beneficial or positive impacts to marine life after repowering of Unit 3.

However, the development of the requested information in the context of finalization and consideration of the SGS Unit 3 Repowering Project EIR is beyond the requirements and intent of CEQA. An EIR is prepared whenever a project "may have a significant effect on the environment" to disclose and discuss such effects (Public Resources Code, Section 21100, 21151). The CEQA Guidelines define a significant environmental effect as "a substantial, or potentially substantial <u>adverse</u> [emphasis added] change in any of the physical conditions within an area..." (CEQA Guidelines, Section 15382). This definition of an impact as a substantial adverse change is the foundation of the impact issues identified in a CEQA Environmental Checklist and the impact evaluations contained in an EIR.

LADWP's conclusion that the cessation of once-through cooling is positive and substantial is supported by a number of recent and important research efforts leading up to the May 2010 adoption of the OTC Policy by the State. For example, the California Energy Commission's "Issues and Environmental Impacts Associated with Once-through Cooling at California's Coastal Power Plants" (CEC, June 2005, CEC-700-2005-013) provides ample evidence of the substantial positive environmental benefits of the cessation of once-through cooling processes. Among the benefits to the environment of curtailing once-through cooling outlined in the report are:

- Reduction of entrainment and impingement of fish in plant intake structures
- Reduction in thermal impacts to near shore biota
- Reduction of various unquantified cumulative thermal impacts affecting species diversity, migration, and thermal shock
- Improvement in water quality, particularly biological oxygen demand and pollutant reduction

Other agencies and private groups have weighed in on the benefits of the OTC Policy, including the State Lands Commission, the California Department of Fish and Game, and the California Coastkeeper Alliance. Other sources of information regarding the benefits of ceasing once-through cooling include

"California's Coastal Power Plants: Alternative Cooling System Analysis" (Tetra Tech, February 2008), which has some information that is specific to SGS.

The actual regulation adopted under Section 316(b) of the Clean Water Act, as cited in the commenters' letter, demonstrates that the adverse impacts of once-through cooling would be curtailed by the law, which prohibits new power plants from using such systems and requires existing systems to reduce their entrainment/impingement impacts by 90 to 95 percent. LADWP has not quantified in the Draft EIR the beneficial effects of eliminating once-through ocean water cooling in its SGS Unit 3 Repowering Project because the purpose of CEQA is to analyze and mitigate adverse environmental effects and because considerable evidence exists that curtailing once-through cooling has a substantial positive impact on marine resources.

Response 5-4

The suggestion to include low impact development practices is noted. As stated in Response 4-5, LADWP would comply with local, State, and federal requirements for storm water control related to construction activities. The Draft EIR, Chapter 2, Introduction (page 2-12), acknowledges that a general construction storm water permit from the State of California, Regional Water Quality Control Board would be needed prior to construction. It is reiterated that no storm water would flow to off-site storm drains during either construction or operations.

Response 5-5

The commenters are referencing information provided in the existing conditions section of the EIR, which describes the current wastewater system. These operations are currently permitted, though under review by the Regional Water Quality Control Board. With decommissioning of Unit 3, there would no longer be a boiler, and some wastes associated with the operation of a steam boiler generator (as opposed to the proposed gas-fired turbine generator) would be eliminated. Wastewater treatment requirements for the new facilities would be permitted by the Regional Water Quality Control Board in accordance with current laws and regulations.

Response 5-6

As noted above and stated in the Draft EIR, the waste stream concentrations of the proposed project after treatment would not exceed the existing waste discharge permit limits, though it is realized that the SGS National Pollutant Discharge Elimination System (NPDES) discharge permit is in the process of being amended and that new constituent limits likely will be established. The increase in volume would be primarily due to the new reverse osmosis for the air quality process, which includes mainly rinse water and does not include the addition of any chemicals. No significant adverse impact would occur under the current permit, and the facility's wastewater discharges would continue to be regulated by the SWRCB. Furthermore, SGS would continue to modify its treatment and discharge system as needed to comply with a new or amended NPDES permit. It would be premature to consider such an alternative as piping wastewater to Hyperion in the absence of a significant adverse impact and without establishment of the applicable new waste discharge requirements.

Response 5-7

This comment does not address specific issues or concerns related to the adequacy of the environmental impact analysis in the Draft EIR. No further response is necessary.

2.2.6 Letter 6: South Coast Air Quality Management District



Emailed July 2, 2012 July 2, 2012

Julie Van Wagner Environmental Planning and Assessment Los Angeles Department of Water and Power 111 North Hope Street, Room 1044 Los Angeles, CA 90012

DRAFT ENVIRONMENTAL IMPACT REPORT (EIR) FOR THE SCATTERGOOD REPOWERING PROJECT

The South Coast Air Quality Management District (AQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the lead agency and should be incorporated into the Final EIR.

The lead agency proposes to remove the existing Scattergood Generating Station (SGS) electrical generation Unit 3 from operation and replace its generating capacity with modern higher efficiency generation units with a gross generating capacity of up to 590 MW. As part of the proposed project, the lead agency would also physically and permanently derate the existing SGS generation Unit 1 such that there would be no increase in the total gross generating capacity of the station. The proposed project would also include associated cooling units, pollution control systems, and ancillary facilities necessary for the operation of the new generation units. The existing Unit 3 would also be demolished under the proposed project.

There appear to be several assumption that have been made in the calculation of potential emission impacts from this project that do not have corresponding enforceable measures in the Draft EIR. In order to ensure that the stated impacts are accurate in the EIR, the calculations should be revisited to determine if they are accurate, and if so, additional measures should be added to the Draft EIR to ensure that the stated operations and construction activities occur as predicted. In addition, clarification should be provided regarding the greenhouse gas calculation methodology. Details regarding these comments are contained in the attachment.

Pursuant to Public Resources Code Section 21092.5, please provide the AQMD with written responses to all comments contained herein prior to the adoption of the Final Environmental Impact Report. The AQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact James Koizumi, Air Quality Specialist – CEQA Section, at (909) 396-3234, if you have any questions regarding these comments.

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6-1

Sincerely,

In V. M. Mill.

Ian MacMillan

Program Supervisor, Inter-Governmental Review Planning, Rule Development & Area Sources

IM:JK LAC1206XX-XX Control Number

1. Operational Emissions During First Six Months

Peak operational emissions were estimated by subtracting the project emissions (new turbine systems, other new sources, and the derated Unit 1) from the existing emissions (Unit 1 and Unit 3). This operating scenario does not appear to match the potential for overlapping operations during the first six months after commissioning. Based on the text on page 3-6 of the EIR, during the six months after commissioning, the new turbine systems, other new sources, and the derated Unit 1 could all operate at the same time as the existing Unit 3. Therefore, the peak emissions up to six months after commissioning should include the existing Unit 3 (boilers) in addition to the new turbine systems, other new sources, and the derated Unit 1. If all of these sources are run at the same time during this period, the proposed project might be significant for operational NOx, CO, PM10, and PM2.5 emissions. The Final EIR should clarify these operations and if emissions are found to be significant, additional mitigation measures should be considered to reduce these impacts to a less than significant level.

2. Diesel Particulate Filters

Page 1-7, of the Air Quality and Climate Change Technical Report for the Scattergood Generating Station Unit 3 Repowering Project report states that all black start generators would be equipped with diesel particulate filters. This is reflected in emission estimates. Therefore, a mitigation measure should be added that requires all black start generators to be equipped with diesel particulate filters.

3. Greenhouse Gas Impacts

GHG impacts from the operation of the project are evaluated using a two-fold threshold. First, the efficiency of the CCGS and SCGS systems is compared to the target of 1,100 lb CO₂e/MWh established by SB 1368. Second, the GHG impacts from construction and operation of emergency generators and circuit breakers are compared to the AQMD's threshold of 10,000 metric tons of CO₂e per year. Using this approach, the project is determined to have a less than significant GHG impact in the Draft EIR.

AQMD staff requests that the lead agency provide further clarification regarding potential GHG impacts. First, additional substantial evidence should be provided describing why the entire project emissions should not be evaluated against the AQMD threshold of 10,000 MT CO₂e/year as the AQMD threshold does not contain guidance for partitioning GHG emissions. Second, additional information should be provided that clarifies how the efficiencies of the proposed project relate to EPA's recently proposed Carbon Pollution Standard for New Power Plants.

4. Commissioning Calculations

Table B-16 states that commissioning of both the Flex Plant 30 and Flex Plant 10 would occur over 24 hours per day. However, the emissions presented in the Peak Daily Emission Table for Scenario 2 (which is mistakenly labeled Scenario 1) appears to be estimated based on 23 hours per day (e.g., 222.6 pounds per hour of NOx x 24 hours = 5,343 pounds; not 5,119.8 pounds as presented in the peak daily emissions). These underestimated commissioning emissions are also presented in Table 6-7. The calculations or text in the EIR should be corrected to be consistent.

Also, commissioning (included in construction estimates) is significant for VOC, CO, NOx, PM10 and PM2.5 emissions. Since testing and maintenance emissions from the black start

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6-5

6 - 4

6-2

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3

engines are not included in the emission estimates, a mitigation measure should be included that prohibits the testing and maintenance of the black start engines during commissioning.

6-6 cont.

Lastly, emissions from commissioning assumed that only one combined cycle system would be commissioned at a time for the Siemens scenario and the combined cycle and simple cycle systems would not be commissioned at the same time for the GE scenario. Therefore, mitigation measures should be added that prohibits the commissioning of both combined cycle systems at the same time for the Siemens scenario and that prohibits the commissioning of the combined cycle and simple cycle systems at the same time for the GE scenario. Otherwise, emissions impacts may have been underestimated in the Draft EIR.

6-7

5. Fugitive Dust

When developing fugitive emission factors for the proposed project, the consultant used the moist soil moisture content from the 1993 SCAQMD CEQA Air Quality Handbook and a 61 percent control factor for watering. This level of control may not be achievable with soil that is already moist pre-watering. The dry soil moisture content of two percent should be used if watering is used as mitigation and no project specific data is available. The project proponent should either use the two percent dry soil moisture content with the control factor for watering in the EIR calculations, use soil moisture contents as measured at the proposed project location in the EIR calculations, or include onsite monitoring to prevent any violations of Rule 403.

6-8

6. Offroad Equipment

Page 4-1, of the Air Quality and Climate Change Technical Report for the Scattergood Generating Station Unit 3 Repowering Project report states that off road emission factors were obtained from the SCAQMD website and that "the equipment-specified load factors have been updated by multiplying the emission factor by 0.67, consistent with the CARB's recently released off-road mobile source emission inventory model (OFFROAD 2011)." These modified emission factors are presented in Table 6a of the same EIR document. This 0.67 adjustment is not consistent with OFFROAD 2011. OFFROAD 2011 contains other adjustments in addition to the load factors, such as to populations and operating hours, which in some cases results in emission factors that are greater than only multiplying the OFFROAD 2007 emission factors by 0.67. It does not appear to affect significance determinations for the proposed project, but may affect other proposed projects, if this practice is repeated for them. Unadjusted emissions factors from either OFFROAD 2007 or OFFROAD 2011 should be used to develop emission estimates for the proposed project, unless further substantial evidence is provided for the adjustment.

6-9

7. Overlapping Construction Phases

Since emissions from each construction phase (Phase 1, Phase 2 and Phase 3) were estimated and evaluated separately, a mitigation measure should be added to prevent overlap of these phases. There also appears to be a typo on page 4-13 of the Air Quality and Climate Change Technical Report for the Scattergood Generating Station Unit 3 Repowering Project report. The second sentence under the commissioning subheading states "The Siemens Flex-Plant 30 CCGS will also be commissioned in 24 phases." Since the first sentence under the commissioning subheading states "The Siemens Flex-Plant 30 combustion turbine will be commissioned in 24 different phases," it appears that the second sentences should be corrected to state "The Siemens Flex-Plant 10 CCGS will also be commissioned in 24 phases."

6-10

6-11

4

Response to Letter 6: South Coast Air Quality Management District

Response 6-1

The comment provides introductory and background information that does not address issues related to the adequacy of the analysis contained in the Draft EIR. The comment also provides a brief summation of the types of issues discussed in detail on the succeeding pages of the comment letter. Responses to these detailed comments are provided below. No further response is necessary.

Response 6-2

The six-month period after the completion of commissioning of the proposed project generators, during which Unit 3 would remain operable, is necessary for continued testing of the new units under normal operating conditions to ensure the reliability and safety of the units. While Unit 3 would remain available for operation during this six-month period, it would only be a temporary substitute source of generation that would not be utilized unless there was a relatively long-term forced outage of the new units based on a critical system breakdown or concern. In no event would the new units and Unit 3 be operated at the same time or on the same day.

The continued operation of Unit 3 beyond December 2015 (the mandated in-service date for the proposed project generators in accordance with the Settlement Agreement between LADWP and the SCAQMD) would represent a violation of the SWRCB OTC Policy. Therefore, Unit 3 would likely be operated only if the new units were taken offline for major and relatively lengthy adjustments or maintenance and only if demand for energy within the service area could not be otherwise met.

Furthermore, the amount of power that can be generated at SGS is physically limited not only by the generators themselves but also by the associated switching equipment and transmission system, which do not possess the capacity to accommodate more power than the existing capacity of all generators at SGS (830 megawatts gross). Since the new generation units would entirely replace the generating capacity of Unit 3 (along with a portion of the capacity of Unit 1), it would be implausible that both the new units and Unit 3 would be operated simultaneously. The text on page 3-26 of the Draft EIR has been modified to indicate the limited conditions under which Unit 3 would be operated during the initial six-month period of operation of the proposed project units. This change is reflected in *Chapter 3: Changes to the Draft EIR* of this Final EIR.

Response 6-3

As stated on page 1-7 of the Air Quality Technical Report, and as noted by the commenter, "All black start generators would be equipped with diesel particulate filters, which provide up to 90 percent reduction in diesel particulate matter." The use of diesel particulate filters on the black start generators is also reflected in the SCAQMD permit applications for the proposed project. Because the particulate filters are specified as equipment for the black start generators under the proposed project, their inclusion was appropriately considered in the analysis of emissions from the generators, as reflected in Tables B-5b (Hourly Emissions for Other Sources, Generation Scenario 1) and Table B-11b (Hourly Emissions for Other Sources, Generation Scenario 2). Therefore, the particulate filters cannot appropriately be considered mitigation since they have been included in the proposed project.

Response 6-4

Greenhouse gas (GHG) emissions from power generation facilities have been considered differently than emissions from other industrial operations because electricity is considered an end-use energy type that is distributed by a regulated utility through an integrated electric system. The California Air Resource Board

(CARB) has the primary responsibility for implementing Assembly Bill 32 (California Global Warming Solutions Act) and the renewable portfolio standard (RPS) for utilities. As noted in *Powering the Future – A Vision for Clean Energy, Clear Skies, and a Growing Economy in Southern California*, jointly prepared by SCAQMD, CARB, and the Southern California Association of Governments (SCAG) and published in May 2011, a broad use of clean energy is critical to the region's transition from traditional combustion of fossil fuels in cars, trucks, and factories. This transition to clean energy comes in part through repowering older power plants to substantially improve the overall efficiency of electricity generation throughout the integrated electric system.

Taking note of the integrated nature of the electrical power system and the global (i.e., not local) nature of the GHG effect, the 2009 *Framework for Evaluating Greenhouse Gas Implications of Natural Gas-Fired Power Plants in California* (CEC-700-2009-009-F, December 2009, p. 23) stated:

"When one resource is added to the system, all else being held equal, another resource will generate less power. If the new resource has a lower cost or fewer emissions than the existing resource mix, the aggregate system characteristics will change to reflect the cheaper power and lower GHG emissions rate."

The CEC has evaluated GHG emissions from proposed power projects pursuant to CEQA since 2007. As directed by Senate Bill 97, the California Natural Resources Agency adopted amendments to the CEQA Guidelines for GHG emissions, codified in Title 14 California Code of Regulations (GHG CEQA Guidance). The Amendments became effective on March 18, 2010. The GHG CEQA Guidance provided the following framework for evaluating GHG emissions:

- Quantify GHG emissions;
- Determine whether the project may increase or decrease GHG emissions as compared to the existing environmental setting;
- Determine whether the project emissions exceed a threshold of significance determined by the lead agency; and
- Determine the extent to which the project complies with state, regional, or local plans for reduction or mitigation of GHGs.

Since 2009, the CEC has evaluated GHG emissions in the Final Staff Assessment (FSA) for electrical power generation projects using these criteria with performance-based standards as the basis for determining significance impact thresholds. Examples located in the SCAQMD region of jurisdiction include the BP Refinery Watson Cogeneration Steam and Reliability Project (CEC-700-2011-002-FSA) and the NRG El Segundo Power Redevelopment Project (CEC-800-2010-015-FSA), which each proposed using combined cycle gas-fired turbine generating technology to produce highly efficient baseload power generation, similar to the SGS Repowering Project. Other recent examples in California where a performance-based standard was employed to determine impacts related to GHGs include the Lodi Energy Project (CEC-700-2009-010-FSA), the Tracy Peaker Plant (CEC-700-2009-003-FSA), the Almond Generating Station (CEC-700-2010-011-FSA), and NRG Carlsbad (CEC-700-2009-017-FSA).

Each CEC determination evaluates GHG emissions within the context of the reductions that will come from replacing older steam boiler technology power generation with fast-starting, high-efficiency gas-fired turbines. It has been determined that net GHG emissions for the integrated electric system will decline when new gas-fired power plants: (1) serve load growth or capacity needs more efficiently than the existing fleet; (2) improve the overall efficiency of the electric system; and/or (3) permit increased

All FSAs for these projects may be viewed at http://www.energy.ca.gov/sitingcases/all_projects.html

penetration of renewable generation that complies with State GHG reduction plans. The proposed project would meet all of these objectives.

CEC staff has separately evaluated short-term impacts of GHG emissions during construction of power plants, consistently concluding that these would be sufficiently reduced by "best practices" and would therefore not be significant. However, an in-depth analysis of GHG emissions due to construction activities, which are not part of the performance-based power generation standard, was nonetheless conducted in the Draft EIR for the SGS Repowering Project. To evaluate activities and equipment not included in the efficiency metric associated with the long-term operational performance standard, it is more appropriate to use the numeric standard adopted by the SCAQMD for industrial sources. This accounts for potential GHG emissions from construction as well as from new circuit breakers and black start generators.

