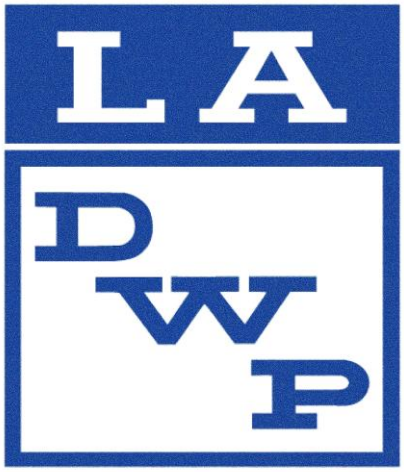
Initial Study

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

January 21, 2011

TABLE OF CONTENTS

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1.0 INTRODUCTION

1.1 OVERVIEW

The Los Angeles Department of Water and Power (LADWP) proposes to replace the capacity of Scattergood Generating Station (SGS) Unit 3 with natural gas-fired combustion turbines and heat recovery steam generator(s) operating in both simple and/or combined cycle configuration. SGS Unit 3 was constructed in 1974 and is located in the City of Los Angeles community of Playa Del Rey. The proposed new generators would be air-cooled and, therefore, would not need to utilize the existing SGS once-through ocean water cooling system. The existing SGS Unit 3 generates electricity via a natural gas-fired conventional steam boiler/generator and has a maximum net capacity of 460 megawatts (MW). The proposed replacement units would have a capacity of up to 574 MW, depending upon the type and configuration of units provided. As part of the proposed project, LADWP would physically and permanently derate (i.e., reduce the generation capacity of) the remaining existing operating units at SGS (either Unit 1, Unit 2, or both units) by the necessary amount such that there would be no increase in the total net generation capacity of SGS.

The proposed project is being implemented primarily to improve LADWP's aging infrastructure with more reliable, dispatchable, and efficient gas turbine technology. It is also being implemented in part pursuant to a formal Settlement Agreement (May 2003) between LADWP and the South Coast Air Quality Management District (SCAQMD) to reduce air pollutant emissions from stationary sources in the South Coast Air Basin (SCAB) under the provisions of the Regional Clean Air Incentives Market (RECLAIM) program.

Under this agreement, generator Units 1, 2, 3, and 4 at Valley Generating Station and generator Units 3 and 4 at Haynes Generating Station have been repowered. The repowering of Haynes Units 5 and 6 is scheduled for completion by December 2013. LADWP has petitioned SCAQMD to substitute repowering of SGS Unit 3, which has a net generating capacity of 460 MW, in place of SGS Units 1 and 2, which have a combined net generating capacity of 358 MW and were originally scheduled for repowering under the Settlement Agreement. The primary reasons for this change are that 1) Unit 3 will have a larger reduction in the use of ocean water and therefore a larger reduction on marine life impacts; and 2) Units 1 and 2 currently burn digester gas from the Hyperion Wastewater Treatment facility under an agreement that is effective through 2015. Unit 3 is incapable of burning this digester gas. Deferring the repowering of Units 1 and 2 to a future date would provide additional time to find an alternate method for Hyperion to dispose of the substantial volume of digester gas currently burned at SGS. The proposed substitution would also represent a greater repowering benefit because of the significantly higher generation capacity of Unit 3 compared to Units 1 and 2. SCAQMD has agreed in concept to the substitution request. The implementation schedule for the SGS Unit 3 repowering now requires that the replacement units be on line by the end of 2015.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT REQUIREMENTS

The construction and operation of the proposed SGS Unit 3 Repowering Project constitutes a project as defined by the California Environmental Quality Act (CEQA; California Public Resources Code §§21000 et seq.). LADWP, a public municipal utility, will fund, implement, and operate the proposed project, and therefore, is the lead agency for purposes of CEQA compliance. Pursuant to the Warren-Alquist Act, the California Energy Commission would not be the lead agency or a responsible agency for this project because the project would result in no net increase in generating capacity at the facility.

As an initial step of the CEQA process, LADWP has prepared an Initial Study to determine if the proposed project could have the potential to cause significant adverse environmental impacts. Based on the conclusions of the Initial Study evaluation (contained herein), LADWP has determined that the

proposed project may have a significant impact and will prepare an EIR. Since some impacts evaluated in the Initial Study would not be potentially significant, LADWP proposes to eliminate them from further evaluation in the EIR. The preliminary evaluation of the potentially affected environmental factors is included in the Initial Study checklist in Section 3.

The Final Environmental Assessment (FEA) for the RECLAIM program (October 1993) analyzed the impacts associated with establishing the program and implementing the RECLAIM regulations. A number of subsequent environmental documents have been prepared for major program amendments and for various projects at specific facilities identified by the RECLAIM program. The EIR prepared for the SGS Unit 3 Repowering is appropriately a project EIR focusing only on associated construction and operations impacts involved with replacing Unit 3. It does not address the eventual probable repowering of Units 1 and 2, since the current schedule for that activity is beyond 2020 and the type of equipment that would be used is not known at this time. It would be speculative to attempt such a project-level analysis.

SCAQMD (as the lead agency) certified an EIR in 2001 for installation of pollution abatement equipment pursuant to RECLAIM at three LADWP power plants, one of which was SGS.[1] In addition to installation of Selective Catalytic Reduction (SCR) systems on all units at SGS, the EIR addressed construction of a new ammonia storage facility. The subject EIR is incorporated herein by reference.

1.3 PROJECT LOCATION

SGS is located at 12700 Vista Del Mar in the City of Los Angeles (community of Playa Del Rey). It is adjacent to the Pacific Ocean and approximately 1.5 miles south of Los Angeles International Airport (LAX). The facility is located on approximately 56 acres that is bounded to the west by Vista Del Mar and Dockweiler State Beach. Adjacent to the site on the north is the City of Los Angeles' Hyperion Wastewater Treatment Facility. Bordering the site on the south, east, and northeast is the City of El Segundo. Residential neighborhoods and light retail commercial uses in El Segundo border SGS to the east and northeast. In addition to the residential units, uses within one-half mile of the site include a pre-school, an elementary school, a middle school, commercial uses, and three public parks. The site is bordered to the south by the large Chevron El Segundo refinery. Another electric generating plant, the NRG El Segundo Generating Station, is located approximately one-half mile south of the SGS site. Grand Avenue divides the SGS property north and south; all the active generation and generation support facilities are located north of Grand Avenue. Figure 1 illustrates the location of the SGS in relation to west Los Angeles and the region.

1.4 CURRENT OPERATIONS AT SCATTERGOOD GENERATING STATION

Units 1 and 2 at SGS were placed into operation in 1958 and 1959, respectively. Unit 3 was placed into operation in 1974. Units 1 and 2 each have a net electrical generating capacity of 179 MW, and Unit 3 has a net generating capacity of 460 MW, making the total potential net generating capacity of the facility 818 MW. All three existing units utilize conventional steam generators to produce electricity. Currently, all three units predominantly burn natural gas to provide the thermal heat to produce steam, which drives a steam turbine that in turn drives a generator unit to create electricity. All units are capable of using distillate fuel oil in the event natural gas is not available. Units 1 and 2 also sometimes use a mixture of natural gas and digester gas. The digester gas is supplied from the adjacent Hyperion Wastewater Treatment Plant as a byproduct of its waste treatment process.