The SCAQMD has previously recognized that some projects may need to be evaluated differently for GHG emissions, as evidenced by the tiered approach presented during workshops held by the SCAQMD during development of a GHG Significance Threshold pursuant to CEQA. Although only a numeric standard was adopted by the SCAQMD's Governing Board as an interim measure, the tiered approach and technical rationale are still valid concerns for the SCAQMD and implementation of various project types. The core of the Tier IV options is a set of efficiency metrics. These include a Reduction Target Option, which indirectly measures projects' GHG efficiency by evaluating the emissions reductions associated with a project's GHG-reduction features and an efficiency target option that directly measures a project's GHG efficiency for specific industry sectors. Likewise, LADWP has used a tiered approach for assessment of GHG impacts to better reflect the true efficiencies associated with the repowering equipment and operations.

As a fast-starting, highly efficient power generation system, the proposed units at SGS would meet all required performance-based criteria used by the CEC to evaluate GHG emissions statewide for thermal power generation projects. The proposed project would have an estimated GHG emission efficiency rate of 0.465 metric tons of CO₂/MWh for Generation Scenario 1 and 0.450 metric tons of CO₂/MWh for Generation Scenario 2. These GHG emission rates are considered low, and they compare favorably with the GHG performance of other power generation facilities recently permitted in California. With its low heat rate, the proposed project would displace older, less-efficient units and would support the integration of renewable energy into the LADWP system. As the CEQA lead agency, LADWP has acknowledged its responsibility to individually meet State RPS goals, and repowering the existing generation units from traditional steam boiler technology to highly efficient gas-turbine technology is integral to achieving clean air and GHG reduction objectives.

The Environmental Protection Agency's (EPA's) proposed Carbon Pollution Standard for New Power Plants would similarly involve a performance standard for new combined cycle power generation systems. The combined cycle gas-fired turbine train proposed for Generation Scenario 1 (GE option) would meet the EPA's proposed Carbon Pollution standard of 1,000 lb CO₂/MWh with a rating of 936 lb CO₂/MWh. The combined cycle power generation system proposed for Generation Scenario 2 (Siemens option) would also meet the proposed standard with a rating of 993 lb CO₂/MWh. However, it should be noted that, while the proposed EPA Carbon Pollution Standard would be met, projects evaluated pursuant to CEQA are not required to be analyzed relative to proposed or future standards or limits that are tentative in nature and may or may not eventually apply to the project. The proposed repowering of SGS Unit 3 would employ a highly efficient gas-fired turbine technology that meets or exceeds currently applicable performance-based standards. Any future standards, such as the EPA's proposed Carbon Pollution Standard, would need to be considered at an appropriate future date, as applicable.

As indicated in the comment, peak daily emissions during commissioning for the Flex Plant 10 under Generation Scenario 2 (as well as for the two SCGSs under Generation Scenario 1) were inadvertently calculated based on 23 hours (rather than 24 hours) of operation per day, as shown in Table B-16 in Appendix B of the Air Quality Technical Report. This error is also reflected in Tables 6-6 (Generation Scenario 1) and 6-7 (Generation Scenario 2) of the Air Quality Technical Report. The analogous tables on page 4-34 of the Draft EIR (Table 4.2.2-9 [Generation Scenario 1: Commissioning Emission Rate and Emissions Summary] and Table 4.2.2-10 [Generation Scenario 2: Commissioning Emission Rate and Emissions Summary]) have been corrected to reflect 24 hours of operation per day during peak commissioning activity for the SCGS and the Flex Plant 10 (see *Chapter 3: Changes to the Draft EIR* of this Final EIR for changes to these tables). While this correction resulted in an increase in peak daily emissions for the subject generation units during commissioning, it did not alter the impact significance conclusion reflected in the Draft EIR.

Response 6-6

A mitigation measure (AIR-J) has been added to the EIR that reads as follows: "The testing and maintenance of the black start generators shall be prohibited during the commissioning of electrical generation units." This change is reflected in *Chapter 3: Changes to the Draft EIR* of this Final EIR.

Response 6-7

The analysis contained in the Draft EIR for the peak daily emissions during commissioning of the proposed generators was incorrectly based on the assumption that the CCGS and SCGSs would not be commissioned at the same time for Generation Scenario 1 and that only one CCGS would be commissioned at a time for Generation Scenario 2. For Generation Scenario 1, the commissioning of the CCGS would require 460 hours of actual operating time divided between 24 separate phases, and the commissioning of each SCGS CTG would require 176 hours of actual operating time divided between 9 separate phases. For Generation Scenario 2, the commissioning of each CCGS would require 460 hours of actual operating time divided between 24 separate phases. These activities would occur during the last several months of project construction, leading up to an in-service date of December 2015. During commissioning, the generation units would be started, operated at various levels, evaluated, and shut down for periods of time to make necessary adjustments to meet safety requirements, ensure proper thermal and chemical characteristics, synchronize electrical and mechanical systems, and achieve efficiency objectives.

However, the commissioning process is complex and not entirely predictable, and while the individual systems (i.e., each CCGS or SCGS) would not always be operating simultaneously during commissioning, periods of overlap may not be completely avoidable while adhering to the mandated schedule for project completion. Therefore, an appropriately conservative assumption relative to peak daily emissions during commissioning is that all proposed units under a given generation scenario would be operating simultaneously throughout a 24-hour day. Table 4.2.2-9 (Generation Scenario 1: Commissioning Emission Rate and Emissions Summary) and Table 4.2.2-10 (Generation Scenario 2: Commissioning Emission Rate and Emissions Summary) on page 4-34 of the Draft EIR have been corrected to reflect peak daily emissions during commissioning equivalent to the combined total of 24 hours of maximum emissions for all units under each scenario. The supporting text on page 4-34 of the Draft EIR has also been modified to indicate this assumption. These changes are reflected in *Chapter 3: Changes to the Draft EIR* of this Final EIR. While this correction resulted in an increase in peak daily emissions during commissioning under each generation scenario, it did not alter the impact significance conclusion reflected in the Draft EIR. It should be noted that the analysis for localized ambient air quality

impacts contained in the Draft EIR incorporated the assumption that all units under a given generation scenario would be operated simultaneously at the worst case emission rate during commissioning.

Mitigating the resultant significant impact related to peak daily emissions by limiting commissioning to the CCGS or the two SCGS CTGs at a given time for Generation Scenario 1 or only one CCGS at a given time for Generation Scenario 2 is not feasible, as discussed above, because of the complex nature of the commissioning process and the requirement to achieve an in-service date for the proposed generation units of December 2015, as mandated in the Settlement Agreement between LADWP and the SCAQMD and as required in relation to ceasing the use of the once-through cooling system associated with Unit 3 by December 2015. The text on page 4-44 of the Draft EIR regarding the commissioning mitigation measures has been modified to discuss the infeasibility of entirely avoiding simultaneous commissioning operations for the proposed units. This change is reflected in *Chapter 3: Changes to the Draft EIR* of this Final EIR.

Response 6-8

The moist soil moisture content employed in calculating fugitive dust emissions during project construction was used inadvertently since there is no supporting data for this level of soil moisture at the project site. Instead, a dry soil moisture content should have been employed, with a 61 percent control factor for watering. Table 4.2.2-5 (Regional Impact Analysis: Peak Daily Criteria Pollutant Emissions Summary for Generation Scenario 1) on page 4-31 of the Draft EIR and Table 4.2.2-6 (Regional Impact Analysis: Peak Daily Criteria Pollutant Emissions Summary for Generation Scenario 2) on page 4-32 of the Draft EIR (which reflect peak daily emissions during project construction) have been corrected to incorporate a dry soil moisture content and a 61 percent control factor. The supporting text related to these tables has also been modified (see Chapter 3: Changes to the Draft EIR of this Final EIR for changes to the tables and text). While this correction resulted in an increase in peak daily emissions for PM₁₀ and PM_{2.5} during construction, it did not alter the overall regional criteria pollutant impact significance conclusion reflected in the Draft EIR. Table 4.2.2-7 (Localized Construction Impact Summary: Generation Scenario 1) and Table 4.2.2-8 (Localized Construction Impact Summary: Generation Scenario 2) on page 4-33 of the Draft EIR have also been corrected to incorporate a dry soil moisture content and a 61 percent control factor. The supporting text related to these tables has also been modified (see Chapter 3: Changes to the Draft EIR of this Final EIR for changes to the tables and text). While this correction similarly resulted in an increase in localized concentrations for PM₁₀ and PM_{2.5} during construction, it did not alter overall the localized construction impact significance conclusion reflected in the Draft EIR. Project construction would comply with SCAQMD Rule 403, which, as described above, would ensure fugitive dust emissions would be reduced by 61 percent. No additional feasible mitigation measures are available that would reduce this impact to a less than significant level. The text on page 4-45 of the Draft EIR regarding level of significance after mitigation has also been modified to reflect the above corrections to the soil moisture content (see Chapter 3: Changes to the Draft EIR of this Final EIR for changes to this text).

Response 6-9

As indicated in the comment, the OFFROAD 2011 model differs in several respects from the OFFROAD 2007 model, which was used to develop the emission factors available on the SCAQMD's website. In addition to using lower load factors than the OFFROAD 2007 model, the OFFROAD 2011 model also incorporates updated estimates of equipment age distributions, horsepower distributions, annual operating hours and equipment population, as well as other factors. As a result, emission factors by equipment type from the OFFROAD 2011 model would not be determined simply by reducing load factors for emission factors calculated from the output of the OFFROAD 2007 model. Therefore, as suggested by the comment, the construction equipment emission calculations have been revised using emission factors developed using the OFFROAD 2011 model. Construction equipment emission factors were estimated by

dividing total annual emissions by type of equipment within the South Coast Air Basin during 2012 by the total annual hours of operation by the type of equipment during 2012. However, the OFFROAD 2011 model does not provide emission estimates for some types of equipment. Therefore, unadjusted emission factors from the SCAQMD's website were used for equipment not included in the OFFROAD 2011 model. Additionally, the OFFROAD 2011 model does not estimate CO or GHG emissions, so unadjusted CO and GHG emission factors from the SCAQMD's website were used for all equipment.

Table 4.2.2-5 (Regional Impact Analysis: Peak Daily Criteria Pollutant Emissions Summary for Generation Scenario 1) on page 4-31 of the Draft EIR and Table 4.2.2-6 (Regional Impact Analysis: Peak Daily Criteria Pollutant Emissions Summary for Generation Scenario 2) on page 4-32 of the Draft EIR (which reflect peak daily emissions during project construction) have been corrected to incorporate the updated equipment emissions factors. The supporting text related to these tables has also been modified (see Chapter 3: Changes to the Draft EIR of this Final EIR for changes to the tables and text). While this correction resulted in changes in peak daily emissions for all criteria pollutants during construction, it did not alter the overall regional criteria pollutant impact significance conclusion reflected in the Draft EIR. Table 4.2.2-7 (Localized Construction Impact Summary: Generation Scenario 1) and Table 4.2.2-8 (Localized Construction Impact Summary: Generation Scenario 2) on page 4-33 of the Draft EIR have also been corrected to incorporate the updated equipment emissions factors. The supporting text related to these tables has also been modified (see Chapter 3: Changes to the Draft EIR of this Final EIR for changes to the tables and text). While this correction similarly resulted in changes in localized concentrations during construction for the analyzed pollutants, it did not alter the overall localized construction impact significance conclusion reflected in the Draft EIR. While the mitigation measures contained in the Draft EIR would reduce these impacts, they are expected to remain significant and unavoidable after mitigation. The text on page 4-45 of the Draft EIR regarding level of significance after mitigation has also been modified to reflect the above corrections to the OFFROAD model assumptions (see Chapter 3: Changes to the Draft EIR of this Final EIR for changes to this text).

Table 4.2.5-1 (GHG Construction Emissions Summary [CO₂e]) on page 4-65 of the Draft EIR has also been corrected to incorporate the updated equipment emissions factors (see *Chapter 3: Changes to the Draft EIR* of this Final EIR for changes to this table). The updated results from Table 4.2.5-1 have been factored into a corrected Table 4.2.5-3 (Annual GHG Emission Summary) on page 4-66 of the Draft EIR (see *Chapter 3: Changes to the Draft EIR* of this Final EIR for changes to this table). While this correction resulted in changes to the annual GHG mass emissions for construction, it did not alter the impact significance conclusion for GHGs reflected in the Draft EIR.

Response 6-10

The phases of construction indicated in the air quality analysis were based on a detailed schedule of construction activities included as Appendix H (Construction Data) of the Draft EIR. (Note: Appendix H was inadvertently omitted from the Draft EIR, but its omission did not change the results of analysis that depended on the information contained in the schedule. Appendix H has been added to the EIR as indicated in *Chapter 3: Changes to the Draft EIR* of this Final EIR.) This schedule was prepared by professionals with expertise and experience in electrical generation facility design and construction in order to provide comprehensive, plausible, and reasonably accurate data for use in various components of the environmental impact analysis contained in the Draft EIR.

The schedule reflects a breakdown of tasks during construction to establish the general magnitude of effort related to personnel levels, equipment use, truck trips, and earthwork during any given month over the eight-year project construction period, including the approximately three-year period related to the actual proposed generator construction (i.e., excluding the Unit 3 pre-demolition and demolition activity). This level of detail is as opposed to a broad characterization of peak levels of effort typically employed for the purposes of environmental analysis of construction-related impacts. However, while this schedule

represents a valid estimation of the construction tasks, timing, and level of effort expected for the proposed project, the actual construction process may vary to some degree from the schedule. As discussed on page 3-19 of the Draft EIR,

"Although the construction for the proposed project would be continuous, for descriptive purposes, tasks can be grouped together in phases based on their general purpose, schedule, and similarities in the type of work conducted. While the tasks and phases would generally be sequential in that some must precede others at a given location, a certain amount of overlap between tasks would occur as construction proceeds in different locations within the project site. However, in order to analyze potential environmental impacts related to the construction phase of the project, the following description generally considers the tasks and phases separately as a means of relating the overall sequence of construction and establishing the general level of activity related to functions such as equipment operations, truck deliveries, worker commute trips, and earthwork."

Therefore, it would be inappropriate and unrealistic to assume that the actual construction effort would necessarily proceed exactly as depicted in the Draft EIR schedule. However, while it is possible that some work that has been characterized in the schedule as occurring during Phase 1 (Demolition and Site Preparation) may overlap during actual facility construction with some work that has been characterized as occurring during Phase 2 (Generation Unit Construction and Commissioning), Phase 1 work at any given location must be completed before Phase 2 work could proceed. If Phase 1 and Phase 2 work were to occur simultaneously at different locations within the total project envelope, it would not generally represent an overall increase in the level of effort at a given time (relative to personnel, equipment, truck trips, and earthwork) since continued Phase 1 work in a given area would delay Phase 2 work in the same location, such that the overall level of effort within SGS at a given time would be similar to that expressed in the Draft EIR schedule (Appendix H). In no event would work associated with Phase 3 of project construction (Decommissioning and Demolition of Unit 3) occur prior to the completion of Phase 2, since Unit 3 must remain operational until the proposed project generation units have been fully tested. Therefore, a mitigation measure prohibiting any overlap between the phases of construction as described in the Draft EIR is infeasible and unnecessary relative to the validity of the impact significance conclusions related to air quality.

Response 6-11

The comment is correct that the second reference to the Flex-Plant 30 in the first paragraph on page 4-13 of the Air Quality and Climate Change Technical Report should have been to the Flex-Plant 10. As discussed in Response 6-7, above, each CCGSs under Generation Scenario 2 (i.e., the Siemens Flex-Plant 30 and the Siemens Flex-Plant 10) would require 460 hours of actual operating time during commissioning divided between 24 separate phases. Although this error in the text did not affect the environmental impact analysis or conclusions in the Draft EIR, a correction to the second sentence of the first paragraph on page 4-13 of the Air Quality and Climate Change Technical Report is made by reference in this response as follows: "The Siemens Flex-Plant 30-10 CCGS will also be commissioned in 24 phases."

2.2.7 Letter 7: City of El Segundo



City of El Segundo Planning & Building Safety Department

Elected Officials:

Carl Jecobson,
Mayor
Suzanne Fuentes,
Meyor Pro Tem
Bill Flaher,
Council Member
Dave Atkinson,
Council Member
Arie Felihauer,
Council Member
Tracy Weaver,
City Clerk
Chris Poweli,
City Treasurer

Appointed Officials:

Greg Carpenter, City Manager Mark D. Hensley, City Attorney

Department Directors:

Deborah Cullen, Finance/Human Reso Kevin Smith, Fire Chief Debra Brighton, Library Services Sam Lee, Planning and Buildin Safety Mitch Tavera, Police Chief Stephanie Katsouleas, Public Works Robert Cummings, Recreation & Parks

www.elsegundo.org

July 2, 2012

Julie Van Wagner Los Angeles County Department of Water and Power 111 North Hope Street, Room 1044 Los Angeles, CA 90012

RE: DRAFT Environmental Impact Report for the Scattergood Generating Station – Unit 3 Repowering Project.

Dear Ms. Van Wagner:

The City of El Segundo appreciates the opportunity to review the Draft Environmental Impact Report (EIR) for the Scattergood Generating Station – Unit 3 Repowering Project. The City has the following comments:

1) Project Description – Hours of Construction. Clarification is needed on the potential hours of construction on Saturdays. These hours of construction should be consistent with City of Los Angeles and City of El Segundo Municipal Code requirements. Mitigation measures should be specific regarding construction hours and under what circumstances extended hours will be permitted. The mitigation measure regarding construction hours as currently drafted does not mitigate any impacts since it is not specific regarding the times and terms for any extended hours. While the City of El Segundo is generally supportive of a schedule that expedites completion of the project as quickly as possible, the City requests that the mitigation measure explicitly state that no construction will occur on Sundays or Federal holidays excepting a public safety condition.