[1] SCAQMD. 2001. *Final Environmental Impact Report for LADWP's Installation of Five Combustion Turbines at the Harbor Generating Station, Installation of Three Selective Catalytic Reduction Systems at Scattergood Generating Station, and the Installation of One Combustion Turbine at the Valley Generating Station*.

The existing facilities at SGS are located on an irregularly shaped parcel containing approximately 56 acres (see Figure 2). The site rises in elevation from west to east and contains several essentially level terraces. The existing generator units are located on the lowest terrace, adjacent to the Vista Del Mar. Units 1 and 2 utilize a common exhaust stack, whereas Unit 3 has its own stack. Each stack is approximately 300 feet in height. The existing generator units are housed in enclosures that are approximately 150 feet in height.

SGS uses a once-through ocean water cooling system for all three generating units. There is one intake structure for all three units. Sea water is drawn into the cooling system through a 12-foot diameter submerged intake pipe located offshore. Water is discharged from the cooling system through a single submerged outfall terminating 1,200 feet offshore. The intake pipe has a velocity cap to reduce fish impingement, and marine mammal exclusionary bars to keep large mammals from entering the intake. The intake pipe leads to an intake structure located on the beach west of the facility, with trash racks and water screens that are used to keep fish and debris out of the circulating water system. There are eight circulating water pumps, located downstream of the screens, that supply ocean water to the steam turbine condensers. Once the ocean water passes through the cooling condensers, heated water enters the outfall and is discharged into the ocean. Process water from facility operations is treated in various wastewater treatment facilities on-site and discharged with the once-through cooling water through the outfall.

The natural gas used at the facility is supplied by continuous feed from a dedicated pipeline that enters the SGS property from the south via Grand Avenue. A pressure reducing station near the Grand Avenue entrance reduces the natural gas pressure prior to combustion in the units. Raw water and condensate feed water are stored in three tanks at the eastern end of the property.

On the southeastern portion of the SGS property, across Grand Avenue from the main generator units, there are four large fuel oil storage tanks. These tanks are empty and unused but were formerly used to store fuel oil prior to the conversion of SGS to natural gas fuel. These tanks are approximately 200 feet in diameter and 56 feet in height. There is a smaller empty and unused fuel oil storage tank, in the central portion of SGS that once supplied emergency fuel for the main generator units as well as for the site's emergency backup generator.

The electrical energy generated at the site is sent to a switchyard located on the upper (eastern) portion of the site. In the switchyard, the electrical energy is stepped up to either 138 or 230 kilovolts (kV) prior to transmission. A connection to the Scattergood-Olympic and Scattergood-Airport transmission lines allows the power to be delivered throughout the west side of the City of Los Angeles.

SGS currently supplies primarily base load electric demand within the LADWP service system. Base load is the minimum system load for a given service area that must be provided at all times. Base load varies throughout the day; for instance, base load at night is typically lower than base load during the day. The existing steam boiler units at SGS are suited for base load operations because they operate most efficiently over continuous periods of time and because the equipment was not designed to handle excessive thermal stresses caused by cycling on and off. Several days may be required to completely start or stop the units.

LADWP and City of Los Angeles Department of Public Works have a partnership agreement that allows the adjacent Hyperion Wastewater Treatment Facility to dispose of a large portion of its digester gas via pipeline transmission to SGS for use as fuel in Units 1 and 2. The digester gas must be mixed with at least 50 percent natural gas to allow for proper combustion. Unit 3 is not capable of burning the digester gas. In addition, SGS provides steam to Hyperion via a one-mile-long pipeline that is used in Hyperion's biosolids digester system. The agreement governing this partnership is effective through January 2015.

In 2002, selective catalytic reduction (SCR) systems were installed on all three units at SGS under the RECLAIM program. SCR is a post-combustion control technology for reducing oxides of nitrogen (NOx) emissions. The SCR system reduces NOx by injecting aqueous ammonia and oxygen into the flue gas in the presence of a catalyst, which produces nitrogen molecules and water vapor.

The statewide *Policy on the Use of Coastal and Estuarine Waters for Power Plant Cooling*, known as the once-through cooling (316b) policy (OTC), was adopted in May 2010 and became effective October 1, 2010. Interim measures require the installation of marine mammal exclusionary bars within one year of the effective date of the Policy. These bars prevent large mammals such as sea lions and seals from entering the intake, and were installed at SGS in February 2008.

FIGURE 1. REGIONAL LOCATION AND VICINITY MAP

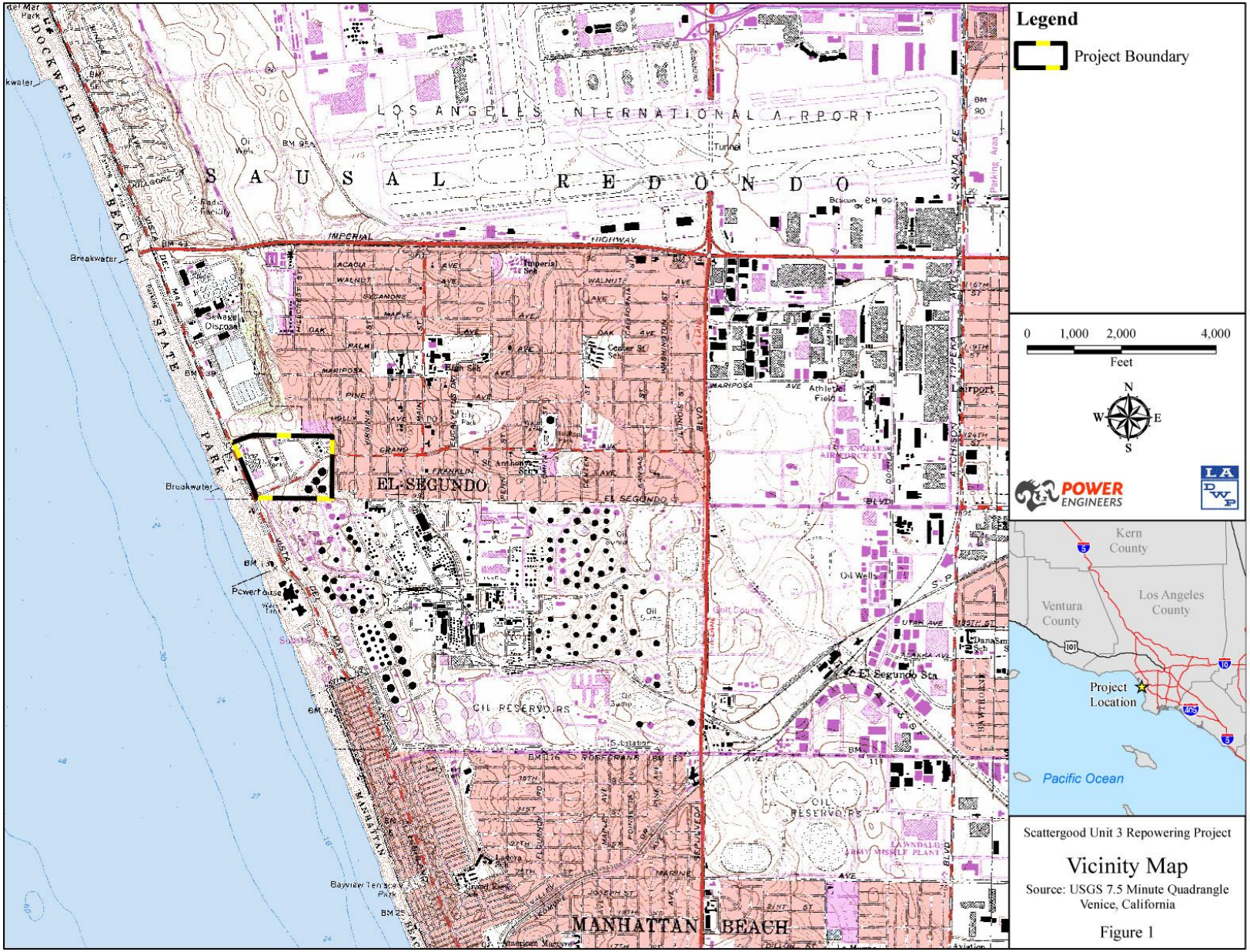
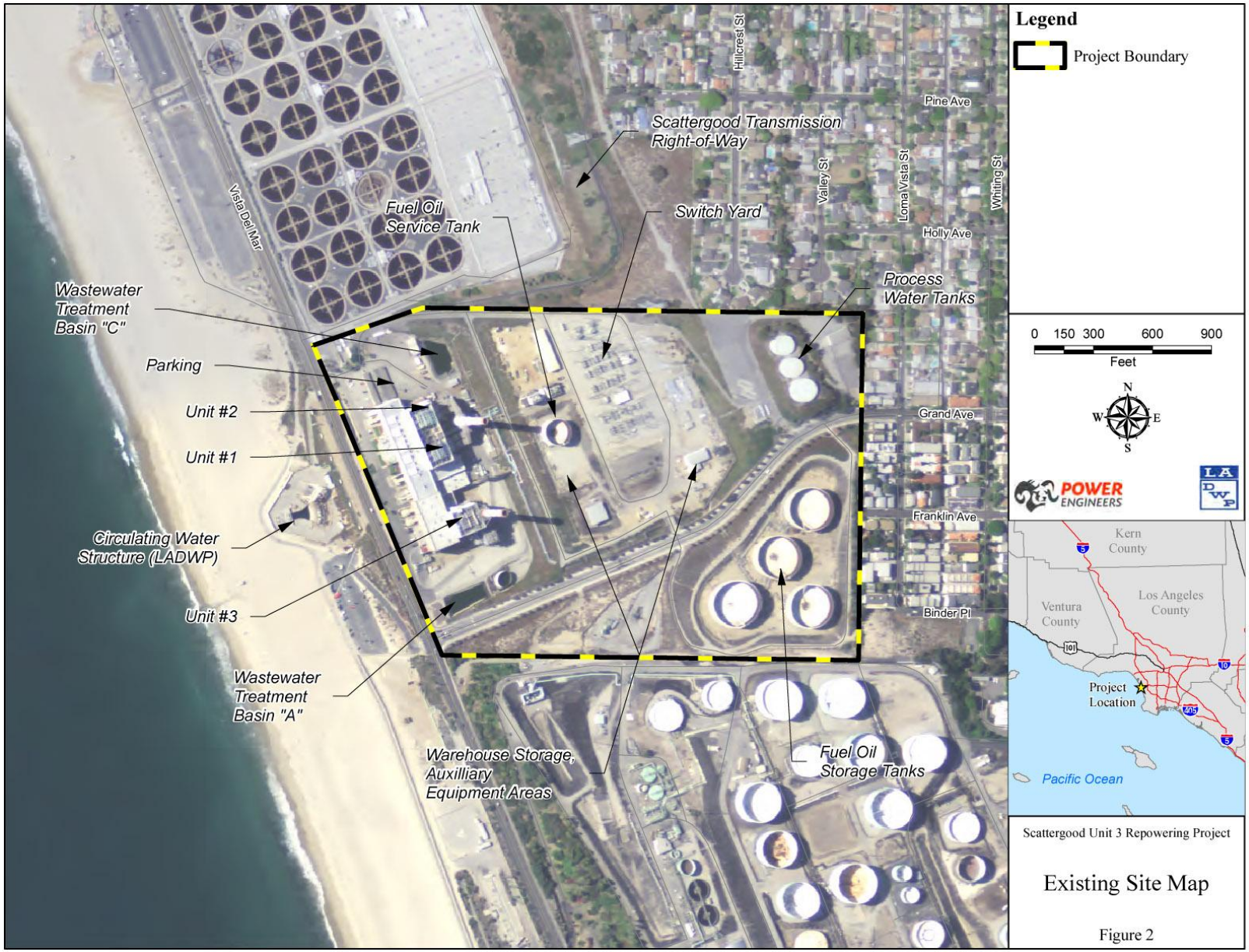


FIGURE 2. SGS EXISTING FACILITIES MAP



2.0 PROJECT DESCRIPTION

2.1 PROJECT FACILITIES AND CONSTRUCTION

2.1.1 Generation Facilities

The proposed repowering of SGS Unit 3 involves providing a Combined Cycle Generating Systems (CCGS) or a combination of a CCGS and Simple Cycle Generating Systems (SCGS) that can be used to replace the base load capacity of Unit 3 and also provide capacity to meet peak load demands. Unit 3's net generating capacity of 460 MW would be completely replaced by the new units, and any excess capacity of the new equipment would be offset by derating (reducing the generation capacity of) Units 1 and/or 2.

There are two power generation system scenarios that are currently under consideration and that represent the expected high and low range of generating capacities that would be implemented at SGS.

Generation Scenario 1 (509 MW)

Under this scenario, base load would be provided by a new Combined Cycle Generating System (CCGS) and peak load would be provided by a Simple Cycle Generating System (SCGS).