2) Project Description - Construction Laydown. It is the City's understanding that after the existing unused storage tanks are demolished on the parcel south of Grand Avenue the area will be used for worker parking. Please fully describe the site work to prepare this area for parking. As these surface parking lots will potentially be used

7-1

7-2

350 Main Street, El Segundo, California 90245-3813 Phone (310) 524-2380 FAX (310) 322-4167

7-2 for a number of years, please describe maintenance and dust control cont. measures that will be implemented for this area. 3) Project Description - Future use of the parcel located south of Grand Avenue. Please clarify in the DEIR what is the intended use this parcel after the site is no longer needed for construction purposes. The 7-3 City of El Segundo would like to see that the future rehabilitation and landscaping of this parcel occur. Additionally there is potential for this parcel to serve open space or recreational needs in the future. 4) Aesthetics - Sign Easement. The City requests that the DWP consider granting the City of El Segundo a sign easement at the corner of Vista 7-4 Del Mar and Grand Avenue. The City would potentially like to place a way-finding sign identifying the City of El Segundo's location further east on Grand Avenue. 5) Aesthetics - Landscape Improvements. Additional landscape 7-5 screening located along the Grand Avenue street frontage would reduce the aesthetic impacts of proposed new equipment and facilities associated with this Project. 6) Air Quality - Construction. The Draft EIR should include a mitigation measure identifying construction dust control measures to reduce 7-6 emission of fugitive dust to the extent possible. Please identify specific dust control measures that will be implemented. The City of El Segundo has residential development on the bluffs above Vista Del Mar that could be negatively effected by construction related dust. 7) Air Quality - Construction and Commissioning. The Draft EIR identifies that significant impacts that cannot be mitigated may occur during construction and commissioning. A mitigation measure requiring 7-7 notification to the City as well as residents, businesses and sensitive receptors within 1000 feet of the site prior to construction phases and commissioning that could have potential significant air quality impacts should be included. This notice should include contact information to the project public liaison. 8) Air Quality and Construction Noise. Please add a mitigation measure requiring installation of a temporary 8-foot tall fence along the ridgeline 7-8 on the east side of the property boundary north of Grand Avenue adjacent to the residences on Hillcrest to further buffer noise and fugitive dust from the site. 9) Noise - Construction. Noise mitigation measure NOISE-D appears to allow construction that generates high noise levels to continue into evening periods identified in the City of Los Angeles and City of El 7-9 Segundo Municipal Codes as required quiet periods. Please re-write this mitigation measure to require any construction occurring during Code required quiet times, to fully comply with the more restrictive of the two Cities' construction noise standards. 10) Noise - Construction. Please clarify the reason for the location choice 7-10 for noise monitoring station #2. There are homes at the end of the Hillcrest Street cul-de-sac that are closer to identified construction noise.

2

sources than the monitoring station. These homes are sensitive receptors and could have noise levels higher than what is evaluated in the EIR. Please demonstrate that the construction noise levels at the	7-10 cont.
closest point to these homes will still not exceed 62 dB. = 11) Noise - Construction. NOISE-B identifies that contractors will endeavor to use quieter equipment. A more quantifiable standard should be included in this condition. NOISE-C identifies that all laydown areas and equipment should be located away from noise-sensitive receptors. A more quantifiable standard should be used for this mitigation as well.	7-11
12) Noise - Construction. A mitigation measure requiring notification to the City of El Segundo as well as residents, businesses and sensitive receptors within 1,000 feet of the site prior to construction phases that have the potential to generate prolonged periods of loud noise should be included. This notice should include contact information (name, title, phone number, fax number and address) of the project public liaison.	7-12
13) Cumulative Impacts- Olympic Line project. Please clarify how the construction schedule for the repowering project will be coordinated with the construction schedule for the Olympic line project. The City prefers that the projects be coordinated in a way that both projects will not be impacting Grand Avenue at the same time to the maximum extent possible.	7-13
14) Circulation – Roadway Improvements. Modifications to Grand Avenue to allow for better access to an enlarged vehicle gate for the facility off of Grand Avenue are planned. It is the City's understanding these modifications include a westbound acceleration lane and a eastbound left turn pocket. As part of these improvements the City of El Segundo requests that the entire Grand Avenue roadway be repaved from Vista Del Mar to the eastern City of Los Angeles boundary as part of the project because truck traffic will deteriorate the road condition during the extended construction schedule. The City requests that general maintenance and replacement of any damaged sidewalks, curb and gutter adjacent to DWP property on both the north and south side of	7-14
Grand Avenue be required as a condition of project approval. 15) Circulation – Roadway Improvements and Traffic Safety – The City of El Segundo requests that further analysis be conducted regarding the need for a deceleration lane to address traffic safety issues because of high speed traffic for the right-turn movement from Vista Del Mar (northbound) to Grand Avenue (eastbound). The City also requests that the City of Los Angeles constructs the lane if feasible.	7-15
16) Circulation – Bicycle Lane. Any roadway improvements should not result in the removal of the existing bicycle lane on Grand Avenue.	7-16
17) Circulation – Worker Access. It is the City's understanding that an existing tunnel will be improved to allow workers to access the construction site from the parking area south of Grand Avenue through a tunnel underneath the roadway in order to minimize pedestrian traffic	7-17

and safety hazards on Grand Avenue. Please add a mitigation measure to limit ensure that worker access to the site is limited to accessing the site from the parking area through this tunnel only. This would mitigate potential pedestrian/vehicle conflicts as a result of this project.

7-17 cont.

7-18

7-19

- 18) Circulation and Biological Resources A local community organization Tree Musketeers with cooperation from the City of El Segundo and the City of Los Angeles instituted the "Trees to the Sea" Program in which the "Millenium Trees" were planted along Grand Avenue. Please add a mitigation measure that ensures the Millenium Trees will be protected during construction and that no Millenium Trees may be removed. The City also requests that the mitigation measure specify that the tree protection measure and installation must be reviewed, approved and inspected by both the City of Los Angeles and by the City of El Segundo (Parks and Recreation Department). The City also requests that any vegetation that is damaged or removed in the right-of-way as a result of construction must be replaced.
- 19) Construction Management Plan Please provide copies of the construction management plan to the City of El Segundo Public Works Department and the Planning and Building Safety Department.

Thank you for the opportunity to comment on the Scattergood Generating Station

– Unit 3 Re-powering Project. If you have any questions regarding El Segundo's comments, please contact Kimberly Christensen, Planning Manager at (310)

Sincerely.

Kimberly Christensen, AICP, Planning Manager Planning and Building Safety Department

Cc: Greg Carpenter, City Manager
Sam Lee, Planning and Building Safety Director
Mark Hensley, City Attorney
Karl Berger, Assistant City Attorney
City Council

524-2340 or Masa Alkire, Principal Planner at (310) 524-2371.

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Response to Letter 7: City of El Segundo

Response 7-1

As stated on page 3-19 of the Draft EIR, it is anticipated that construction activities would normally occur Monday through Friday from about 7:00 a.m. to 3:30 p.m. However, as also stated on page 3-19, to ensure project construction stays on schedule, construction activities by reduced work crews may also be conducted until 7:00 p.m., Monday through Friday, and occasional Saturday shifts also may be required. While weekday after-hours and/or Saturday work is not anticipated to occur frequently, the construction process for a large project such as the SGS Repowering Project is complex, and a certain amount of work beyond normal hours would likely occur during the three-year period of primary construction (i.e., the effort excluding the Unit 3 pre-demolition and demolition activities that would occur after the construction of the proposed generators is completed).

However, Mitigation Measure NOISE-D on page 4-91 of the Draft EIR prohibits the construction contractor from initiating work outside the allowable hours for construction activity codified in the City of Los Angeles and City of El Segundo municipal codes if that work would generate high noise levels. For weekdays, this would prohibit the initiation of high noise-generating activities before 7:00 a.m. (in accordance with both the Los Angeles and El Segundo municipal codes) and after 6:00 p.m. (in accordance with the El Segundo Municipal Code). For Saturdays, this would prohibit the initiation of high noise-generating activities before 8:00 a.m. (in accordance with the Los Angeles Municipal Code) and after 6:00 p.m. (in accordance with both the Los Angeles and El Segundo municipal codes). Based on Mitigation Measure NOISE-D, the initiation of high noise-generating activities would therefore also be prohibited on federal holidays (in accordance with the El Segundo Municipal Code) and on Sundays (in accordance with both the Los Angeles and El Segundo municipal codes). This aspect of the mitigation measure effectively avoids the occurrence of high noise-generating activities on Sundays and federal holidays, as requested by the City of El Segundo.

Mitigation Measure NOISE-D also requires that the contractor undertake all reasonable efforts to complete work in progress on weekdays and Saturdays prior to 6:00 p.m., the time codified in the El Segundo Municipal Code at which high noise-generating activities must cease. However, as discussed on page 3-19 of the Draft EIR, some construction activities, such as continuous welds or continuous pours of concrete, cannot be interrupted and must continue until completed, even if this requires continuing work beyond specified hours. Nonetheless, as also discussed on page 3-19, it is anticipated that most construction activities that might be conducted outside of normal weekday working hours would be types that create less noise.

Response 7-2

After the demolition of the fuel storage tanks and the associated infrastructure, the site would be stabilized with aggregate material or City approved soil binders to provide a driving surface and control dust. The current first full paragraph on page 3-25 of Chapter 3: Description of the Proposed Project of the Draft EIR has been modified to indicate the stabilization and maintenance of the former fuel tank site (see Chapter 3: Changes to the Draft EIR of this Final EIR).

Response 7-3

After completion of the proposed project construction, the former fuel tank site would continue to be maintained with an aggregate material or soil binder to provide a stable surface and control dust. The site would likely be utilized in the future for parking and laydown during the construction related to the eventual repowering of SGS Units 1 and 2, which must be completed by December of 2024 in accordance with the SWRCB's OTC Policy. After the completion of the Units 1 and 2 repowering, the former fuel

tank site would be maintained for potential, but as yet unspecified, maintenance and/or operational functions at SGS.

Response 7-4

Although unrelated to the proposed project or any impacts potentially caused by the project, LADWP would consider granting a license for right of entry to its property at the southeast corner of the intersection of Vista Del Mar and Grand Avenue for the placement of a directional sign for the City of El Segundo. Details of a license agreement related to this right of entry, including the location, size, and content of the signage, shall be subject to agreement between the parties. Actual approval of the license agreement would be granted by the City of Los Angeles through its normal approval process.

Response 7-5

During the widening and lane modifications along Grand Avenue required to accommodate constructionrelated vehicle access to SGS, approximately 30 street trees are anticipated to be removed, mostly along the north side of the street. In accordance with the City of Los Angeles Department of Public Works Bureau of Street Services Urban Forestry Division's policies, all street trees removed during construction must be replaced at a ratio of two replacement trees for each tree removed. The placement of trees must follow the tree spacing guidelines established by the Urban Forestry Division, which are intended to maintain the health and vitality of the trees as well as protect infrastructure within the right-of-way. To the extent that they could be accommodated, the replacement trees would be placed on Grand Avenue adjacent to the SGS property, along both the north and south sides of the street. Any replacement trees that could not be accommodated in this area would be placed by the Bureau of Street Services at a location(s) elsewhere within the City as determined by the Urban Forestry Division. LADWP would coordinate with the Urban Forestry Division and the Tree Musketeers organization to develop an appropriate plan for street tree replacement and maintenance on Grand Avenue. At the predicted replacement ratio, the plan would provide additional landscape planting along both the north and south sides of the Grand Avenue street frontage. A new paragraph describing the above tree replacement procedure has been added to page 3-25 of Chapter 3: Description of the Proposed Project of the Draft EIR (see *Chapter 3: Changes to the Draft EIR* of this Final EIR).

Response 7-6

As stated on page 4-29 of *Section 4.2.2*, *Air Quality*, of the Draft EIR, the proposed project would be subject to the SCAQMD's Rule 403 to control construction-related fugitive dust emissions to the extent feasible. Specific dust control measures under Rule 403 would not represent mitigation per se because their implementation is mandatory and they are already accounted for in the baseline determination of project construction impacts related to dust emissions. However, the implementation of Rule 403 would typically include the following or similar measures:

- 1) Water shall be applied to exposed surfaces at least two times per day to prevent generation of dust plumes.
- 2) One of the following measures shall be utilized at each vehicle egress from the project site to a paved public road:
 - a. Install a pad consisting of washed gravel maintained in clean condition to a depth of at least six inches and extending at least 30 feet wide and at least 50 feet long.
 - b. Pave the surface extending at least 100 feet and at least 20 feet wide.
 - c. Utilize a wheel shaker/wheel spreading device consisting of raised dividers at least 24 feet long and 10 feet wide to remove bulk material from tires and vehicle undercarriages.
 - d. Install a wheel washing system to remove bulk material from tires and vehicle undercarriages.

- 3) All off-site haul trucks carrying soil, sand, and other loose materials shall be covered (e.g., with tarps or other enclosures that would reduce fugitive dust emissions).
- 4) Construction activity on exposed or unpaved dirt surfaces shall be suspended when wind speeds exceed 25 miles per hour.
- 5) Ground cover in disturbed areas shall be replaced in a timely fashion when work is completed in the area.
- 6) A community liaison concerning on-site construction activity, including resolution of issues related to dust generation, shall be identified.
- 7) Non-toxic soil stabilizers shall be applied according to manufacturers' specifications to all inactive construction areas (previously graded areas inactive for ten days or more).
- 8) Traffic speeds on all unpaved roads shall be limited to 15 mph or less.
- 9) Streets shall be swept at the end of the day if visible soil is carried onto adjacent public paved roads. If feasible, water sweepers shall use reclaimed water.

Mitigation Measure NOISE-E on page 4-91 of the Draft EIR calls for the identification of a liaison for project construction to address public concerns regarding construction activities. This mitigation measure has been modified to require the notification to the City of El Segundo and to residents, businesses, and other uses located within 1,000 feet of SGS prior to the outset of construction for the proposed project. The notification would include the contact information for the public liaison. See *Chapter 3: Changes to the Draft EIR* of this Final EIR for the revisions to this mitigation measure.

Response 7-8

An approximately six-foot-high wall currently exists between the northern SGS property boundary and the residences located at the south end of Hillcrest Street. The six-foot-high wall also extends in front of the first residence northward along the bluff, parallel to the transmission line road. A combination of six-foot-high and shorter walls currently exist along the western boundaries of the residential properties located on the west side of Hillcrest Street. However, although these existing walls were not taken into account as a factor in reducing noise, based on the analysis provided in *Section 4.2.7*, *Noise*, of the Draft EIR, after implementation of the proposed mitigation measures, no significant impact related to noise would occur at the Hillcrest Street residential properties during project construction.

Based on its distance from the generator construction sites on the lower and middle terraces of SGS, a fence located along the northern SGS boundary and the bluff would have little effect on reducing the impacts related to dust. Dust generated at this distance would generally have dispersed vertically into the atmosphere, and only a relatively small portion that reaches the ridgeline would actually be blocked by a fence. The types of construction support activities (i.e., construction worker vehicle parking and storing lightweight materials) proposed for the paved area of SGS located adjacent to the Hillcrest Street residences are not anticipated to create significant dust that would be reduced by a temporary fence in this location. In addition, and as discussed above in Response 7-6, proposed project construction would be required to comply with SCAQMD Rule 403 for the control of fugitive dust.

Furthermore, to have any beneficial effect relative to blocking noise and/or dust, the fence would need to consist of a solid material. A solid eight-foot fence located along the edge of the bluff would block some west-facing views of the ocean and Dockweiler State Beach from the rear of the Hillcrest Street properties during project construction while not achieving a meaningful reduction in either noise or dust impacts.

See Response 7-1, above.

Response 7-10

Noise Monitoring Station No. 2 is approximately 575 feet from the middle terrace of SGS, where the proposed project generation units located closest to the residences on Hillcrest Street would be sited. Sound measured at Monitoring Station No. 2 is representative of the ambient noise level at 575 feet from the middle terrace. The residential properties and the southwest corner of the Hillcrest Street cul-de-sac are also located 575 from the middle terrace. In addition, Noise Monitoring Station No. 2 provided the least obstructed line-of-sight path between the bluff and the proposed generation units located both on the middle and lower terraces of SGS. In this way, the selected monitoring station site represents a more conservative location from which to evaluate the noise impacts related to project construction and operations, rather than at the rear of the residence at the far southwest corner of the cul-de-sac, where the line-of-sight path to the proposed generation units is somewhat more obstructed.

Relative to construction noise, the El Segundo Municipal Code establishes an upper limit of 65 dBA (not the 62 dBA indicated in the comment). As shown in Tables 4.2.7-8, 4.2.7-9, and 4.2.7-10 in the Draft EIR, with the implementation of the proposed mitigation measures, which would conservatively reduce construction noise emanating from various sources by 3 dBA, the noise level at Monitoring Station No. 2 (as well as at the far southwest corner of the residential property on Hillcrest Street) would not exceed 65 dBA.

Based on an existing ambient noise level of 57 dBA, the applicable noise limit from SGS during operations of the proposed project would be 62 dBA, in accordance with the El Segundo Municipal Code. As demonstrated in Table 4.2.7-7 of the Draft EIR, the operation of the proposed project would not exceed this limit at Monitoring Station No. 2 (nor at the far southwest corner of the residential property on Hillcrest Street) under either Generation Scenario outlined in the EIR.

Response 7-11

Mitigation Measure NOISE-B cannot establish the absolute use of equipment during construction due to equipment availability and the nature of construction activity, but the measure is included to encourage the use of quieter equipment when possible. Likewise, Mitigation Measure NOISE-C is included to encourage the contractor to locate materials laydown areas as far from residential uses as feasible. For example, it is anticipated that the areas closer to the adjacent residential properties would be utilized for construction worker vehicle parking, and the areas farther from the residential properties would be utilized for materials laydown. However, the exact use configuration of these sites cannot be absolutely determined at this time.

Nonetheless, as discussed on page 4-92 of the Draft EIR, precisely because the benefits of Mitigation Measures NOISE-B and NOISE-C cannot be accurately quantified, no reduction in the noise levels created by construction activity was attributed to the measures in the determination of noise impacts after the implementation of proposed mitigation. However, even without any reduction in noise levels attributed to Mitigation Measures NOISE-B or NOISE-C, construction noise would not exceed the limits established in the El Segundo Municipal Code, as demonstrated in Tables 4.2.7-8, 4.2.7-9, and 4.2.7-10 on pages 4-92 and 4-93 of the Draft EIR.

Response 7-12

See Response 7-7, above.