The CCGS would consist of one combustion turbine generator (CTG) and one steam turbine generator (STG) operating in combination and producing up to 309 MW net. The CTG would operate on a mixture of compressed natural gas and air to produce a net output of about 209 MW and would use an approved low NOx combustor to control NOx emissions. Exhaust heat from the CTG would be captured in a Heat Recovery Steam Generator (HRSG) where it would be used to produce steam to drive an STG. The STG would have a net output of about 100 MW net. The CTG exhaust, while in the HRSG, would pass through an oxidation catalyst to control emissions of carbon monoxide and then pass through an SCR catalyst to further control NOx. The CTG exhaust would continue to exit the HRSG and flow up a 200-foot exhaust stack. Steam exiting the STG would be condensed using a dry cooling system with electric powered fans. The cooling fans would be housed in a structure that is approximately 120 feet wide by 210 feet long, with a height of about 100 feet. The condensate from the cooling system would be pumped back to the HRSG to be converted into steam in a closed-loop system.

Power generated by the CCGS would be stepped up in voltage from 13.8 kV to 230 kV using two separate generator step-up transformers. Each transformer would be connected to a switch rack, and the power would be delivered to the existing 230 kV Scattergood-Olympic and Airport transmission lines using overhead power poles and power lines.

To help meet peak load requirements, an SCGS consisting of two individual CTGs operating independently would be provided. While the SCGS is not as fuel-efficient as a CCGS, it offers much greater flexibility to react quickly (in terms of start-ups, shut-downs, and ramp rates) to changes in system demand and load, which also increases overall system efficiency. This type of unit is often referred to as a peaking unit. One configuration of the SCGS being considered would have two CTGs using a mixture of compressed natural gas and air to produce a net output of about 100 MW each (two units would have a total net output of 200 MW). Depending upon the model used, the CTGs may incorporate an intercooler to increase the output and efficiency of the units. Water injection would be used to control NOx in the front end of the CTG. The CTG exhaust would be routed to an oxidation catalyst to control carbon monoxide and then pass through an SCR catalyst to further control NOx. The exhaust from each CTG would exit the SCR and flow up a 150-foot exhaust stack.

Power generated by the SCGS would be stepped up in voltage from 13.8 kV to 230 kV using a generator step-up transformer. The transformer would be connected to a switch rack, and the power would be delivered to the existing 230 kV Scattergood-Olympic and Airport transmission lines using overhead power poles and power lines.

Generation Scenario 2 (574 MW)

Under this scenario, base load would be provided by a new CCGS similar to that described for Generation Scenario 1, although it would operate at a slightly lower capacity of 304 MW. Peak load would be provided by a single additional CCGS unit rather than an SCGS consisting of more than one CTG.

The peak load CCGS would operate in a similar manner as the base load CCGS. One natural gas-fired CTG would provide a net output of about 209 MW and would incorporate low NOx combustion technology. A one-pass HRSG would capture exhaust heat to produce steam that would power an STG, producing an additional 61 MW net power. The CTG exhaust would pass through an oxidation catalyst to reduce carbon monoxide and through an SCR catalyst to control NOx. The CTG exhaust would flow to a 200-foot exhaust stack. Steam downstream of the STG would be cooled using a heat exchanger smaller in size than that described for Generation Scenario 1. The condensate would be pumped back to the HRSG to be converted into steam in a closed loop steam cycle.

Power generated by both CCGSs under this scenario would be stepped up in voltage from 13.8 kV to 230 kV using two separate generator step-up transformers each. Each transformer would be connected to a switch rack and the power would be delivered to the existing 230 kV Scattergood-Olympic and Airport transmission lines using overhead power poles and power lines.

2.1.2 Auxiliary Equipment and Operations

The auxiliary equipment and other operations that would be provided to support the CCGS and SCGS are described below.

Diesel Generator

A 2,700 kilowatt (kW) diesel generator would be installed to provide power to the SCGS for emergency starts. The diesel generator would be skid-mounted with a 2,000 gallon diesel fuel tank incorporated into its base.

Auxiliary Steam Boiler

An independent source of steam is provided for the STG in the base-load CCGS by providing an auxiliary steam boiler that can produce 20,000 pounds per hour of auxiliary steam. The steam in this case would be produced by an electric-heated boiler and is required to seal the STG in order to allow shorter start-up times.

Ammonia Handling and Storage

As with current operations, aqueous ammonia would be used in the SCR systems of the proposed generators at SGS. Ammonia for the new equipment would be obtained from the existing ammonia storage system at SGS. Ammonia would be routed from the storage tanks to CTGs via new piping. It is anticipated that no new ammonia storage facilities would be required, and no increase in the number or rate of deliveries of ammonia would be required since ammonia used for the new generators would be generally offset by the reduction in ammonia use associated with removal from service of existing Unit 3.

Wastewater Treatment and Disposal

Water that is used in the CCGS and SCGS must be treated to remove undesirable constituents that could foul the cooling or pollution control equipment. This water purification process generates a wastewater that would be collected and treated in an upgraded SGS wastewater treatment system. The upgrade would include replacement of existing wastewater settling basins "A" and "C" with aboveground settling tanks of a similar capacity located in place of settling basin "A." Wastewater would be treated and discharged at a high rate of dilution in the SGS ocean water cooling outfall.

Cooling System Components

The proposed CCGS and SCGS equipment would be cooled utilizing a closed-loop water circulation system to transfer heat from the CTGs or the STG to the cooling system. Each SCGS CTG would have an intercooler in the compression section of the turbine. This inter-stage cooling provides cooler flow to the high-pressure compressor and increases overall efficiency and power output. The warm water in the closed-loop would be sent from the heat exchanger to one of two new dry cooling structures. The water would be cooled by fans that would draw air over the tubes containing the warm water, and the cooled water would then be pumped back to the heat exchangers.

In using dry cooling for the proposed generation units rather ocean water cooling, the project would substantially reduce the amount of once-through cooling water utilized by SGS. It is anticipated that replacement of Unit 3 with dry-cooled CCGS and SCGS units would reduce the maximum once-through ocean water cooling flow by about 55percent. The proposed repowering project would not require any modifications of the cooling water intake structure or outfall, and the plant's existing once-through cooling water circulation system would continue to serve Units 1 and 2 at the substantially reduced flow.

Natural Gas System

Natural gas is the primary fuel of the CTG used in the CCGS and SCGS. A new natural gas line(s) will be teed-off of the existing Southern California Gas (SoCal Gas) company metering station located within the Scattergood property near the Grand Avenue entrance. Natural gas will be supplied from the SoCal Gas company system and routed to an on-site compressor building where it will be compressed for use in the generator systems. The compressor building will house a minimum of three screw-type compressors connected to a common header that will supply each CCGS CTG and a minimum of three screw-type compressors connected to a common header that will supply each SCGS CTG.

Air Pollution Controls

The new CTs would use a combination of processes to control air pollutant emissions. The combustors in the SCGS CTs would use water injection to reduce emissions of NOx. The combustor in the CCGS CT would use dry low NOx burners to reduce emissions of NOx. An SCR system also would be provided for the CTs that would use a catalyst to facilitate a reaction between NOx and aqueous ammonia to reduce NOx emissions. The aqueous ammonia would be atomized with air and vaporized with an electric heater. The ammonia/air mixture would be blended within a static mixer and injected into the flue gas ahead of the catalyst bed via an injection grid. A carbon monoxide (CO) catalyst would also be installed to comply with the SCAQMD's New Source Review and Best Available Control Technology (BACT) requirements.

2.1.3 Construction

Construction of the proposed project is scheduled to begin the second quarter of 2012 and continue to completion at the end of 2015. The duration of construction activities would be approximately 30 months and would normally take place six days per week, Monday through Saturday. To ensure that construction activities stay on schedule, Sunday shifts may be required at times during the construction period, and

two shifts per day may also be necessary at times. During peak project construction periods, approximately 538 workers could be present at the site on the same day.

Construction activities for the proposed project would include grading and site preparation, construction of access roads and equipment foundations (including driving of piles if needed), construction of the CCGS and SCGS generators, construction of the dry cooling system, expansion of the existing electrical switch yard, and turbine commissioning (testing and calibration prior to operations). All required construction staging, storage, and lay-down areas related to project construction would be located within the existing SGS boundaries. Two of the large, unused storage tanks on the south side of Grand Avenue would be demolished to allow more area for construction staging. Construction employee parking may be located within the LADWP transmission right-of-way adjacent to the northern Scattergood property line. The new generating system equipment would be brought to the site on trucks, and some oversize loads are anticipated. In addition, construction contractors would require temporary trailers on site for construction planning and management activities.

A number of key site improvements would be required to accommodate the proposed project. The existing road along the north side of SGS that provides access to the upper levels of the property would be relocated to allow more room to construct the base-load CCGS and the dry cooling system. A 30-foot retaining wall would be required on the north side and a portion of the east side of the lower level to provide adequate space for the CCGS. A new road providing access to the upper levels would be constructed near the southwest corner of the SGS property (Vista Del Mar and Grand Ave). In addition to the road relocation, various existing facilities, including the existing wastewater settling basins and the Hyperion-Scattergood steam line, would be relocated within SGS.

After construction of the new generator units and prior to producing electrical energy for distribution to the LADWP service area, the CTGs would undergo a comprehensive commissioning and testing program. The commissioning program includes testing, calibration, and synchronization of the CTG electrical and mechanical systems and completing CCGS and SCGS trial runs. The commissioning phase of the project requires approximately 3 to 4 months and generally involves a total on-site workforce of 100 or fewer persons.

A conceptual site plan showing the location of proposed facilities at the site is provided in Figure 3.

2.2 PROJECT OPERATIONS

2.2.1 Removal of Unit 3 from Service and Demolition

Within 90 days of completion of the commissioning of the proposed project, the existing Unit 3 would be decommissioned and permanently removed from service. LADWP also plans to demolish and remove Unit 3 from the site. It is assumed that the demolition would take approximately 24 months to complete. .

2.2.2 Operating Personnel and Requirements

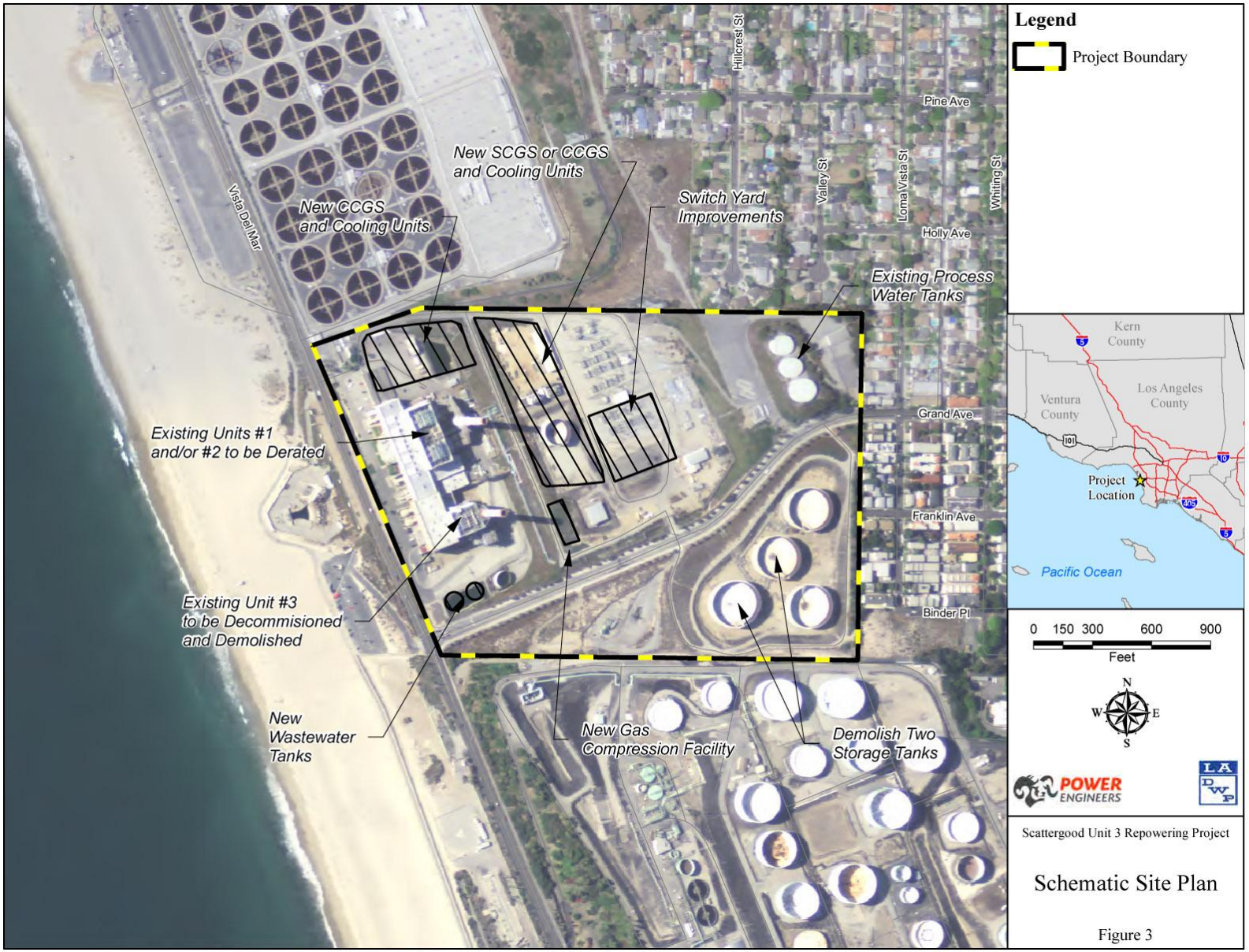
Once constructed, the proposed project would not require additional personnel beyond those currently employed at SGS to support site operations. The facility would be permitted to operate 24 hours per day, seven days per week.

2.2.3 Derating of Units 1 and/or 2

The existing SGS Unit 3 has a maximum net capacity of 460 MW. The proposed replacement units would have a capacity of up to 574 MW, depending upon the type and configuration of units provided. As part

of the proposed project, Units 1 and/or 2 would be physically and permanently derated by up to 114 MW so that there is no net increase in capacity of the facility. It has not been decided which unit(s) would be derated. Derating would be accomplished by making physical modifications to the units, which would be subject to the approval of SCAQMD.