The proposed Scattergood-Olympic Transmission Line would exit SGS near the Grand Avenue gate that would be improved as part of the SGS Repowering Project. The transmission line would then proceed underground westward along Grand Avenue to Vista Del Mar. Because the SGS Repowering Project construction would include the widening of Grand Avenue (which would include a segment encompassing approximately half the distance from the Grand Avenue gate to Vista Del Mar), the Grand Avenue widening and lane modifications would be closely coordinated with the Scattergood-Olympic Transmission Line installation. The Grand Avenue modifications are anticipated to take approximately two months to complete during late 2012 and/or early 2013. Depending on the status of design, procurement, and construction contract award for the Scattergood-Olympic Transmission Line, the installation of the line within Grand Avenue (which is anticipated to take approximately three weeks to complete) may occur concurrently with the road widening and lane modifications or at a separate time. However, if the Grand Avenue modifications and the transmission line installation were to occur concurrently, the number of lanes closed at a given time on Grand Avenue would not increase beyond what would be expected for the road modification project if it was to be completed individually. A new paragraph describing the coordination of the Grand Avenue widening and lane modifications and the Scattergood-Olympic Transmission Line installation has been added to page 3-25 of Chapter 3: Description of the Proposed Project of the Draft EIR (see Chapter 3: Changes to the Draft EIR of this Final EIR).

Response 7-14

All roadway pavement, sidewalks, curbs, and gutters demolished or damaged during the Grand Avenue widening and lane modifications would be fully replaced or restored. In addition, LADWP would resurface and restripe all of Grand Avenue between Vista Del Mar and the El Segundo City line after the completion of construction. The last paragraph beginning on page 3-24 of *Chapter 3: Description of the Proposed Project* of the Draft EIR has been modified to indicate this work would be completed as part of the proposed project (see *Chapter 3: Changes to the Draft EIR* of this Final EIR).

Response 7-15

Based on the distribution, timing, and type of traffic anticipated during the proposed project construction, the project would have minimal impact related to right-turn movements from northbound Vista Del Mar to eastbound Grand Avenue (See Section 4.2.8, Traffic and Transportation, of the Draft EIR for a discussion of volume, distribution, and timing of project construction-related traffic at the intersection of Vista Del Mar and Grand Avenue). After the completion of construction, the proposed project would create no changes in terms of traffic volume or patterns that would affect this intersection. Therefore, the need for this right-turn lane is unrelated to the proposed project or any impacts potentially caused by the project. The majority of the area required for a right-turn lane from northbound Vista Del Mar to eastbound Grand Avenue falls outside LADWP property and City of Los Angeles jurisdiction. Although additional right-of-way may be needed for this street improvement, the granting of a right-of-way inside City of Los Angeles boundaries is not within the authority of LADWP. This work would need to be coordinated with the City of Los Angeles Bureau of Engineering and Department of Transportation, and may also require the approval of the Los Angeles City Council.

Response 7-16

As stated in the last paragraph starting on page 3-24 of *Chapter 3: Description of the Proposed Project* of the Draft EIR, "[m]aintaining the existing bike lanes on Grand Avenue is included in the concept design for the street widening and lane reconfiguration."

The existing pedestrian tunnel interconnecting the northern and southern parcels of SGS would be improved, and signage directing workers to the tunnel entrances would be erected. Construction workers would be directed to use either the tunnel or the signalized crosswalk at Vista Del Mar to cross Grand Avenue. The current first full paragraph on page 3-25 of *Chapter 3: Description of the Proposed Project* of the Draft EIR has been modified to indicate this (see *Chapter 3: Changes to the Draft EIR* of this Final EIR).

Response 7-18

Because a primary aspect of the Grand Avenue street construction is the widening of the roadway to accommodate left-turn lanes and facilitate right turns into the driveways on the north and south side of the street, it is not possible to avoid the removal of all existing trees. Under the current concept plan for the Grand Avenue widening and lane modifications, it is anticipated that approximately 30 trees, mostly along the northern side of the street, would require removal. See Response 7-5, above, regarding the procedures for the replacement of these trees.

Response 7-19

If the project is approved, a construction management plan would be provided to the City of El Segundo when it has been prepared by the contractor.

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CHAPTER 3: ERRATA

3.1 INTRODUCTION

Text changes shown in this chapter include those made as a result of comments on the Draft EIR during the public review period. Specific responses to comments (see Chapter 2) direct readers to specific pages or ranges of pages in the Draft EIR. All changes made to the Draft EIR are indicated in strikeout (deletion) and underline (addition) text, as shown in the subsequent section. The changes to the Draft EIR shown in the section below do not affect the overall conclusions of the environmental analysis relative to the significance of impacts.

3.2 ERRATA

Table 1.8-1, beginning on page 1-9, is revised as shown on the following pages.

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
Air Quality			
or obstruct implementation of the applicable air quality plan; would violate any air quality impacts for NOx, PM ₁₀ , and PM _{2.5} ;	Significant regional air quality impacts for NOx, PM ₁₀ , and PM _{2.5} ; Significant localized NO ₂ , PM ₁₀ and PM _{2.5} impacts Commissioning: Significant regional air quality	 AIR-A During Project construction, all internal combustion engines/construction equipment operating on the project site shall meet EPA-Certified Tier 3 emissions standards, or higher, according to the following: From January 1, 2012, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control 	Construction: Significant and unavoidable impacts Commissioning: Significant and unavoidable
	 device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations On or after January 1, 2015: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, control technology documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment. 	impacts Operation: N/A	
		AIR-B In the event a Tier 3 or Tier 4 engine is not available for any off-road engine larger than 50 horsepower, that engine shall be equipped with a diesel particulate filter (soot filter), unless certified by engine manufacturers that the use of such devices is not practical for specific engine types. For purposes of this condition, the use of such devices is "not practical" if, among other reasons: 1. There is no available soot filter that has been certified by either CARB or the EPA for the engine in question; or 2. The construction equipment is intended to be on site for 10	

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		days or less. The use of a soot filter may be terminated immediately if one of the following conditions exists: 1. The use of the soot filter is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in backpressure; 2. The soot filter is causing or is reasonably expected to cause significant engine damage; or 3. The soot filter is causing or is reasonably expected to cause a significant risk to workers or the public.	
		AIR-C All construction equipment shall be properly maintained and the engines tuned to the engine manufacturer's specifications.	
		AIR-D Prohibit construction equipment from idling longer than five minutes and post signs prohibiting idling longer than five minutes at the facility entrance and near areas where construction equipment is operating.	
		AIR-E The engine size of construction equipment shall be the minimum practical size to support the required scope of work for the equipment.	
		AIR-F Use electric welders instead of gas or diesel welders in portions of the facility where electricity is available.	
		AIR-G Use on-site electricity rather than temporary power generators in portions of the facility where electricity is available.	
		AIR-H Suspend all construction activities that generate air pollutant emissions during first stage smog alerts.	
		AIR-I Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment to the extent feasible.	
		AIR-J The testing and maintenance of the black start generators	

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		shall be prohibited during the commissioning of electrical generation units. Develop a Construction Emission Management Plan for each affected facility to minimize emissions from vehicles including, but not limited to: consolidating truck deliveries; scheduling deliveries to avoid peak hour traffic conditions; describing truck routing; describing entry/exit points; identifying locations of parking; identifying construction schedule; and prohibiting truck idling in excess of five consecutive minutes.	
AQ-2: The proposed Project would not result in exposure of sensitive receptors to substantial pollutant concentrations.	Less than significant impact	None	N/A
Noise			
NOISE-1. Construction of the proposed Project would expose persons to or generate noise levels in excess of City (or other applicable) standards and create a substantial temporary increase in ambient noise levels in the vicinity of the Project.	Significant impact	NOISE-A: All construction equipment shall be properly maintained and equipped with mufflers and other suitable noise attenuation devices. NOISE-B: Grading and construction contractors shall endeavor to use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment). NOISE-C: The construction contractor shall ensure that all stockpiling and vehicle staging areas are located away from noise-sensitive receivers, to the extent feasible. NOISE-D: The construction contractor shall plan work such that activities that generate high noise levels will not be started outside the hours codified in the Los Angeles and El Segundo Municipal Codes, and all reasonable efforts to conclude work in progress prior to the hours listed in these codes will be taken by the construction contractor.	
		NOISE-E: A public liaison for Project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and shall be required to implement reasonable measures to address the concern. Prior to the outset of construction activity for	

Potential Impact	Significance Determination	Mitigation Measures	Level of Significance After Mitigation
		the proposed project, LADWP or its contractor shall notify the City of El Segundo and residents, businesses, and other uses located within 1,000 feet of SGS. The notification shall include the contact information for the project public liaison.	

The last paragraph beginning on page 3-24 is modified as follows:

Because the construction of the lower terrace CCGS would prohibit the use of the existing main gate located along Vista Del Mar in the northwest corner of SGS, the main gate function would be relocated to Grand Avenue, at the site of the existing SGS secondary gate. The existing gate and/or an adjacent gate on Vista Del Mar would be used for deliveries/hauling related to the construction of the CCGS on the lower terrace. The Grand Avenue gate would be used by SGS personnel, for most normal deliveries, for deliveries related to portions of the work on the lower terrace CCGS, and for deliveries/hauling related to the middle terrace construction. In order to accommodate these uses, the gate, including an on-site bridge, would need to be modified. In addition, Grand Avenue, which currently consists of two westbound lanes and one eastbound lane in the area of the gate, would require widening and modifications to provide turning lanes to accommodate the level and type of traffic anticipated during construction of the proposed project. The new lane configuration would include an eastbound left-turn lane into the Grand Avenue gate and a westbound left-turn lane into a gate opposite the Grand Avenue entrance that would provide access to the southern parcel of SGS, where laydown and parking for project construction support would be provided. While no right-turn lanes are provided, the existing sidewalks and curbs at the entrances to both the north and south parcels of SGS would be modified with a larger radius to facilitate vehicle turning movements. The east- and west-bound (outside) lanes would also be widened to facilitate turns into and out of SGS on both sides of the street. All roadway pavement, sidewalks, curbs, and gutters demolished or damaged during construction would be fully replaced or restored. In addition, LADWP would resurface and restripe all of Grand Avenue between Vista Del Mar and the El Segundo City line after the completion of the proposed generator unit construction. Maintaining the existing bike lanes on Grand Avenue is included in the concept design for the street widening and lane reconfiguration.

The following is inserted as the first full paragraph on page 3-25:

During the widening and lane modifications along Grand Avenue required to accommodate construction related vehicle access to SGS, approximately 30 street trees are anticipated to be removed, mostly along the north side of the street. In accordance with the City of Los Angeles Department of Public Works Bureau of Street Services Urban Forestry Division's policies, all street trees removed during construction must be replaced at a ratio of two replacement trees for each tree removed. The placement of trees must follow the tree spacing guidelines established by the Urban Forestry Division, which are intended to maintain the health and vitality of the trees as well as protect infrastructure within the right-of-way. To the extent that they could be accommodated, the replacement trees would be placed on Grand Avenue adjacent to the SGS property, along both the north and south sides of the street. Any replacement trees that could not be accommodated in this area would be placed by the Bureau of Street Services at a location(s) elsewhere within the City as determined by the Urban Forestry Division. LADWP would coordinate with the Urban Forestry Division and the Tree Musketeers organization to develop an appropriate plan for street tree replacement and maintenance on Grand Avenue.

The following is inserted as the second full paragraph on page 3-25:

LADWP is planning to construct a new underground transmission line to interconnect SGS and the Olympic Receiving Station in West Los Angeles. The Scattergood-Olympic Transmission Line is unrelated to and not contingent upon the implementation of the SGS Repowering Project, nor is the repowering project related to or contingent upon the installation of the transmission line. However, the transmission line construction has been considered in the cumulative impacts analysis for the repowering project. The transmission line would exit SGS near the Grand Avenue gate that would be improved as part of the SGS Repowering Project. The transmission line would then proceed underground westward along Grand Avenue to Vista Del Mar. Because the SGS Repowering Project construction would include the widening of Grand Avenue (which would include a segment encompassing approximately half the distance from the Grand Avenue gate to Vista Del Mar), the Grand Avenue widening and lane

modifications would be closely coordinated with the Scattergood-Olympic Transmission Line installation. The Grand Avenue modifications are anticipated to take approximately two months to complete during late 2012 and/or early 2013. Depending on the status of design, procurement, and construction contract award for the Scattergood-Olympic Transmission Line, the installation of the line within Grand Avenue (which is anticipated to take approximately three weeks to complete) may occur concurrently with the road widening and lane modifications or at a separate time. However, if the Grand Avenue modifications and the transmission line installation were to occur concurrently, the number of lanes closed at a given time on Grand Avenue would not increase beyond what would be expected for the road modification project if it was to be completed individually.

The current first full paragraph on page 3-25 is revised as follows:

Limited areas are currently available within SGS to accommodate construction support functions, such as materials laydown, worker vehicle parking, and supervision offices. In order to partially accommodate these functions, the large existing fuel tanks located in the southern parcel of SGS (south of Grand Avenue) would be entirely demolished along with any infrastructure associated with the tanks. This would provide approximately five acres for parking and laydown area. An existing pedestrian tunnel interconnecting the northern and southern parcels of SGS would be improved, and signage directing workers to the tunnel entrances for passage between the parcels would be erected. Construction workers will be directed to use either the tunnel or the signalized crosswalk at Vista Del Mar to cross Grand Avenue. Prior to demolition, barriers to reduce dust would be constructed along the eastern perimeter of the fuel tanks site to buffer residential areas during project construction. After removal of the tanks, the area would be stabilized with aggregate material or City-approved soil binders to provide a driving surface and control dust. The site would be maintained throughout project construction and after construction is completed as necessary to minimize dust.

The last full paragraph on page 3-26 is modified as follows:

Within six months of completion of the commissioning of the proposed project generators, LADWP would remove existing Unit 3 from service and surrender the operating permits pursuant to SCAQMD Rule 2012. This six-month period of continued availability for operation of Unit 3 after project commissioning would allow for a verification of the reliability of, and any necessary adjustments to, the new generation units. While Unit 3 would remain available for operation during this six-month period, it would only be a temporary substitute source of generation that would not be utilized unless there was a relatively long-term forced outage of the new units based on a critical system breakdown or concern. In no event would the new units and Unit 3 be operated at the same time or on the same day. Unit 3 would likely be operated only if the new units were taken offline for major and relatively lengthy adjustments or maintenance and only if demand for energy within the service area could not be otherwise met. Prior to initiating the actual demolition of Unit 3, several tasks would need to be completed. Existing Units 1, 2, and 3 share many common electrical, plumbing, and mechanical systems that must be appropriately identified, isolated, reconfigured as necessary, and severed so as to not compromise the continued safe and reliable operation of Units 1 and 2. Based on its age and its function, Unit 3 contains several types of hazardous materials, including asbestos, lead paint, petroleum products, and potentially toxic fluids. These materials must be thoroughly identified and removed prior to the demolition of the primary structure of Unit 3. In addition, some of the equipment in Unit 3 may have salvage or reutilization value, and this equipment would be identified and removed prior to demolition. These tasks generally could not begin prior to the decommissioning of Unit 3 (six months after final commissioning of the proposed project generation units), and they would take approximately 2 to 2.5 years to complete, including site investigations, engineering plans, awards of contracts, and execution. During this portion of Phase 3, the number of on-site personnel and equipment would remain less than five, and no more than one truck roundtrip for delivery or hauling per week would be anticipated.

The third full paragraph on page 4-31 of the Draft EIR is modified as follows:

Peak daily emissions generated as a result of construction for Generation Scenario 1 would occur during plant construction activities, as presented in Table 4-2.2-5. Emissions during the construction phase are not expected to exceed the significance thresholds for CO, VOC, or sulfur oxides (SO_x), PM₁₀, and PM_{2.57} but peak daily construction emissions are anticipated to exceed the significance threshold for NO_x, PM₁₀ and PM_{2.5}. Therefore, the regional air quality impacts associated with construction activities of Generation Scenario 1 are considered significant.

Table 4.2.2-5 (Regional Impact Analysis: Peak Daily Criteria Pollutant Emissions Summary for Generation Scenario 1) on page 4-31 of the Draft EIR is modified as follows:

Construction	Activity Description	Criteria Pollutant					
Phase		VOC	CO	NOx	SOx	PM ₁₀	PM _{2.5}
	Characa Tank Damalitian	8.7	44.0	89.3	0.1	4.4	3.6
1	Storage Tank Demolition	<u>8.0</u>	<u>49.6</u>	<u>100.6</u>	0.2	<u>4.9</u>	<u>4.0</u>
Į.	Site Preparation	39.0	154.3	317.2	0.4	29.5	16.3
		<u>31.1</u>	<u>218.6</u>	<u>412.8</u>	<u>0.3</u>	<u>269.4</u>	<u>69.4</u>
	Dignt Construction	57.3	255.5	372.6	0.6	30.9	18.7
2	Plant Construction	<u>44.7</u>	<u>320.9</u>	<u>443.6</u>	<u>0.5</u>	<u>269.4</u>	<u>69.4</u>
2	Switchyard Expansion	37.0	206.2	180.2	0.4	12.9	9.9
	Switchyard Expansion	<u>31.5</u>	<u>234.2</u>	<u>205.5</u>	0.4	<u>31.1</u>	<u>14.5</u>
	Unit 3 Pre-Demolition	0.2	1.7	1.1	0.0	0.1	0.1
			<u>1.8</u>	<u>1.7</u>	0.0	0.1	0.1
	Unit 3 Demolition	15.0	65.1	122.6	0.2	6.5	5.8
3		<u>10.3</u>	<u>88.0</u>	<u>139.4</u>	<u>0.1</u>	<u>6.6</u>	<u>5.9</u>
3	Unit 3 Basin Retaining Wall	7.7	32.2	52.2	0.1	3.1	2.8
		<u>5.7</u>	<u>42.8</u>	<u>65.6</u>		<u>3.4</u>	<u>3.0</u>
	Unit 3 Basin Backfill, Compact and Grade	3.1	14.7	22.0	0.0	3.5	1.5
		<u>2.3</u>	<u>19.8</u>	<u>25.0</u>		<u>39.5</u>	<u>9.1</u>
Poak Daily Emiss	sions Ih/day =	57.3	255.5	372.6	0.6	52.9	30.9
reak Daily Lillis	Peak Daily Emissions, lb/day =		<u>320.9</u>	<u>443.6</u>	<u>0.5</u>	<u>269.4</u>	<u>69.4</u>
SCAQMD Mass-	SCAQMD Mass-Daily Threshold (Construction) ¹		550	100	150	150	55
Exceed SCAQMD Mass-Daily Threshold (Y/N)?		No	No	Yes	No	No	No
		INU	INO			<u>Yes</u>	<u>Yes</u>
Values in bold exceed the SCAQMD's mass-daily threshold							
Source: SCAQMD CEQA Thresholds, March 2011. Available at: http://www.aqmd.gov/ceqa/handbook/signthres.pdf							

The first paragraph on page 4-32 of the Draft EIR is modified as follows:

Peak daily emissions generated as a result of construction for Generation Scenario 2 would occur during plant construction activities, as presented in Table 4-2.2-6. Emissions during the construction phase are not expected to exceed the significance thresholds for CO, VOC, or sulfur oxides (SO_x), PM₁₀, and PM_{2.5}, but peak daily construction emissions are anticipated to exceed the significance threshold for NO_x, PM₁₀ and PM_{2.5}. Therefore, the regional air quality impacts associated with construction activities of Generation Scenario 1 are considered significant.