FIGURE 3. SGS UNIT 3 REPOWERING CONCEPTUAL SITE PLAN



2.2.4 Termination and Decommissioning

The estimated life of the new equipment at SGS is expected to be more than 30 years. Equipment that is no longer effective may then be shut down and/or decommissioned, replaced, or modified in accordance with applicable regulations, market conditions, and technology prevailing at the time of termination.

Decommissioning of the new units in the future may involve a combination of salvage or disposal in accordance with applicable federal, State, and local regulations.

2.3 REQUIRED PERMITS AND APPROVALS

Prior to construction and operation of the proposed project, LADWP would secure the required regulatory permits and approvals, most of which would come from the SCAQMD in the form of the "authority to construct" and "permit to operate" regulatory processes. Changes to the SGS wastewater treatment system would require an amendment of the site's National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board (SWRCB) and California Regional Water Quality Control Board (RWQCB). Currently, the SGS is operating under an administratively extended NPDES permit, due to the newly adopted statewide OTC policy. It is anticipated that this permit will be renewed within the next year, and any modifications due to the proposed repowering project would be incorporated into the NPDES permit.

The project would be constructed and operated under various federal and State laws, some of which could require regulatory action by governmental agencies. For example, oversize loads on trucks and the transportation of hazardous/flammable materials require a transportation permit from the California Department of Transportation (Caltrans). Use and storage of hazardous materials on the site requires compliance with the Resource Conservation and Recovery Act under State and federal Environmental Protection Agencies. Under the Clean Water Act, discharges of storm water for construction projects in excess of one acre are regulated under a General Storm Water Construction Activities Permit issued by the California State Water Resources Control Board with oversight by the RWQCB. However, it is noted that the 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. Consequently, the renewal of the SGS discharge permit would not be specifically addressed in the EIR.

For the proposed project, SCAQMD, SWRCB, and RWQCB are considered responsible agencies under CEQA. A Responsible Agency means "a public agency which proposes to approve a project for which a lead agency is preparing an EIR" (CEQA Guidelines §15381). Potential permits and approvals are as follows:

City of Los Angeles Department of Water and Power

- Certification by the Board of Commissioners that the EIR was prepared in accordance with CEQA and other applicable codes and guidelines
- Approval by the Board of Commissioners of the proposed project

South Coast Air Quality Management District

- Authority to Construct
- Permit to Operate
- Fugitive Dust Abatement Plan Approval (Rule 403)
- Demolition Permit for Unit 3 and Storage Tanks

State Water Resources Control Board and Los Angeles Regional Water Quality Control Board

- General Discharge Permit for construction dewatering and hydrostatic test water
- General Storm Water Permit Associated with Construction Activities
- Amendment of the NPDES Permit for wastewater treatment system modifications

3.0 INITIAL STUDY CHECKLIST

3.1 PROJECT INFORMATION

Project Title:

Scattergood Generating Station Unit 3 Repowering Project

Lead Agency Name and Address:

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

Contact Person and Phone Number:

Julie Van Wagner
Environmental Project Manager
Los Angeles Department of Water and Power
(213) 367-5295

Project Sponsor's Name and Address:

Same as Lead Agency

City Council District:

11th District – Councilmember Bill Rosendahl

Neighborhood Council:

Westchester-Playa

Project Location:

SGS is located at 12700 Vista Del Mar in the City of Los Angeles (community of Playa Del Rey). It is adjacent to the Pacific Ocean, approximately 1.5 miles south of Los Angeles International Airport. The facility is located on approximately 56 acres that is bounded to the north by the Hyperion Wastewater Treatment Facility, to the east by the City of El Segundo, to the south by the Chevron El Segundo Refinery, and to the west by Vista Del Mar.

General Plan Designation:

The SGS site has a general plan designation of Public Facilities.

Zoning:

The SGS site is zoned PF-1 (Public Facilities)

Description of Project:

LADWP proposes to replace the capacity of Scattergood Generating Station (SGS) Unit 3 with natural gas-fired combustion turbines and heat recovery steam generator(s) operating in both combined and individual configuration. The proposed generators would be air cooled and would not need to utilize the existing ocean water cooling system at SGS. The existing SGS Unit 3, constructed in 1974, generates

electricity via a natural gas-fired conventional steam boiler/generator and has a maximum net capacity of 460 megawatts (MW). The proposed replacement units would have a capacity of up to 574 MW depending upon the type and configuration of units provided. LADWP would permanently derate the other operating units at SGS (either Unit 1, Unit 2, or both), such that there would be no increase in the total net generation capacity of SGS.

Surrounding Land Uses and Setting:

Adjacent to the SGS property on the north is the City of Los Angeles' Hyperion Wastewater Treatment Facility. Bordering the site on the east are residential neighborhoods and commercial areas of the City of El Segundo. Intermixed in this area are several schools, churches, and public parks. The site is bordered to the south by the large Chevron El Segundo refinery. Another electric generating plant, the NRG El Segundo Generating Station, is located approximately one-half mile south of the SGS site. Dockweiler State Beach and the Pacific Ocean are located immediately west of the site.

Agencies That May Have an Interest in the Proposed Project:

CEQA Lead Agency
Los Angeles Department of Water and Power

Responsible/Trustee Agencies

Los Angeles Regional Water Quality Control Board
South Coast Air Quality Management District

3.2 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

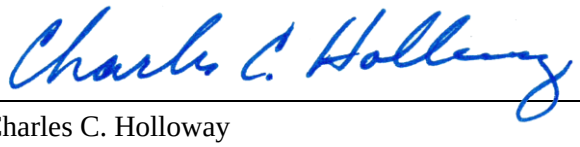
The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages.

☒	Aesthetics	☐	Agriculture and Forestry Resources	☒	Air Quality
☒	Biological Resources	☒	Cultural Resources	☐	Geology / Soils
☒	Greenhouse Gas Emissions	☒	Hazards & Hazardous Materials	☐	Hydrology / Water Quality
☐	Land Use / Planning	☐	Mineral Resources	☒	Noise
☐	Population/Housing	☐	Public Services	☐	Recreation
☒	Transportation / Traffic	☒	Utilities / Service Systems	☒	Mandatory Findings of Significance

3.3 DETERMINATION

On the basis of this initial evaluation:

	I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
	I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
X	I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
	I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
	I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.



1-21-2011

Charles C. Holloway
Manager of Environmental Planning and Assessment
Los Angeles Department of Water and Power

Date

3.4 ENVIRONMENTAL EVALUATION

The following discussion of potential environmental effects was completed in accordance with Section 15063(d) (3) of the California Environmental Quality Act (CEQA) Guidelines (2010) to determine if the project may have a significant effect on the environment.

3.4.1 Aesthetics

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect on a scenic vista?	☒	☐	☐	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☒
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

DISCUSSION

a) Have a substantial adverse effect on a scenic vista?

Potentially Significant Impact. The proposed project facilities would be located entirely within the existing 56-acre SGS, which includes three large existing steam-boiler electrical generation units with two tall exhaust stacks, an electrical switchyard and transmission towers, several large aboveground storage tanks, and other ancillary facilities that support the power generation function at the station. These facilities impart an entirely industrial character to the property. Surrounding and nearby uses, including the approximately 130-acre Hyperion Wastewater Treatment Plant (located immediately north of SGS along Vista Del Mar), the over one-square-mile Chevron oil refinery and oil storage facility (located immediately south of SGS along Vista Del Mar), and the NRG El Segundo Generating Station (located about 0.5 miles south of SGS along Vista Del Mar) further reinforce the industrial character of the area. However, in addition to these industrial uses, SGS is bounded along its eastern edge by residential neighborhoods and on the west by Dockweiler State Beach (across Vista Del Mar).

Scenic vistas generally refer to views of expansive open space areas or other natural features, such as mountains, undeveloped hillsides, large natural water bodies, or coastlines. Less commonly, certain urban settings or features, such as a striking or renowned skyline, may also represent a scenic vista. Under CEQA, scenic vistas also generally, although not exclusively, refer to views that are accessible to broader segments of the public, rather than those available to a limited number of private entities. The proposed project facilities would be sited adjacent to existing SGS generation or generation support facilities, and they would generally be visually similar in character and scale to and be located largely within the visual profile of the existing facilities. Some elements of the existing facilities, such as the Unit 3 generator and stack, and two large storage tanks, would be removed as a component of the proposed project. Furthermore, the SGS property rises in elevation from west to east by approximately 125 feet in a series of terraces, which tends to obscure some of the facilities located on

lower terraces from viewpoints east of the station. Nonetheless, because the proposed project facilities would be visible from some residential properties located on the bluffs overlooking SGS and the Pacific Ocean and from Dockweiler beach, albeit within the context of the existing generating station, the potential effect of the proposed project on scenic vistas as seen from adjacent and nearby viewpoints will be further analyzed in the EIR.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

No Impact. There are no officially designated or eligible State scenic highways or local scenic routes (as designated by either the City of Los Angeles or the City of El Segundo) within the vicinity of SGS.

c) Substantially degrade the existing visual character or quality of the site and its surroundings?

Less Than Significant Impact. The proposed project facilities would be located entirely within the existing 56-acre SGS, which, as discussed above, includes three large existing electrical generation units, an electrical switchyard and transmission towers, several large aboveground storage tanks, and other ancillary facilities that support the power generation function at the station. These facilities impart an entirely industrial character to the property. Surrounding and nearby uses include the Hyperion Wastewater Treatment Plant, the Chevron oil refinery and storage facility, and the NRG El Segundo Generating Station, all of which further reinforce the industrial character of the area. The proposed project facilities would be sited adjacent to existing SGS generation or generation support facilities, and they would generally be visually similar in character and scale to and be located largely within the visual profile of the existing facilities. Given the nature and context of the proposed project facilities, they would not substantially degrade the existing visual character or quality of the site or its surroundings, other than the potential to affect scenic vistas, as addressed in Section 3.4.1(a).

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

Less Than Significant Impact. The proposed generator units and dry cooling structures would require lighting similar to that on the existing SGS facilities, which is required for the safety of personnel working at the facility at night, for security of the installation, and as a warning to aircraft in relation to tall structures at the station. Based on the existing level of lighting at the station and the scale of the proposed project facilities compared with the existing facilities, new lighting associated with the project would not be expected to adversely affect nighttime views in the area. The materials used in the construction of the new generator units would not be expected to add a new source of glare at the facility.

Although it is anticipated that construction activity for the proposed project would be limited to daytime hours, if nighttime construction was required, it would create a new source of light. This impact would be temporary, related to only the construction phase of the proposed project. Based on the distance of the construction sites from residences adjacent to or near SGS, the elevational differences between the construction sites and the residences, and the ability to direct light away from the residential uses, construction related lighting would not be expected to adversely affect nighttime views in the area.

3.4.2 Agricultural and Forestry Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board.				
Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?	☐	☐	☐	☒
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☒
e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

DISCUSSION

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

No Impact. The proposed project would be located at the site of the existing SGS, which is owned by LADWP and is occupied by facilities devoted to the production and transmission of electricity. The SGS does not contain land that is designated as Farmland as mapped by the Farmland Mapping and Monitoring Program.[2] The proposed project would be located on land that has general plan and zoning designations of Public Facilities.[3] No portion of the site is currently used for agricultural purposes or is encumbered by a Williamson Act contract.

[2] State of California, Division of Land Resource Protection. *Farmland Mapping and Monitoring Program*. Website: http://www.consrv.ca.gov/DLRP/fmmp/index.htm, accessed October 2010.

[3] City of Los Angeles. *ZIMAS – Zoning Information and Map Access System*. Website: http://zimas.lacity.org/, accessed October 2010.

b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

No Impact. See discussion under Section 3.4.2(a).

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

No Impact. The proposed project would be located at the site of the existing SGS, which is owned by LADWP and is occupied by facilities devoted to the production and transmission of electricity. The project site does not support native tree cover or timber resources and is not considered forest land, timberland, or a timberland production zone as defined in the California Public Resources Code or Government Code.[4, 5]

d) Result in the loss of forest land or conversion of forest land to non-forest use?

No Impact. See discussion under Section 3.4.2(c).

e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

No Impact. There is no Farmland or forest land within the SGS or on adjacent parcels. The proposed project would not increase the generation capacity of the proposed facility and thus would not contribute to growth that may lead to the conversion of Farmland or forest land. Therefore, there would be no potential for construction or operation of the proposed project to convert Farmland to non-agricultural use or forest land to non-forest use, either directly or indirectly.

[4] Legislative Council of California. *California Public Resources Code.* Website: http://www.leginfo.ca.gov/.html/prc_table_of_contents.html, accessed October 2010.
[5] Legislative Council of California. *California Government Code.* Website: http://www.leginfo.ca.gov/.html/gov_table_of_contents.html, accessed October 2010.

3.4.3 Air Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations.				
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☒	☐	☐	☐
b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?	☒	☐	☐	☐
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	☒	☐	☐	☐
d) Expose sensitive receptors to substantial pollutant concentration?	☒	☐	☐	☐
e) Create objectionable odors that would affect a substantial amount of people?	☐	☐	☒	☐

DISCUSSION

a) Conflict with or obstruct implementation of the applicable air quality plan?