AUGUST 2012

Table 4.2.2-6 (Regional Impact Analysis: Peak Daily Criteria Pollutant Emissions Summary for Generation Scenario 2) on page 4-32 of the Draft EIR is modified as follows:

Dhasa	Activity Description		С	riteria Po	llutant		
Phase	Activity Description	VOC	CO	NOX	SOX	PM ₁₀	PM _{2.5}
	Storage Tank Demolition	8.7	44.0	89.3	0.1	4.4	3.6
1	Storage Tank Demontion	<u>8.0</u>	<u>49.6</u>	<u>100.6</u>	<u>0.2</u>	<u>4.9</u>	<u>4.0</u>
ı	Site Preparation	39.0	154.3	317.2	0.4	29.5	16.3
	Site Freparation	<u>31.1</u>	<u>218.6</u>	<u>412.8</u>	<u>0.3</u>	<u>269.4</u>	<u>69.4</u>
	Plant Construction	64.4	289.5	397.1	0.6	31.2	19.4
2	Flant Construction	<u>51.6</u>	<u>347.9</u>	<u>459.0</u>	0.0	<u>269.4</u>	<u>69.4</u>
2	Switchyard Expansion	38.0	214.9	181.9	0.4	13.1	10.0
	Switchyard Expansion	<u>32.5</u>	<u>242.6</u>	<u>206.8</u>	0.4	<u>31.3</u>	<u>14.6</u>
	Unit 3 Pre-Demolition	0.2	1.7	1.1	0.0	0.1	0.1
	Offic 3 Fie-Demontion	0.2	<u>1.8</u>	<u>1.7</u>	0.0	0.1	0.1
	Unit 3 Demolition	15.0	65.1	122.6	0.2	6.5	5.8
3	Office Demonstration	<u>10.3</u>	<u>88.0</u>	<u>139.4</u>	<u>0.1</u>	<u>6.6</u>	<u>5.9</u>
3	Unit 3 Basin Retaining Wall	7.7	32.2	52.2	0.1	3.1	2.8
	Office Dasin Retaining Wall	<u>5.7</u>	<u>42.8</u>	<u>65.6</u>	0.1	<u>3.4</u>	<u>3.0</u>
	Unit 3 Basin Backfill, Compact and Grade	3.1	14.7	22.0	0.0	3.5	1.5
	Office Basili Backlill, Compact and Grade	<u>2.3</u>	<u>19.8</u>	<u>25.0</u>	0.0	<u>39.5</u>	<u>9.1</u>
Dook Doily Emiss	nione Ih/dov =	64.4	289.5	397.1	0.6	53.2	31.2
Peak Daily Emiss	sions, ib/day –	<u>51.6</u>	<u>347.9</u>	<u>459.0</u>	0.0	<u>269.4</u>	<u>69.4</u>
SCAQMD Mass-	Daily Threshold (Construction)	75	550	100	150	150	55
Evanad SCAOMI	D Mass-Daily Threshold (Y/N)?	No	No	Vac	No	No	No
EXCERT SCACINI	י אומספ-טמווץ דווופטוטוט (דווא)!	No	No	Yes	No	<u>Yes</u>	<u>Yes</u>
	eed the SCAQMD's mass-daily threshold						

Source: SCAQMD CEQA Thresholds, March 2011. Available at: http://www.aqmd.gov/ceqa/handbook/signthres.pdf

The last paragraph on page 4-32 of the Draft EIR is modified as follows:

Maximum daily on-site emissions for Generation Scenario 1 construction and the applicable LSTs are summarized in Table 4.2.2-7. The CO, PM_{10} and $PM_{2.5}$ emission limits would not be exceeded, but the NO_2 , PM_{10} , and $PM_{2.5}$ emission limits would be exceeded. Therefore, emissions during construction of the proposed Generation Scenario 1 are not expected to cause significant adverse localized CO, PM_{10} , or $PM_{2.5}$ air quality impacts at the nearest sensitive receptors, but they may cause significant adverse localized NO_2 , PM_{10} , and $PM_{2.5}$ air quality impacts to the nearest sensitive receptors.

Table 4.2.2-7 (Localized Construction Impact Summary: Generation Scenario 1) on page 4-33 of the Draft EIR is modified as follows:

Description	CO	NO ₂	PM ₁₀	PM _{2.5}
Area 1 - Tank Demolition	11.7	30.2	1.4	1.2
Alea 1 - Tank Demonition	<u>17.3</u>	<u>41.5</u>	<u>1.8</u>	<u>1.6</u>
LST - 5 acres, 25 meters	1531	221	13	6
Exceed SCAQMD LST (Y/N)?	No	No	No	No
Area 2 - Switchyard Expansion	83.5	167.4	12.1	8.8
Alea 2 - Switchyard Expansion	<u>111.5</u>	<u>192.7</u>	<u>28.7</u>	<u>13.4</u>
LST - 1 acre, 200 meters	2367	156	57	18
Exceed SCAQMD LST (Y/N)?	No	Yes	No	No
Area 3 - Unit 3 Demolition/Basin Backfill	46.9	94.5	6.9	4.6
Alea 3 - Offic 3 Demonition/Dasin backini	<u>69.9</u>	<u>111.3</u>	<u>39.4</u>	<u>9.1</u>
LST - 1 acre, 200 meters	2367	156	57	18
Exceed SCAQMD LST (Y/N)?	No	No	No	No
Area 4 New CCC/CCCC Cooling Units Compressor and M/M Tanks	168.9	357.4	51.7	17.7
Area 4 - New SCGS/CCGS, Cooling Units, Compressor, and WW Tanks	<u>234.2</u>	<u>435.5</u>	<u> 268.8</u>	<u>69.0</u>
LST - 2 acres, 200 meters	2961	186	64	21
Evened CCAOMD LCT (V/N)/2	No	Voc	No	No
Exceed SCAQMD LST (Y/N)?	No	Yes	<u>Yes</u>	<u>Yes</u>
Values in bold exceed the SCAQMD LST.				

The first paragraph on page 4-33 of the Draft EIR is modified as follows:

Maximum daily on-site emissions for Generation Scenario 2 construction and the applicable LSTs are summarized in Table 4.2.2-8. Similar to Generation Scenario 1, the CO, PM_{10} and $PM_{2.5}$ emission limits would not be exceeded, but the NO_2 , PM_{10} , and $PM_{2.5}$ emission limits would be exceeded. Therefore, emissions during construction of the proposed Generation Scenario 2 are not expected to cause significant adverse localized CO, PM_{10} , or $PM_{2.5}$ air quality impacts at the nearest sensitive receptors, but they may cause significant adverse localized NO_2 , PM_{10} , and $PM_{2.5}$ air quality impacts to the nearest sensitive receptors.

Table 4.2.2-8 (Localized Construction Impact Summary: Generation Scenario 2) on page 4-33 of the Draft EIR is modified as follows:

Description	CO	NO ₂	PM ₁₀	PM _{2.5}
Area 1 - Tank Demolition	14.9	41.9	2.0	1.7
Aled 1 - Talik Demolition	<u>17.3</u>	<u>41.5</u>	<u>1.8</u>	<u>1.6</u>
LST - 5 acres, 25 meters	1531	221	13	6
Exceed SCAQMD LST (Y/N)?	No	No	No	No
Area 2 - Switchyard Expansion	83.9	168.4	10.5	8.8
Alea 2 - Switchyard Expansion	<u>111.6</u>	<u>193.3</u>	28.7	<u>13.4</u>
LST - 1 acre, 200 meters	2367	156	57	18
Exceed SCAQMD LST (Y/N)?	No	Yes	No	No
Area 3 - Unit 3 Demolition/Basin Backfill	4 6.9	94.5	5.1	4.6
Area 3 - Unit 3 Demolition/Basin Backfill	<u>69.9</u>	<u>111.3</u>	<u>39.4</u>	<u>9.1</u>
1 acre, 200 meters	2367	156	57	18
Exceed SCAQMD LST (Y/N)?	No	No	No	No
Area 4 New CCCC/CCCC Cooling Units Commission and MIM Tanks	153.3	377.8	29.9	18.2
Area 4 - New SCGS/CCGS, Cooling Units, Compressor, and WW Tanks	<u>211.6</u>	<u>439.8</u>	<u> 268.8</u>	69.0
2 acres, 200 meters	2961	186	64	21
Evened CCAOMD LCT (V/N)/2	Ma	Vaa	No	No
Exceed SCAQMD LST (Y/N)?	No	Yes	<u>Yes</u>	<u>Yes</u>
Values in bold exceed the SCAQMD LST.			-	

The first paragraph on page 4-34 of the Draft EIR is modified as follows:

Peak daily emissions during commissioning for Generation Scenario 1 were compared to the SCAQMD's regional mass daily significance threshold for construction, as presented in Table 4.2.2-9. The analysis assumes that the CCGS and the two SCGS CTGs under this generation scenario would be operating simultaneously throughout a 24-hour day. Emissions during the commissioning phase of the proposed project are anticipated to exceed the significance thresholds for VOC, CO, NO_x, PM₁₀, and PM_{2.5}. Therefore, regional air quality impacts associated with commissioning activities are considered significant and unavoidable.

Table 4.2.2-9 (Generation Scenario 1: Commissioning Emission Rate and Emissions Summary) on page 4-34 of the Draft EIR is modified as follows:

Source		Emis	sion Rate,	lb/hr							
Source	VOC	CO	NOx	SOx	PM ₁₀	PM _{2.5}					
CCGS (CTG & STG)	86.7	4,000.0	250.0	1.6	10.1	10.1					
SCGS (One CTG)	12.0 197.3 80.3 0.5 6										
Source		Peak Dail	ly Emissio	ns, Ib/day	,						
Source	VOC	CO	NOx	SO _X	PM ₁₀	PM _{2.5}					
CCGS (CTG & STG)	2,080.8	96,000.0	6,000.0	38.4	242.4	242.4					
SCGS (Two CTGs)	552.0	9,075.8	3,693.8	23.0	303.6	303.6					
3003 (TWO CTOS)	<u>576.0</u>	<u>9,470.4</u>	<u>3,854.4</u>	<u>24.0</u>	<u>316.8</u>	<u>316.8</u>					
Peak Daily =	2,080.8	96,000.0	6,000.0	38.4	303.6	303.6					
reak Dally -	<u>2,656.8</u>	<u>105,470.4</u>	<u>9,854.4</u>	<u>62.4</u>	<u>559.2</u>	<u>559.2</u>					
SCAQMD Thresholds	75	550	100	150	150	55					
Exceed Threshold (Y/N)?	Yes	Yes	Yes	No	Yes	Yes					

Values in **bold** exceed the SCAQMD's mass-daily threshold

Detailed emission calculations and operating parameters are presented in the *Air Quality and Climate Change Technical Report for the Scattergood Generating Station Unit 3 Repowering Project* Appendix AB, Table A-1eB-16.

STG = steam turbine generator

The second paragraph on page 4-34 of the Draft EIR is modified as follows:

Peak daily emissions during commissioning for Generation Scenario 2 were compared to the SCAQMD's regional mass daily significance threshold for construction, as presented in Table 4.2.2-10. The analysis assumes that both CCGSs under this generation scenario would be operating simultaneously throughout a 24-hour day. Emissions during the commissioning phase of the proposed project are anticipated to exceed the regional significance thresholds for VOC, CO, NO_x, PM₁₀, and PM_{2.5}. Therefore, regional air quality impacts associated with commissioning activities are considered significant and unavoidable.

Table 4.2.2-10 (Generation Scenario 2: Commissioning Emission Rate and Emissions Summary) on page 4-34 of the Draft EIR is modified as follows:

Source		Emis	sion Rate,	lb/hr		
Source	VOC	CO	NOx	SOx	PM ₁₀	PM _{2.5}
Flex Plant 30 (S CCGS)	552.0	4817.3	220.8	1.6	9.1	9.1
Flex Plant 10 (SC CGS)	552.0	4817.3	222.6	1.6	9.3	9.3
Source		Peak Dai	ly Emission	s, lb/day	,	
Source	VOC	CO	NOx	SOx	PM ₁₀	PM _{2.5}
Flex Plant 30 (SC CGS)	13,248.0	115,615.2	5,299.2	38.4	218.4	218.4
Flex Plant 10 (SCCGS)	12,696.0	110,797.9	5,119.8	36.8	213.9	213.9
riex Plant 10 (3 003)	<u>13,248.0</u>	<u>116,615.2</u>	<u>5,342.4</u>	<u>38.4</u>	<u>223.2</u>	<u>223.2</u>
Peak Daily	13,248.0	115,65.2	5,299.2	38.4	218.4	218.4
reak Dally	<u>26,496.0</u>	<u>231,230.4</u>	<u>10,641.6</u>	<u>76.8</u>	<u>441.6</u>	<u>441.6</u>
SCAQMD Thresholds	75	550	100	150	150	55
Exceed Threshold (Y/N)?	Yes	Yes	Yes	No	Yes	Yes

Values in **bold** exceed the SCAQMD's mass-daily threshold

Detailed emission calculations and operating parameters are presented in the *Air Quality and Climate Change Technical Report for the Scattergood Generating Station Unit 3 Repowering Project* Appendix AB, Table A-1eB-16.

A new mitigation measure as follows is added to the bottom of page 4-43 of the Draft EIR:

AIR-J The testing and maintenance of the black start generators shall be prohibited during the commissioning of electrical generation units.

The third paragraph on page 4-44 of the Draft EIR is modified as follows:

Emissions of VOC, CO, NO_x, PM₁₀ and PM_{2.5} during turbine commissioning will be from fuel combustion in the combustion turbines. No feasible mitigation measures for these emissions have been identified. The commissioning activities are required to ensure safe, reliable operation of the CTGs and the associated emission control systems. Therefore, they cannot feasibly be altered to reduce emissions. Mitigating the significant impact related to peak daily emissions by limiting commissioning to one CCGS or the two CTGs of the SCGS at a given time is not feasible because the commissioning process is complex and not entirely predictable. The commissioning of each CCGS would require 460 hours of actual operating time divided between 24 separate phases, and the commissioning of each SCGS would require 176 hours of actual operating time divided between nine separate phases. These activities would occur during the last several months of project construction, leading up to an in-service date of December 2015. During commissioning, the generation units would be started, operated at various levels, evaluated, and shut down for periods of time to make necessary adjustments to meet safety requirements, ensure proper thermal and chemical characteristics, synchronize electrical and mechanical systems, and achieve efficiency objectives. While the individual generation units would not always be operating simultaneously during commissioning, periods of overlap may not be completely avoidable while adhering to the schedule for project completion of December 2015 mandated by the Settlement Agreement between LADWP and the SCAQMD and as required in relation to ceasing the use of the once-through cooling system associated with Unit 3 by December 2015.. Additionally, existing Unit 3 cannot be decommissioned and existing Unit 1 cannot be de-rated to offset emissions during the commissioning activities because operation of these units at their current capacities is needed to provide reliable electrical power to LADWP's customers prior to full operation of the proposed project.

The first three paragraphs on page 4-45 of the Draft EIR are modified as follows:

Construction emissions for the proposed project and cumulative projects for NOx, $\underline{PM_{10}}$ and $\underline{PM_{2.5}}$ are expected to remain significant following mitigation. Emissions of CO, VOC, \underline{and} SOx, $\underline{PM_{10}}$ and $\underline{PM_{2.5}}$

generated during construction would be less than significant and, therefore, mitigation is not required. Construction emissions are expected to be short-term, and they would be eliminated following completion of the construction phase.

The mitigation measures are expected to result in additional emission reductions and reduce the potentially significant adverse impacts associated with NOx, PM_{10} and $PM_{2.5}$ emissions; however, sufficient emission reductions are not expected to reduce the significant NO_x , PM_{10} and $PM_{2.5}$ emissions to less than significant. VOC, CO, and SO_x , PM_{10} , and $PM_{2.5}$ emissions would remain less than significant.

Localized significant impacts from construction activities were analyzed for NO_2 , CO, PM_{10} , and $PM_{2.5}$. The construction activities associated with the proposed project are not expected to cause a significant adverse localized air quality impact to nearby sensitive receptors for CO, PM_{10} , and $PM_{2.5}$, and no mitigation would be required. However, the analysis concluded that construction emissions of NO_x , PM_{10} and $PM_{2.5}$ may cause the NO_2 applicable LST to be exceeded. The mitigation measures are expected to result in additional NO_x , PM_{10} and $PM_{2.5}$ emission reductions and reduce the potentially significant adverse localized NO_2 , PM_{10} and $PM_{2.5}$ impacts associated with NOx emissions; however, the impacts are expected to remain significant.

Table 4.2.5-1 (GHG Construction Emissions Summary [CO₂e]) on page 4-65 of the Draft EIR is modified as follows:

		Generation Sc	enario 1	Generation So	cenario 2
Phase	Activity Description	MT/activity	Amortized MT/30-yr	MT/activity	Amortized MT/30-yr
	Storage Tank Demolition	291	9.7	324.6	10.8
1	Storage Tank Demontion	<u>320</u>	<u>10.7</u>	<u>320</u>	<u>10.7</u>
'	Site Preparation	1,349	45.0	1356.6	4 5.2
	Site Preparation	<u>1,854</u>	<u>61.8</u>	<u>1,854</u>	<u>61.8</u>
	Dignt Construction	8,634	287.8	9349.3	311.6
2	Plant Construction	<u>11,088</u>	<u>369.6</u>	11,937	<u>397.9</u>
2	Cuitabuard Evacacion	1,594	53.1	1487.5	49.6
	Switchyard Expansion	<u>1,832</u>	<u>61.1</u>	1,733	57.8
	Heit 2 Dec Domolition	33	1.1	32.8	1.1
	Unit 3 Pre-Demolition	<u>38</u>	<u>1.3</u>	38	<u>1.3</u>
	Linit 2 Demolities	1,122	37.4	1122.1	51.437.4
2	Unit 3 Demolition	<u>1,541</u>	<u>51.4</u>	<u>1,541</u>	<u>51.4</u>
3	Unit 2 Basin Bataining Wall	174	5.8	174.4	5.8
	Unit 3 Basin Retaining Wall	<u>237</u>	<u>7.9</u>	<u>237</u>	<u>7.9</u>
	Linit 2 Danin Bankfill, Compact and Crade	230	7.7	230.1	7.7
	Unit 3 Basin Backfill, Compact and Grade	<u>313</u>	<u>10.4</u>	313	10.4
Total D	rainet Construction CHC Emissions -	13,427	447.6	14,077	469.2
Total Pr	oject Construction GHG Emissions =	17,223	<u>574.1</u>	17,973	<u>599.1</u>
Detailed	emission calculations are presented in the Air Quality	and Climate Chang	e Technical Report	Appendix A, Table	A-3a and A-3b.

Table 4.2.5-3 (Annual GHG Mass Emission Summary) on page 4-65 of the Draft EIR is modified as follows:

Source Description	Generation Scenario 1	Generation Scenario 2
Source Description	MTC	O₂e/Yr
Amortized Construction	448	4 69
Amortized Construction	<u>574</u>	<u>599</u>
Circuit Breaker Leakage	51	51
Blackstart Generators	97	391
Annual CHC Emissions -	596	911
Annual GHG Emissions =	<u>722</u>	<u>1,041</u>
SCAQMD GHG Significance Threshold	10	,000
Exceed Threshold (Y/N)?	No	No

Mitigation Measure NOISE-E on page 4-91 is revised as follows:

NOISE-E: A public liaison for project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and shall be required to implement reasonable measures to address the concern. Prior to the outset of construction activity for the proposed project, LADWP or its contractor shall notify the City of El Segundo and residents, businesses, and other uses located within 1,000 feet of SGS. The notification shall include the contact information for the project public liaison.

3.2.1 Appendices

Appendix H Construction Data is included in the Draft EIR as follows.

APPENDIX H

Construction Data

	A	В	С	D	E	F	G	Н	- 1	J	K	L	М	N	0	Р
1		Acti			ips	Oct-12	Nov-12	Dec-12	Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13
2	DEMONITIONS.	Qty	Units	Per Mon	Total	-3	-2	-1	1	2	3	4	5	6	7	
	DEMOLITIONS Tank E, Assoc Piping & Building @ Cooling Twrs	275	Lot	275	275	275										
5	Tank E. @ Cooling Twrs Tank & Foundation Demo & Disposal	210	Lot	210	210	210										
6	Tank E @ Cooling Twrs Piping Demo & Disposal															
7	Building & Foundations Demo & Disposal															
	Tank A, B, C, D & Assoc Piping Removal	1,100	Lot	550	1,100		550	550								
9	Tank A, B, C, D Oil Removal, Disposal & Tank Cleaning															
10 11	Tank A, B, C, D Tank & Foundation Demo & Disposal Tank A, B, C, D Piping Demo & Disposal															
	SITE PREP															
13	Piping mods to Gas, Steam, Water, etc for Retaining Walls 1, 2 & 3 Construction	100	tons	40	120		40	40	40							
14	Move in and Construct Roads, Construction Yards, (Site Trailer and Laydown Area Prep)	200	tons	10					10							
15	Construct Roads	1,620	tons	40	160							40	40			40
16	Miscellaneous supplies - silt fence, orange safety fence, ect.	30	tons	6					6							
17	Grade Drainage	3,200	tons	25	160					10	25	25	25	25	25	2
18 19	Installation of No 1,2 & 3 retaining walls plus mods to HTP-SGS retaining wall	95,000	00	3	19						,	_	-	2		
20	Form Work Rebar	95,000	Sq ft tons	4						4	3	4	4	3	2	
21	Embedments	10	tons	1	1					1	- 7		- 7	- 3		
22	Concrete	6,400	CY	100	711					80	110	110	110	110	110	8
23	Misc. Concrete Operations (Settling Tk Foundations)	1,600	CY	25	75					25	25	25				
24	Grand Avenue Entrance and Road Modifications	900	tons	50	100		50	50								
25	Install New Settling tanks	60	Lot	20	60						10	20	20	10		
	SWITCHYARD EXPANSION		4													
27 28	Increase Capacity UNIT 3 PRE-DEMOLITION ACTIVITIES	1	tons	10	20											
28	Isolate Unit 3 from Units 1 & 2 on all common infrastructure															
30	Sample and Test for Hazardous Materials															
31	Remove Hazardous Materials	100	tons	1	12											
32	UNIT 3 DEMOLITION															
33	Move in and Construction Yards, (Site Trailer and Laydown Area Prep)	200		10	10											
	Miscellaneous supplies - silt fence, orange safety fence, ect.	30		6												
35	Demolition to open up site	2,000	tons	100	200											
36 37	Demolition of Heavy concrete structures Demolition of lower structure	4,000	tons	40 200	80 400											
38	Demolition of Tipped Structure	3,000	tons	300	300											
39	Install Unit 3 Retaining Wall	0,000	torio													
40	Form Work	14,000	Sq ft	3	3											
41	Rebar	20		1	1											
42	Concrete	270	CY	30	30											
43	Unit 3 Basin Backfill	110,000	CY	1,400	11,000											
44 45	GENERAL ELECTRIC LMS 100 (Legal)	77	Ea	1	77											
46	LMS 100 (Legal) LMS 100 (Oversized Loads by width and weight)	14			14											
47	7FA (Legal/OD)	396	Ea		396											
	7FA (Oversized Loads by width and weight)	16			16											
49	FUEL DELIVERY															
50	On site equip fuel delivery	883,000	gal	34	883	5	5		20	20	20	20		20	20	
	Total Delivery Trips				16,266	280	645	645	76	144	197	247	222	171	160	166
	Avg Monthly Delivery Trips	1			258	14	32	32	4	7	10	12	- 11	0		
54	Avg. Daily Delivery Vehicle Trips General Construction Schedule					-3	- 2	-1	1	2	3	4	11 5	6	7	9
55	125. Mobilization - Fuel Oil Tk Removal					-0	-			_			·	·		<u>'</u>
	126. Tank E, Assoc Piping & Bldg @ Cooling Twrs Removal															
57	127. Tank A, B, C, D & Assoc Piping Removal															
	128. Mobilization Earthwork & Wall Construction															
	129. Temp Relocate Systems and Facilities	ļ														
	130. Cut Hillside for Retaining Walls and Remove North Ramp	 		 	 											
	131. Complete Fill to Grade 132. Modify HTP-SGS Retaining Wall	 	1													
	132. Modify HTP-SGS Retaining Wall 133. Retaining Walls	†	1	1	1											
	134. Backfill Wall 3 & Road	1														
	135. Finish Grade/Construct Roads															
	136. Modify Grand Ave Road & Access															
	137. Install New Settling Tanks		1													
	138. Switchyard Expansion	ļ	1													-
69 70	139. Unit 3 Pre-Demolition Activities	 	-			 	-	-	 			 			 	
71	Isolate Unit No 3 Identify Hazardous Materials	 	1													
72	Remove Hazardous Materials	<u> </u>														
73	140. Unit 3 Demolition															L
74	Mobilization															
75	Demolition															
	Retaining Wall	ļ														
76		1	1													
77	Backfill Basin				l .			1								
77 78	Compact & Grade Basin															
77 78 79	Compact & Grade Basin 141. Project Installation															
77 78 79 80	Compact & Grade Basin 141. Project Installation Civil															
77 78 79 80 81	Compact & Grade Basin 141. Project Installation Civil Mechanical															
77 78 79 80	Compact & Grade Basin 141. Project Installation Civil															
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77 78 79 80 81 82 83	Compact & Grade Basin 141. Project Installation Civil Mechanical Piping Electrical															

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1	20	Quant	Op Hrs /WD ea	Op Hr/Mo	Oct-12		Dec-12		Feb-13 2			May-13						Nov-13	Dec-13	Jan-14	Feb-14				Jun-14	Jul-14	Aug-14			Nov-14
3	Demolitions 65 T Crane Cat950 Loader wiForks	1	8	160	60		100																							
6	Water Truck	1	8	80	20 10	40	20																							
8	60 Pt Manift Excavator	1	8	160		80	80																							
9 10	Shear 10 Wheeler Dump Trucks	1 2	8		30	80 120	240																							
12	40 Pt Flat Bed Trucks Site Prep Parts Truck	2	8	320	120	120	120	240			240	0		240																
14	Paris Truck 4000 Gallon Water Truck 10 Wheeler Dump Trucks	1	6	120				120 440	120 440	120 200	120 200	120 640	120 200	120 320	120	120 200														
16	Excavator, Komatsu PC 400 Dozer, D6M	1 1	8					110	110 55	50 80	50 80	160 80	50	80 40	50	50														
18 19	Roller/Compactor Grader, Cat 14G	1	8	160				80	10	160	160	10	120 60	120 60	10	120 60										-				
20	Dozer, D6M Yard Crane, ATV	1	4	160				80	160	80 160	80	160	60 160	60	160	60														
22	Loader/Forks Cat 966 Concrete Pump	1	8	160					160 40	160 40		160 40	160 40		160 40															
	Misc.	1	8	160				80	160 80	160 80	80	160 80	160 80	80	160 80	80														
26 27 28	Switchyard Expansion Grader, Cat 14G	1	8	160																										
29 30	Loader/Forks Cat 966 Sicissors Lift 20 ft 10 Wheel Dump Truck	2	8	320																						<u> </u>				
31 32	Rock Wheel Trencher Concrete Pump	1	8																											
33 34	Grove 25t Crane Unit 3 Pre-Demolition Activities	1	6	120																										
35 36	Sicissor Lifts 20 ft 10 Wheeler Dump Trucks	1	8	20																										
37 38	Cat950 Loader wiForks Unik 3 Demolition Parls Truck	1	4	80																										
40	4000 gal Water Truck	1	6																											
42	Excavator, Komatsu PC 400 Yard Crane, ATV Grave 25t Crane	1	8	1120 160																					E	Ħ				
44 45	Grove 25t Crane 500 T Crane Loader/Forks Cat 966	1 1 5	8	160																										
46 47	Scissors ift 20 ft Unit 3 Basin Retaining Wall	5	8		L																				F	E				
48	Soisors If 20 ft Loader/Forks Cat 966 175 CFM Air Compressor	5	8	800																					E	E				
51	Concrete Pump	1	8	40																										
52 53	Unit 3 Basin Backfill, Compact & Grade	1		160																						E				
55	Roller/Compactor Cat 14H Blade Grader, Cat 14G	1	8	160 160 80																										
57	Dozer, D6M 4000Gal Water Truck	1	4	80																						 				
59	Plant Construction Civil Earthwork																									-				
61 62	CAT 627F Scraper CAT 14H Blade	6	8	960										480 320	600 320	960 480	960 480	960 480		480 320	160 320	60 120	30 60							
63 64	MF 650B Skip Water Truck Kobelco 80 - Exc	2	8	320										160 160	240 320	320 480	320 480	320 480	320 480	320 480	320 480	240 360	240 360	80 240	80 240	160 480		48 288	80 480	
66	10 Wheeler Dump Trucks	6	8	960										160 480	240 600	320 960	320 960	320 960	320 960	320 960	320 960	240 720	240 720	160 480		320 960	960	192 576	320 960	480
68	CAT 815F Compactor CAT DGR Dozer CAT THING Forder	4	8	640 640 320										160 160 160	480 480 240	640 640 320	640 640 320	640 640 320	640	640 640 320	640 640 320	480 480 240	480 480 240	320 320 160	320 240 160	400 480 320	320	192 192 192	320 240 320	160
70 71	CAT TH103 Forkitt 175 CFM Air Compressor Foundations	1	8											160	160	160	160	160	160	160	160	120	120	80	80	160	160	72	120	120
72 73	90-Ton Rough Terrain Crane 60-Ton Rough Terrain Crane	1 2	6	120										80 80	80 120	80 180	80 200	120 240	120 240	120 240	120 240	90 180	90 180	60 120	60 120	120 240		72 144	80 240	80 120
74 75	Sicissor Lifts 20 ft 1 Ton Parts Truck	4 1	8 6	640 120										80	80	80	80	80 120		520 120	640 120	480 90	480 90	320 60	320 60	120	120	384 72	640 120	320 120
77	175 CFM Air Compressor Electric, Welding Machine 400 Amps	1	8	320 80										40	40	80	80 20	160 40	160 40	160 40	160 40	120 30	120 30	80 30	85 40	300 80		180 36	320 40	
79	Structural Steel 1-Ton Flatbed Truck	3	6	360													120	240	240	240	360	360	360	360	360	280	240	120	120	80
81	1-Ton Flatbed Truck w/Trailer 6,000 # Forklift Electric, Welding Machine Six Pack	2	8	240 320 640													120 160 160	120 160 320	160	240 160 480	240 160 480	240 320 480	240 320 640	240 320 640	320	300	260	120 200 160	120 160 160	160
83	Gas/Diesel Compressor Combo 90-Ton Rough Terrain Crane	4	8	640													160	320 320	320 480	320 480	480 480	640 640	640 640	480 640	320 480	320 320	160	160	160	160
85 86	60-Ton Rough Terrain Crane Sicissor Lifts 20 ft	2	8	320													120 160	120 320		320 640	320 800	320 800	320 960	320 960		160	120	120 160	120 160	120
87 88	SJ 600 Man Lifts 66 ft Mechanical	8	8	1280													160	320		640	800	960	1,120	1,280				160	160	
89 90	1-Ton Flatbed Truck 1-Ton Flatbed Truck w/Trailer 6 000 # Forkith	6	6	720 480													120 120	240 120		240 120	240 120	360 120	360 240	480 240	560 240	640 340		450 360	480 320	360 256
	6,000 # Forklift Electric, Welding Machine Six Pack GasiDiesel Compressor Combo	8	8	1280 640													120 240 80	120 240 80	120 240 160	120 320 160	120 320 160	120 320 160	240 480 320	300 600 480	720 640		960	960 240	240 800 320	192 640 256
94	90-Ton Rough Terrain Crane 60-Ton Rough Terrain Crane	3	6	360													80	120 80	120 120	120	120 120	240 120	240 180	360 360	360	240 240	240	150 165	120 120	96
96 97	Sicissor Lifts 20 ft S.I.600 Man Lifts 66 ft	8	8	1280															160	160	320	480 160	480 380	720 420	720	1,140	1,280	855 855	900	720 720
98 99	500 Ton Crane Electrical	3	8	480																	160	160	160	160	160	320	320	240	480	384
100	Backhoe Bobcat	2	8																							360 160	160	360 160	360 160	160
103	175 CFM Air Compressor Vaccum Trailers Rock Wheel Trencher	2	6	320 240																				120	120	160 120	120	160 180	160 240 180	240
105	Rook Wheel Trencher Equipment Trailer (pullers, benders,ect Generators	2 3 4	8 8	240 480 640	1																			120 160 320	160	120 180 480	180	180 240 480	240 480	320
107	Sicissor Lifts 20 ft SJ 600 Man Lifts 66 ft	6	6	720																				120			240	360 180	360 240	480 360
109	Service Trucks-Conductor Splicing Dump Truck	3 2	6	360 240																				120 120	120 120	100 100	100 100	120 120	120 160	160
111	ForkLit	3	TOTAL Hours	360	250		790	1,285		1,370	1,090	1,610		3,800	4,780		7,900		9,880	10,720	11,440	11,050	12,280	120 13,070	13,225	120 16,300	120 15,340	120	180 13,160	10,880
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116	125. Mobilization - Fuel Oil Tk Removal				ř	"	-1		-	3	7	J	3	- 1	۰	•	10	- 11	12	13	146	13	10		- 10	19	20		- 22	- 23
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121	130. Cut Hillside for Retaining Walls and Remove North Ramp			_																						\vdash				
122	131. Complete Fill to Grade 132. Modify HTPLSGS Retaining Wall																										oxdot			
125	133. Retaining Walls 134. Backill Wall 3 & Road 135. Einiel Gradal Construct Poorle																											=		
127	135. Finish Gradel Construct Roads 136. Modify Grand Ave Road & Access 137. Install New Settling Tanks																										H			
129	137. Install New Setting Tanks 138. Switchyard Expansion 139. Unit 3 Pre-Demolition Activities																								F	F		=		
131	Isolate Unit No 3				L																					E				
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	DEMOLITIONS						Ť															
	Tank E, Assoc Piping & Building @ Cooling Twrs						400															
5	Tank E @ Cooling Twrs Tank & Foundation Demo & Disposal																					
6	Tank E @ Cooling Twrs Piping Demo & Disposal																					
7	Building & Foundations Demo & Disposal																					
8	Tank A, B, C, D & Assoc Piping Removal							650	650													
9	Tank A, B, C, D Oil Removal, Disposal & Tank Cleaning																					
10	Tank A, B, C, D Tank & Foundation Demo & Disposal																					
11	Tank A, B, C, D Piping Demo & Disposal																					
12	SITE PREP																					
	Piping mods to Gas, Steam, Water, etc for Retaining Walls 1, 2 &	& 3 Construct	tion				5	5	5													
	Move in and Construct Roads, Construction Yards, (Site Trailer)						15												
15	Construct Roads																	112				
16	Miscellaneous supplies - silt fence, orange safety fence, ect.									15												
17	Grade Drainage									80												
18	Cut hillsides, modify grades & backfill									100	100		80	80		56		154				
19	Installation of No 1,2 & 3 retaining walls plus mods to HTP-SGS	retaining wal	l								280	280	280	275	275	275	275					
20	Form Work																					
21	Rebar																					
22	Embedments																					
23	Concrete																					
24	Misc. Concrete Operations (Settling Tk Foundations)																					1
25	Grand Avenue Entrance and Road Modifications							300	300													1
26	Install New Settling tanks							1				200	300	300	200							1
27	SWITCHYARD EXPANSION											200	500	550	200							1
28	Increase capacity																					
	UNIT 3 Pre- DEMOLITION ACTIVITIES																					
30	Isolate Unit 3 from Units 1 & 2 on all common infrastructure																					
31	Sample and Test for Hazardous Materials																					
32	Remove Hazardous Materials																					
33	UNIT 3 DEMOLITION																					
34	Move in and Construction Yards, (Site Trailer and Laydown Area	a Prep)																				
35	Miscellaneous supplies - silt fence, orange safety fence, ect.																					
36	Demolition to open up site																					
37	Demolition of Heavy concrete structures																					
38	Demolition of lower structure																					
	Demolition of Tipped Structure																					
	Install Unit 3 Retaining Wall																					
41	Form Work																					
42	Rebar						1															
43	Concrete							1														1
44	Unit 3 Basin Backfill																					
	Plant Construction																					
46	Civil						1	1								300	300	300	800	1,600	1,600	1,600
47	Mechanical															500	500	300	1,700	1,700	1,700	2,20
48	Piping																		.,. 00	.,. 00	.,, 00	2,200
49	Electrical																					
50	System Testing & Startup and Commissioning																					
51	See a second of the South Control of the South Cont			TOTAL	MD/Month		405	955	955	210	380	480	660	655	475	631	575	566	2500	3300	3300	3800
52					Personnel		20	48	48	11	19	24	33	33	24	32	29	28	125	165	165	
53					Vorker MDs		2,273															
54					Supervision		18	18	18	24	24	24	24	24	24	24	24	48	48	48	48	48
55					Personnel		38	66	66	35	43	48	57	57	48	56	53	76	173	213	213	238
56				g. Daily Tota	l Personnel		139															
57	General Construction Schedule	Crew Size		Months		Finish	-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12	13
58	125. Mobilization - Fuel Oil Tk Removal	3		0.2	-3																	
	126. Tank E, Assoc Piping & Bldg @ Cooling Twrs Removal	12	15	0.8	-3	-3																
	128. Tank A, B, C, D & Assoc Piping Removal	36	30	1.5																		
	128. Mobilization Earthwork & Wall Construction	3		0.0																		
	129. Temp Relocate Systems and Facilities	8	20	1.0	-2	1																
	130. Cut Hillside for Retaining Walls and Remove North Ramp	8	38	1.9																		
	131. Complete Fill to Grade	8	10	0.5		4																
65	132. Modify HTP-SGS Wall	4	10	0.5			oxdot	$ldsymbol{ldsymbol{ldsymbol{eta}}}$				آللا										
66	133. Retaining Walls	30	117	5.9																		
67	134. Backfill Wall 3 & Road	10.5	13	0.7	9																	
68	135. Finish Grade/Construct Roads	8	14	0.7	4	9																
	136. Modify Grand Ave Road & Access	20	30	1.5																		
	137. Install New Settling Tanks	32	55	2.8																		
71	138. Switchyard Expansion	10	150	7.5		36																
	139. Unit 3 Pre-Demolition Activities																					
	Isolate Unit No 3	6	120	6.0	43	54	L															
	Identify Hazardous Materials	2	80	4.0																		
	Remove Hazardous Materials	5	110	5.5																		
	140. Unit 3 Demolition																					
77	Mobilization	3		0.0	37	38																
78	Demolition	35	140	7.0	39																	
	Retaining Wall	20	36	1.8																		
	Backfill Basin	10	80	4.0																		
	Compact & Grade Basin	10	20	1.0																		
	141. Project Installation					1																1
82	Civil	97	420	21.0	7	27																
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83 84	Mechanical	175 124	420 300	21.0 15.0																		
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2		Qty	vity Units	Tr Per Mon	ips Total	-3	-2	Dec-12 -1	Jan-13 1	Feb-13 2	mar-13	Apr-13	May-13		Jui-13 7	Aug-13 8		Oct-13	
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	Tank E, Assoc Piping & Building @ Cooling Twrs	275	Lot	275	275	275													
5	Tank E @ Cooling Twrs Tank & Foundation Demo & Disposal																		
6	Tank E @ Cooling Twrs Piping Demo & Disposal																		
7	Building & Foundations Demo & Disposal																		-
8 9	Tank A, B, C, D & Assoc Piping Removal Tank A, B, C, D Oil Removal, Disposal & Tank Cleaning	1,100	Lot	550	1,100		550	550											
10	Tank A, B, C, D Oil Removal, Disposal & Tank Cleaning Tank A, B, C, D Tank & Foundation Demo & Disposal																		
11	Tank A, B, C, D Piping Demo & Disposal																		
	SITE PREP																		
13	Piping mods to Gas, Steam, Water, etc for Retaining Walls 1, 2 & 3 Construction	100	tons	40	120		40	40	40										
14	Move in and Construct Roads, Construction Yards, (Site Trailer and Laydown Area Prep)	200	tons	10	10				10										
15	Construct Roads	1,620	tons	40	160							40	40			40	40		
16	Miscellaneous supplies - silt fence, orange safety fence, ect.	30	tons	6	6				6	40	٥٢	0.5	0.5	05	05	0.5			-
17 18	Grade Drainage Installation of No 1,2 & 3 retaining walls plus mods to HTP-SGS retaining wall	3,200	tons	25	160					10	25	25	25	25	25	25			
19	Form Work	95,000	Sq ft	3	19					4	3	3	3	3	3				
20	Rebar	425	tons	4	21					4	4	4	4	3	2				
21	Embedments	10	tons	1	1					1									
22	Concrete	6,400	CY	100	711					80	110	110	110	110	110	81			
23	Misc. Concrete Operations (Settling Tk Foundations)	1,600	CY	25	75					25	25	25							
	Grand Avenue Entrance and Road Modifications	900	tons	50	100		50	50	.				<u> </u>						├
25	Install New Settling tanks	60	Lot	20	60	-			-	-	10	20	20	10	-				\vdash
26 27	SWITCHYARD EXPANSION Increase Capacity	4	tons	10	20	\vdash			 	 			1						-
	UNIT 3 PRE-DEMOLITION ACTIVITIES		IUID	10	20														<u> </u>
29	Isolate Unit 3 from Units 1 & 2 on all common infrastructure																		
30	Sample and Test for Hazardous Materials																		
31	Remove Hazardous Materials	100	tons	1	12														
32	UNIT 3 DEMOLITION					Щ.			Ь	<u> </u>			<u> </u>						₩
33	Move in and Construction Yards, (Site Trailer and Laydown Area Prep)	200	tons	10	10	—	 		<u> </u>	<u> </u>			<u> </u>	-					₩
34 35	Miscellaneous supplies - silt fence, orange safety fence, ect.	30	tons	100	6 200		 			 			 						
_	Demolition to open up site Demolition of Heavy concrete structures	2,000	tons	100	200 80														
37	Demolition of lower structure	4,000	tons	200	400														
	Demolition of Tipped Structure	3,000	tons	300	300														
39	Install Unit 3 Retaining Wall	*,***	10																
40	Form Work	14,000	Sq ft	3	3														
41	Rebar	20	tons	1	1														
42	Concrete	270	CY	30	30														—
43	Unit 3 Basin Backfill	110,000	CY	1,400	11,000														
44 45	SIEMENS																		-
	1x1 FP30 (w/12 cell ACC) Econopac (Oversized Loads by width and weight)	16	Ea		16														
	Econopac (Coversized Loads by width and weight) Econopac (Legal/OD)	396	Ea		396														
48	1x1 FP10 (w/ACHE)																		
	Econopac (Oversized Loads by width and weight)	8	Ea		8														
	Econopac (Legal/OD)	250	Ea		250														
	FUEL DELIVERY	200 200			200	_	_	_										- 40	
52 53	On site equip fuel delivery Total Delivery Trips	883,000	gal	34	883 16,433	280	645	645	20 76	20 144	20 197	20	20 222		20 160	20 166	20 60	40 40	
	Avg Monthly Delivery Trips				261	200	045	040	10	144	131	241	222	1/1	100	100	00	40	40
	Avg. Daily Delivery Vehicle Trips				201	14	32	32	4	7	10	12	11	9	8	8	3	2	2
56	General Construction Schedule					-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11
57	125. Mobilization - Fuel Oil Tk Removal																		<u> </u>
	126. Tank E, Assoc Piping & Bldg @ Cooling Twrs Removal								<u> </u>	<u> </u>			<u> </u>	-					₩
	127. Tank A, B, C, D & Assoc Piping Removal 128. Mobilization Earthwork & Wall Construction					—				 			-	-	-				├
	128. Mobilization Earthwork & Wall Construction 129. Temp Relocate Systems and Facilities									l -			1						<u> </u>
	130. Cut Hillside for Retaining Walls and Remove North Ramp																		
63	131. Complete Fill to Grade																		
	132. Modify HTP-SGS Retaining Wall																		$ldsymbol{ldsymbol{ldsymbol{eta}}}$
_	133. Retaining Walls					—													<u> </u>
	134. Backfill Wall 3 & Road					\vdash	 			 									
	135. Finish Grade/Construct Roads 136. Modify Grand Ave Road & Access								l —	 									-
	136. Modify Grand Ave Road & Access 137. Install New Settling Tanks								-	1									<u> </u>
70	138. Switchyard Expansion																		
	139. Unit 3 Pre-Demolition Activities																		
72	Isolate Unit No 3																		
73	Identify Hazardous Materials																		
74	Remove Hazardous Materials					Ь			L	<u> </u>			<u> </u>						₩
75	140. Unit 3 Demolition								-						-				<u> </u>
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86 87	System Testing and Startup Generator Commissioning					-			-	<u> </u>			<u> </u>	-		-	\vdash		<u> </u>
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2	Demolitions 20 Demolitions 65 T Crane Cal950 Loader wilForks	Quant	Op Hr/WD/ea	Op Hr/Mo	-3		-1	Jan-13 1		Mar-13	Apr-13	May-13 5	Jun-13	Jul-13 7	Aug-13 8	Sep-13 9	10 10	Nov-13					Apr-14 16						22	Nov-14 23	Dec-14 24
4	65 T Crane Cat950 Loader w/Forks	1	8	160	60 20		100																								
6 7	Caddil Lader will finite Desire Tuber Select	1	4	80	10 10	160	20 80																								
9	Excavalor Shear	1	8	160 3 160 3 320	30	80 80	80 50 240																								
11	40 Ft Flat Bed Trucks Site Pren	2	8	320	120	120 120	120																								
13 14	Parts Truck 4000 Gallon Water Truck	1	4	80				240 120	120	120	240 120	0 120	120	240 120		120															
15 16	10 Wheeler Dump Trucks Excavator, Komatsu PC 400	4	8	640 3 160				440 110	440 110	200 50	200 50	640 160	200 50	320 80	50	200 50															
17 18	Dozer, D6M Roller/Compactor	1	8	80				55 80	55	160	160	80	120	40 120		120															
20 21	Dozer, D6M Yard Crane, ATV	1	4	80	-			80	100	80 80	80	10	60 60	60 60		60 60															
22 23	Loader/Forks Cat 966 Concrete Pump	1	8	3 160 2 40					160	160		160 40	40		160																
24 25	LeaderFloris Cat 965 Concrete Pump Grove 25C Conne Misc. Switchyser Expansion Conder Cpt 160 LeaderFloris Cat 965 Science J 100 100 100 100 100 100 100 100 100 100	1	8	160				80	160 80	160 80	80	160 80	160 80	80	160 80	80															
26 27	Switchyard Expansion Grader, Cat 14G	1	8	160																											
29	Loader/Forks Cat 966 Sicissors Lift 20 ft	2	8	3 120 3 320 3 160																											
31 32	Rock Wheel Trencher Concrete Pump	1	8	3 160 3 160																											
33 34	Grove 25t Crane Unit 3 Removal	1	6	120																											
35 36	Rock Wheel Trender Concrete Pump Grove 35 Clane Unit 3 Removal Unit 3 Phe-Demolition Activities Sicisor Unit 20 0 10 10 10 10 10 10 10 10 10 10 10 10 10 1	1	8	3 20																											
38	10 Wheeler Dump Trucks Cat950 Loader wiForks	1	4	80																											
40 41	Parts Truck 4000 nel Water Truck	1	4	80																											
42	CasSSI Loader will forts Dead 3 Demolition Parts Truck 400 oal Whater Truck Executor, Komstau PC 400 Yeld Caren, ATV Goney 252 Caren 501 Caren Lander(Floris Cat 965	7	8	1120 3 160																											
44	Grove 251 Crane 500 T Crane	1	8	3 160 3 160																											
46	Loader/Forks Cat 965 Soissors lift 20 ft Unit 3 Regin Pateining Mail	5	8	8 800																											
48 49 50	LoaderForks Cat 1965 Soisors III 20 II Unit 3 Basin Retaining Wall Soisors III 20 II LoaderForks Cat 1965 175 CPM Air Compressor	5	8	8 800																											
51 52	Lisiader ons Sat see TTS CFM Air Compressor Conciete Pump Grove 25t Crane	1	8	160																											
53 54	Grove 25t Crane Unit 3 Basin Backfill, Compact & Grade Roller/Compactor	1	8	3 160																											
55 56	Roller/Compactor Cat 14H Blade	1	8	3 160 3 160																											
57 58	Cat 14H Blade Golder, Cat 14G Deser, DBM 400GaV MINET Truck Plant Construction CW Earthwork CAT 14H Blade CAT 14H Blade	1	4	80 80 1 120																											
60 61	Plant Construction Civil Earthwork	1		120																											
62 63	CAT 627F Scraper CAT 14H Blade	6	8	960 3 480										480 320	320	960 480	960 480	960 480	480	480 320			40 80								
64 65	CAT 1418 Blade Wilder Truck Societies SP - Ex- 10 Wheeler Durp Trucks CAT 0879 Dozer CAT 1110 Franklit 115 STM An Compressor	2	8	320 3 480										160 160	320	320 480	480	320 480	480			480	320 480	480	480		480	480	80 480	80 480	80 480
66 67	Kobelco 80 - Exc 10 Wheeler Dump Trucks	2	8	3 320 3 960										160 480 160	600	320 960	320 960	320 960 640	960	320 960 640	320 960 640	320 960 640	320 960 640	320 960 640	320 960 640	960	960	960	320 960 320	160 480 160	160 420 160
68 69	CAT D6R Dozer CAT TH103 Forklift	4	8	3 640 3 640 3 320										160 160		640 640 320	640 640 320	640 640 320	640	640 640 320	640 640 320	640	640 640 320	640 640 320		400 480 320	320	320	320 240 320	160 160 320	160 80 240
71 72	175 CFM Air Compressor Foundations	1	8	160										160	160	160	160	160	160	160	160	160	160	160	160	160	160	120	120	120	120
73 74	90-Ton Rough Terrain Crane 60-Ton Rough Terrain Crane	1	6	120										80 80		80 180	80 200	120 240	240	120 240	120 240	120 240	120 240	120 240	240	120 240	240	120 240	80 240	80 120	60 120
75 76	Sicissor Lifts 20 ft 1 Ton Parts Truck 175 CEM Air Compressor	1	6	640 5 120 8 320										80 40	80 40	80	80	120 160	120	520 120 160	640 120 160	640 120 160	640 120 160	640 120 160	120	640 120 300	120	120	640 120 320	320 120 160	160 120
78 79	Electric, Welding Machine 400 Amps Structural Steel	1	4	80										40	40	80	20	40		40	40		40	60		80			40	40	40
80 81	1-Ton Flatbed Truck 1-Ton Flatbed Truck w/Trailer	3	6	360 3 240													120 120	240 120	240	240 240	360 240	240	360 240	360 240	240	280 180	120	120	120 120	80 80	
82 83	6,000 # Forkift Electric, Welding Machine Six Pack	2	8	320													160 160	160 320	160	160 480	160 480	320 480	320 640	320 640	320 640	300 480	260	200 160	160 160	160 120	
84 85	Conf. Companies Companies Stromberge Stromberg	4	8	640 640 3 320													160 160 120	320 320 120	480	320 480 320	480 480 320		640 640 320	480 640 320	320 480 180	320 320 160	160	160	160 160 120	160 160 120	
87 88	60-Tor Rough Terrain Crane 60-Tor Rough Terrain Crane Scissor Life 20 ft Sci 500 Man Life 61 ft Mechanical 1-Ton Risbed Track 1-Ton Risbed R	6	8	3 960 3 1280													120 160 160	320 320	480	640 640		800	960 1,120	960	800	640 960	480	160	160 160	120	
89 90	Mechanical 1-Ton Flatbed Truck	6	6	720													120	240	240	240	240	360	360	480	560	640	720	600	480	360	240
91 92	1-Ton Flatbed Truck w/Trailer 6,000 # Forklift	4	6	480													120 120	120	120 120	120 120	120 120	120 120	240 240	300	240 480	340 480	480 320	480 240	320 240	240 240	160 120 320
93 94	Electric, Welding Machine Six Pack Gasi/Diesel Compressor Combo 90-Ton Rough Terrain Crane 60-Ton Rough Terrain Crane	4	8	3 1280 6 640 6 360													240 80 80	240 80 120	160	320 160 120	320 160 120		480 320 240	480		640	480	320	800 320 120	720 160 120	320 160 120
96 97	60-Ton Rough Terrain Crane Sicissor Lifts 20 ft	3	6	360										L			80	80	120 120 160	120 120 160	120	120 480	180 480	360 720	360 720	240 1,140	240 1,280	220 1,140	120 900	120 600	120 480
98 99	SJ 600 Man Lifts 66 ft 500 Ton Crane	8	8	3 1280 3 480																	160	160	380 160	420 160	720	900	1,280	1,140	900	720 480	480 320
100	66-Tor Rough Terrain Crane Sicisors Lifts 20 II Sul 600 Man Lifts 66 ft 500 Ton Crane Electrical Backhoe Roboto	2	8	320																						360	360	360	360	360	360
107	Backine Stort 115 CFM Nr Compressor Vaccom Trailer Store Internation Dump Track Foot.In Owners Construction Schedule Owners Construction Schedule	2	8	3 480 3 320 5 240																				120	120	160 160 120	160	160	160 160 240	160 160 240	160 160 240
105	Rock Wheel Trencher Equipment Trailer (pullers, benders,ect	2 2 3	6	240 3 240 3 480	E									L			L		L	L				120 120 160	120	120	120	180	180 240	180 320	240 320
107	Generators Sicissor Lifts 20 ft	4	8	640 720	l .																			320 120	320	480 120	480 240	480	480 360	640 480	640 480
109	SJ 600 Man Lifts 66 ft Service Trucks-Conductor Splicing	3	6	3 480 3 360																				120	120	120 100	100		240 120	360 160	360 180 200
117	ForkLift	3	TOTAL Hours	360	250	880	790	1.285	1.335	1.370	1.090	1.610	1.210	3 800	4.780	6.390	7.900	9,280	9.880	10.720	11.440	12.400	13,600	120 120 15.580	120	120	120	120	160 180 13,160	180 240 10,920	200 360 8,540
114		,	Avg. Daily Equip. Ho Avg. Daily Equip.	ours	13 2	44 6	40 5	64 8	67 8	69	55	81 10	61	190 24	239 30	320 40	395 49	464 58	494 62	536 67	572 72	620 78	680 85	779 97	784	815 102	767 96	718 90	658 82	546 68	427 53
116	General Constitution Exhaultus Str. Michigarium - Faul Ol Ti Removal Str. Michigarium - Faul Ol Ti Removal Str. Faul - Faul - Faul - Faul - Faul Str. Faul - Faul - Faul Str. Faul - Faul Str. F				-3	-2	4	1	2	3	4	5	6	7	8	9	10	11		13	14	15	16	17	18	19			22		24
118 119	126. Tank E, Assoc Piping & Bidg @ Cooling Twrs Removal 127. Tank A, B, C, D & Assoc Piping Removal																														
121	126. Mobilization Earthwork & Wall Construction 129. Temp Relocate Systems and Facilities 130. Cut Hillaids for Palaisian Malin and Recovery North Com-																														
123	131. Complete Fill to Grade 132. Modify HTP-SGS Retaining Wall																														
125	133. Retaining Walls 134. Backfill Wall 3 & Road																														
127 128	135. Finish Grade/Construct Roads 136. Modify Grand Ave Road & Access	-																													
129	137. Install New Settling Tanks 138. Switchyard Expansion 139. Unit 2 Pro Demokling A Market																														
131	I solate Unit No 3 Identify Hazardous Materials																														
13/	Remove Hazardous Materials 140. Unit 3 Demolition																														
136	Mobilization Demolition																														
138	Retaining Wall Backfill Basin																														
141	Relation; Wall Backel Basin Compact & Croshe Basin 141. Project thisfalation Civil Mechanical Piping Electrical																														
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1 2	AF Jan-15	Feb-15	AH 5 Mar-15 26 2	Apr-15	May-15 J	AK Jun-15	AL Jul-15	Aug-15	Sep-15	AO Oct-15	AP Nov-15	Dec-15	AR Jan-16	Feb-16 N	AT Mar-16	AU Apr-16	May-16	Jun-16	AX Jul-16 43	AY Aug-16 44	AZ Sep-16 45	BA Oct-16 46	Nov-16	Dec-16	BD Jan-17 49	Feb-17	Mar-17	BG Apr-17	May-17	Jun-17	BJ Jul-17 55	BK Aug-17	Sep-17	BM Oct-17	BN BO Nov-17 Dec-17 59 6	BP 7 Jan-18 50 61
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114 115	408 51 25	35	34 32: 19 4: 26 2:	1 294	230 29	184 23 30	152 19 31	119 15	87	88 11	64 8	0	0 0 37	0 0 38	0	0 0	0 0	0 0	1 0	1 0	0 0 45	1 0	0 0 47	1 0	0 0	1 0		0 0 52	1 0 53	0 0	1 0 55	1 0	0 0	1 0 58	1 0 59 6	0 1 0 0
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110		62 63	E	64 6	55 66	67	68	69	70	/1	- /2	73	74	75	76	77	/8	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96
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ESTIMATED PERSONNEL... Two CC's (Siemens Option)

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1							Oct-12			Jan-13	Feb-13	Mar-13	Apr-13	May-13	Jun-13	Jul-13	Aug-13	Sep-13		Nov-13	Dec-13
2							-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
_	DEMOLITIONS Table F. Acces Dising & Duilding & Cooling Trues						400														
5	Tank E, Assoc Piping & Building @ Cooling Twrs Tank E @ Cooling Twrs Tank & Foundation Demo & Disposal						400														
	Tank E @ Cooling Twrs Piping Demo & Disposal																				
	Building & Foundations Demo & Disposal																				
8	Tank A, B, C, D & Assoc Piping Removal							650	650												
9	Tank A, B, C, D Oil Removal, Disposal & Tank Cleaning																				
10	Tank A, B, C, D Tank & Foundation Demo & Disposal																				
11 12	Tank A, B, C, D Piping Demo & Disposal SITE PREP																				
	Piping mods to Gas, Steam, Water, etc for Retaining Walls 1, 2 & 3 Constru	ıction					5	5	5												
	Move in and Construct Roads, Construction Yards, (Site Trailer and Laydov)							15											
15	Construct Roads																	112			
	Miscellaneous supplies - silt fence, orange safety fence, ect.									15											
	Grade Drainage						-			80	400					=0		454			-
18 19	Cut hillsides, modify grades & backfill Installation of No 1,2 & 3 retaining walls plus mods to HTP-SGS retaining w	roll								100	100 280	280	80 280	80 275	275	56 275	275	154			
20	Form Work	all									200	200	200	213	213	213	213				
21	Rebar																				
22	Embedments																				
23	Concrete																				
	Misc. Concrete Operations (Settling Tk Foundations)						 														
25	Grand Avenue Entrance and Road Modifications						 	300	300			000	222	000	000			<u> </u>			<u> </u>
	Install New Settling tanks SWITCHYARD EXPANSION						1					200	300	300	200	-		 	-		
	Increase capacity						t							+		1		l			1
_	UNIT 3 Pre- DEMOLITION ACTIVITIES																	1			1
30	Isolate Unit 3 from Units 1 & 2 on all common infrastructure																				
31	Sample and Test for Hazardous Materials		-		-																
	Remove Hazardous Materials															Ш					
_	UNIT 3 DEMOLITION						-			-											
	Move in and Construction Yards, (Site Trailer and Laydown Area Prep)						 									 		 	-		<u> </u>
35 36	Miscellaneous supplies - silt fence, orange safety fence, ect.																				
	Demolition to open up site Demolition of Heavy concrete structures																				
	Demolition of lower structure																				
39	Demolition of Tipped Structure																				
	Install Unit 3 Retaining Wall																				
41	Form Work																				
42	Rebar																				
43	Concrete						-														
	Unit 3 Basin Backfill Plant Construction																				
46	Civil															300	300	300	800	1,600	1,600
	Mechanical																		1,700	1,700	1,700
	Piping																				
	Electrical																				
50	System Testing & Startup and Commissioning						105	0.55	055	040	000	400	000	055	475	004		500	0500	2000	0000
51 52					L MD/Month d Personne		405 20	955 48	955 48	210 11	380 19	480 24	660 33	655 33	475 24	631 32	575 29	566 28	2500 125	3300 165	3300 165
53				Avg. Field \			2,511	40	40	- 11	13	24	აა	33	24	32	23	20	120	100	100
54					Supervision		18	18	18	24	24	24	24	24	24	24	24	48	48	48	48
55				Total Sit	e Personne		38	66	66	35	43	48	57	57	48	56	53	76	173	213	213
56				g. Daily Tota			151														
	General Construction Schedule	Crew Size	W/D				-3	-2	-1	1	2	3	4	5	6	7	8	9	10	11	12
	125. Mobilization - Fuel Oil Tk Removal 126. Tank E, Assoc Piping & Bldg @ Cooling Twrs Removal	12	15	0.2										-		-		 	-		
_	126. Tank E, Assoc Piping & Biog @ Cooling Twis Removal 127. Tank A, B, C, D & Assoc Piping Removal	_				3		1										 	 		1
		- 26	31			.1															
	128. Mobilization Earthwork & Wall Construction	36	30	0.0		1															
	129. Temp Relocate Systems and Facilities	36	20	0.0	-2	_															
63	129. Temp Relocate Systems and Facilities 130. Cut Hillside for Retaining Walls and Remove North Ramp	3 8 8	20	0.0 1.0 1.9) () -2	1 7															
63 64	129. Temp Relocate Systems and Facilities 130. Cut Hillside for Retaining Walls and Remove North Ramp 131. Complete Fill to Grade	36 8 8	20 38	0.0 1.0 1.9 0 0.5	(() () () () () () () () () (1 7															
63 64 65	129. Temp Relocate Systems and Facilities 130. Cut Hillside for Retaining Walls and Remove North Ramp 131. Complete Fill to Grade 132. Modify HTP-SGS Wall	3 8 8 8 8	20 38 10	0.0 1.0 1.9 0.5 0.5	2	7 4															
63 64 65 66	129. Temp Relocate Systems and Facilities 130. Cut Hillside for Retaining Walls and Remove North Ramp 131. Complete Fill to Grade 132. Modify HTP-SGS Wall 133. Retaining Walls	8 8 8 8 4 30	20 38 10 10	0.0 1.0 1.9 0 0.5 0 0.5		2 1 2 7 4 4 9 9															
63 64 65 66	129. Temp Relocate Systems and Facilities 130. Cut Hillside for Retaining Walls and Remove North Ramp 131. Complete Fill to Grade 132. Modify HTP-SGS Wall 133. Retaining Walls 134. Backfill Wall 3 & Road	3 8 8 8 8	20 38 10 10 117	0.0 1.0 1.9 0.5 0.5 0.5 7 5.9	4	1 1 2 7 7 4 4 9 9 9 8 8 9 9															
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ESTIMATED PERSONNEL... Two CC's (Siemens Option)

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19						1,200	1,200			1,800	2,200	2,200	2,200	2,200		1,800	1,800		1,200	1,200	1,200	500	100	100							
48 49 50									200	200	200	200	200	200	200	200	200	200	200	200	200	200	200	200							
52 53 54	3800	3800	4200	4200	4200	6400	7000	7000	9000	9000	9400	9400	9000	9520	8720	6620	6040	4140	3640	2640	1840	1020	500	500	0	0	0	0)	0	0
52	190	190	210	210	210	320	350	350	450	450	470	470	450	476	436	331	302	207	182	132	92	51	25	25	0	0	0	0)	0	0
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<u>APPENDIX I</u>

Mitigation Monitoring and Reporting Program

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MITIGATION MONITORING AND REPORTING PROGRAM

Scattergood Generating Station Unit 3 Repowering Project

		Time Frame for	Responsible	Ver	rification	of Compliance
Number	Mitigation Measure	Implementation	Monitoring Agency	Initials	Date	Remarks
Air Quality						
AIR-A	 During Project construction, all internal combustion engines/construction equipment operating on the Project site shall meet EPA-Certified Tier 3 emissions standards, or higher, according to the following: From January 1, 2012, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet Tier 3 off-road emissions standards. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations On or after January 1, 2015: All off-road diesel-powered construction equipment greater than 50 horsepower shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with control technologies certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations. A copy of each unit's certified tier specification, control technology documentation, and CARB or SCAQMD operating permit shall be provided at the time of 	During construction	LADWP			
AIR-B	mobilization of each applicable unit of equipment. In the event a Tier 3 or Tier 4 engine is not available for any off-road engine larger than 50 horsepower, that engine shall be	During Construction	LADWP			
	equipped with a diesel particulate filter (soot filter), unless					
	certified by engine manufacturers that the use of such devices is					
	not practical for specific engine types. For purposes of this					

		Time Frame for	Responsible	Ver	rification c	of Compliance
Number	Mitigation Measure	Implementation	Monitoring Agency	Initials	Date	Remarks
	condition, the use of such devices is "not practical" if, among other reasons: 1. There is no available soot filter that has been certified by either CARB or the EPA for the engine in question; or 2. The construction equipment is intended to be on site for 10 days or less. The use of a soot filter may be terminated immediately if one of the following conditions exists: 1. The use of the soot filter is excessively reducing normal availability of the construction equipment due to increased downtime for maintenance, and/or reduced power output due to an excessive increase in backpressure; 2. The soot filter is causing or is reasonably expected to cause significant engine damage; or 3. The soot filter is causing or is reasonably expected to					
AIR-C	cause a significant risk to workers or the public. All construction equipment shall be properly maintained and the engines tuned to the engine manufacturer's specifications.	During construction	LADWP			
AIR-D	Prohibit construction equipment from idling longer than five minutes and post signs prohibiting idling longer than five minutes at the facility entrance and near areas where construction equipment is operating.	During construction	LADWP			
AIR-E	The engine size of construction equipment shall be the minimum practical size to support the required scope of work for the equipment.	During construction	LADWP			
AIR-F	Use electric welders instead of gas or diesel welders in portions of the facility where electricity is available.	During construction	LADWP			
AIR-G	Use on-site electricity rather than temporary power generators in portions of the facility where electricity is available.	During construction	LADWP			
AIR-H	Suspend all construction activities that generate air pollutant emissions during first stage smog alerts.	During construction	LADWP			
AIR-I	Use electricity or alternate fuels for on-site mobile equipment instead of diesel equipment to the extent feasible.	During construction	LADWP			
AIR-J	The testing and maintenance of the black start generators shall be prohibited during the commissioning of electrical generation units.	During commissioning	LADWP			

		Time Frame for	Responsible	Ve	rification o	of Compliance
Number	Mitigation Measure	Implementation	Monitoring Agency	Initials	Date	Remarks
Cultural Res	ources					
CR-A	The Project owner shall retain a qualified vertebrate paleontologist to design and implement a paleontological resource mitigation monitoring program to mitigate impacts to significant nonrenewable resources. This plan should include a grading observation schedule to be maintained when grading in bedrock units to further evaluate the fossil resources of the site. This monitoring and mitigation plan shall be consistent with Society of Vertebrate Paleontology SVP (1994) standard guidelines for the mitigation of construction-related adverse impacts on paleontological resources, as well as the requirements of the designated museum repository for any fossils collected (SVP 1994). Specific components to be included in the monitoring program include the following: 1. A construction worker education program to inform the workforce about the potential for discovery of paleontological resources will include: a. procedures to follow if resources are discovered during any construction-related activities, including order of notification of appropriate construction personnel and LADWP officials, and redirection of construction activities while the find is evaluated; b. a description of known resources in the area; and c. instruction that these resources are protected by law and that there is a strict prohibition against collection or disturbance of any paleontological resource. 2. Excavation into the older Quaternary alluvial deposits, including the stratigraphic equivalents of the Palo Verdes Sand or San Pedro Formations, that possess a high paleontological sensitivity rating shall be monitored by a professional paleontologist. Areas to be monitoring during construction shall be determined after review of detailed geologic boring information.	During construction	LADWP			
	3. Procedures shall be established for identification, salvage,					

		Time Frame for	Responsible	Ver	rification	of Compliance
Number	Mitigation Measure	Implementation	Monitoring Agency	Initials	Date	Remarks
	analysis, curation and accession into a museum repository with permanent retrievable storage of any significant fossil specimens and data recovered.					
	A Paleontological Resources Report (PRR) shall be prepared, with an appended itemized inventory of specimens, upon completion of monitoring and evaluation. The report, inventory, and record of accession, when submitted to LADWP, will signify completion of the program to mitigate impacts to paleontological resources.					
Hazards and	Hazardous Wastes					
HAZ-A	Prior to construction of the proposed generation units and/or prior to demolition of the Unit 3 stack, LADWP will submit plans for these components to the FAA for hazard determination pursuant to 14 CFR Part 77. LADWP will implement hazard markings or other requirements established through the review process during construction and/or demolition.	Prior to and during construction	LADWP			
HAZ-B	Asbestos surveys will be completed for buildings to be demolished that were constructed prior to 1980 as required under National Emissions Standards for Hazardous Air Pollutants (NESHAP) guidelines and pursuant to SCAQMD Rule 1403. In addition, NESHAP guidelines require that all potentially friable asbestos-containing materials be removed prior to building demolition.	Prior to construction	LADWP			
HAZ-C	A lead survey of painted surfaces and soil around buildings constructed prior to 1978 will be completed prior to demolition. Requirements in the California Code of Regulation will be followed during demolition activities, including employee training, employee air monitoring, and dust control. Any debris or soil containing lead-based paint or coatings will be disposed of at landfills that meet acceptance criteria for the waste being disposed.	During construction	LADWP			

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
HAZ-D	To quantify the amounts of waste to be generated and protect public health during removal, LADWP will prepare a detailed Waste Management Program prior to start of demolition activity. The purpose of the program is to create procedures for proper storage, labeling, packaging, recordkeeping, manifesting, use of waste minimization principles, and disposal of hazardous materials and waste. The following will be included: • A description of each hazardous waste component. • Waste classification procedures. • Waste container and label requirements. • Accumulation, handling, transport, treatment, and disposal procedures for each waste that protects public health. • Waste minimization procedures, including recycling opportunities. • Preparedness, prevention, contingency, and emergency procedures, including in the event of an unplanned closure or planned temporary facility closure. • All facility employees will receive awareness training for hazardous waste segregation, accumulation, and labeling; inspection of satellite accumulation areas; spill contingencies; and waste minimization procedures in accordance with Title 22 CCR. Procedures to minimize the generation of hazardous waste. Employees will be trained in procedures to reduce the volume of hazardous wastes generated at the Project. The procurement of hazardous materials will be controlled to minimize the storage of surplus materials on site and to prevent unused materials from becoming "off-specification."	Prior to construction	LADWP			
Noise NOISE-A	All construction equipment shall be properly maintained and	During construction	LADWP			
	equipped with mufflers and other suitable noise attenuation devices.	<u>-</u>				

Number	Mitigation Measure	Time Frame for Implementation	Responsible Monitoring Agency	Verification of Compliance		
				Initials	Date	Remarks
NOISE-B	Grading and construction contractors shall endeavor to use quieter equipment as opposed to noisier equipment (such as rubber-tired equipment rather than track equipment).	During construction	LADWP			
NOISE-C	The construction contractor shall ensure that all stockpiling and vehicle staging areas are located away from noise-sensitive receivers, to the extent feasible.	During construction	LADWP			
NOISE-D	The construction contractor shall plan work such that activities that generate high noise levels will not be started outside the hours codified in the Los Angeles and El Segundo Municipal Codes, and all reasonable efforts to conclude work in progress prior to the hours listed in these codes will be taken by the construction contractor.	During construction	LADWP{			
NOISE-E	A public liaison for Project construction shall be identified who shall be responsible for addressing public concerns about construction activities, including excessive noise. The liaison shall determine the cause of the concern (e.g., starting too early, bad muffler) and shall be required to implement reasonable measures to address the concern. Prior to the outset of construction activity for the proposed project, LADWP or its contractor shall notify the City of El Segundo and residents, businesses, and other uses located within 1,000 feet of SGS. The notification shall include the contact information for the project public liaison.	Prior to construction	LADWP			