Potentially Significant Impact. The SCAQMD and the Southern California Association of Governments (SCAG) have responsibility for preparing and implementing the Air Quality Management Plan (AQMP) for the SCAB. Currently, the entire basin is a non-attainment area for the following pollutants: 8-hour ozone (O_3); particulate matter less than 10 microns in diameter (PM_{10}); and particulate matter less than 2.5 microns in diameter ($PM_{2.5}$). The SCAB is a federal maintenance area for carbon monoxide (CO) and NOx. The AQMP analyzes air quality on a regional level and identifies region-wide attenuation methods to achieve the air quality standards, including regulations for stationary-source polluters; facilitation of new transportation technologies, such as low-emission vehicles; and capital improvements, such as park-and-ride facilities and public transit improvements. The most recent plan is the 2007 AQMP, adopted on June 1, 2007. This plan is the SCAQMD's portion of the State Implementation Plan.

Since the RECLAIM program is a component of the AQMP, projects that are consistent with or that are completed pursuant to RECLAIM are by definition consistent with the AQMP. However, the EIR will inventory, model, and evaluate the construction and operation impacts of the proposed project to quantify that project emissions and resulting air quality are within the RECLAIM program limits.

b) Violate any air quality standards or contribute substantially to an existing or projected air quality violation?

Potentially Significant Impact. Emissions of NOx, CO, volatile organic compounds (VOCs), and particulate matter are associated with construction of the proposed project. Activities that would generate air emissions would include mobilization, site preparation, erection of facilities, workforce travel, construction material transport, and system startup and commissioning. Peak construction activities would potentially exceed SCAQMD daily construction emissions significance thresholds and local significance thresholds. Construction activities would be short-term in nature and would not add to long-term air quality degradation; however, the impacts are potentially significant and will be analyzed further in the EIR.

Emissions of NOx, CO, VOCs, particulate matter, and other criteria pollutants are associated with operation of the proposed facilities. These emissions will be quantified in the EIR and compared to existing Unit 3 emissions under baseline conditions. Other considerations, such as exhaust stack plume dispersion and potential health risk factors from toxic air contaminants, will be addressed as required for purposes of substantiating permit compliance and evaluating consistency with air quality standards and regulations.

The proposed project would be required to comply with all relevant federal, State, and local air quality regulations, including acquisition of a permit to construct, permit to operate, and permit for demolition from SCAQMD. Compliance with air quality rules and regulations will be discussed in the EIR.

c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Potentially Significant Impact. The project site is located in the SCAB, which is a non-attainment area for 8-hour O_3, PM_{10}, and $PM_{2.5}$, and is a federal maintenance area for CO and NOx. Construction activities for the proposed project would contribute to an increase in air quality emissions for which the region is non-attainment. In that project construction activities could result in an increase in air pollutant emissions, which individually or cumulatively may exceed established thresholds for these criteria pollutants, the impacts are potentially significant and will be analyzed in the EIR.

The combustion emissions generated from project operations will be analyzed in the EIR in conjunction with the removal from service of Unit 3 to determine whether the project's net emissions would in fact create potential significant adverse air quality impacts. Additionally, the EIR will analyze project emissions in conjunction with other proposed and/or reasonably foreseeable future projects in the vicinity to determine if it could result in a cumulative considerable net increase in criteria pollutants for which the project region is a non-attainment area.

In addition, the air quality impacts associated with the demolition of Unit 3 will be addressed in the EIR and will include assessment of the potential emissions associated with any hazardous materials that must be removed.

d) Expose sensitive receptors to substantial pollutant concentration?

Potentially Significant Impact. Exhaust gases containing air pollutants will be emitted from the stacks of the proposed combustion turbines and will disperse in the atmosphere in the vicinity of the site. To determine the extent of exposure to local residents, worker populations, and other sensitive receptors of the project's generated air pollutants, the EIR will include a health risk assessment (HRA). The HRA will quantify the concentration of pollutants to which receptors in the project vicinity could be exposed during construction and operations.

e) Create objectionable odors that would affect a substantial amount of people?

Less than Significant Impact. It is possible that odors characteristic of construction activities would be detected on properties surrounding the project site. Such odors would include diesel exhaust, petroleum products used in motor vehicles, freshly graded earth, and architectural coatings. Because objectionable construction odors would be relatively mild by the time they reach nearby off-site receptors and would be temporary, construction-related odor impacts would be less than significant.

It is also possible that odors associated with some operations could be detected on properties surrounding the project site. Use of natural gas, diesel fuel, and architectural coatings may be detected on properties surrounding the site. However, the use of these materials is characteristic of the existing operations, is subject to various laws and regulations regarding storage and use, and any such odors generally would be no more impacting than experienced under current operations. Except in the event of a serious accident or malfunction, which are not foreseen, the potential for significant odors to occur during operations is low and would not affect a substantial number of people. This issue will not be discussed further in the EIR.

3.4.4 Biological Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	☒	☐	☐	☐
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☐	☒
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

DISCUSSION

a) Have a substantial adverse effect, either directly or indirectly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Potentially Significant Impact. The existing SGS site is fully developed for power generation and contains very little vegetation. The vast majority of the site is paved over with either concrete or asphalt. Small patches of ruderal vegetation and non-native grasses exist on the fringes of the site, including the northeastern corner of the site adjacent to the Scattergood-Olympic transmission line alignment. Many of the small existing patches of vegetation are dominated by iceplant. Maintenance activities on the property include vegetation control. There are no streams, watercourses, or other waters on the site that are subject to regulation by State or federal agencies with jurisdiction.

To determine whether there is potential for occurrence of important biological resources at the site, previous projects at SGS and in the vicinity were reviewed and regional data bases were consulted. [6] [7] There are two sensitive plant species of interest that have occurred in the project area in the past. The plant species are beach spectaclepod (*Dithyrea maritime*; State Threatened and federal Species of Concern) and coastal dunes milk-vetch (*Astragalus tener* var. *titi*; State and federal Endangered Species). The California Natural Diversity Database (CNDDB) indicates that both species are believed extirpated in the project area.[8]

A number of sensitive bird species have been observed and/or are known to exist adjacent to SGS, based on the facility's near-shore location. These include the western snowy plover (*Charadrius alexandrinus nivosus*), which winters on Dockweiler Beach about one-half mile north of the SGS, and the California least tern (*Sterna antillarum browni*), which nests on the beach roughly adjacent to SGS. No construction activities related to the proposed project would occur at the intake penstocks, which are on the beach side of Vista Del Mar, or would otherwise affect the beach area. No adverse impacts to these sensitive bird species that utilize the coastal area adjacent to SGS would occur.

Several sensitive species of insects have been observed in the vicinity of SGS, including Lange's El Segundo dune weevil (*Onychobaris langei*), Dorothy's El Segundo dune weevil (*Trigonoscuta dorothea dorothea*), Belkin's dune tabanid fly (*Brennania belkini*), and Henne's eucosman moth

[6] CNDDB and CNPS Inventories, accessed November 2010.
[7] Op Cit. SCAQMD.
[8] Op Cit. CNDDB

(*Eucosma hennei*), all federal Species of Concern. None of these species is expected to occur on the SGS site because suitable habitats for the proliferation of these species is not present.[9]

Several sensitive beetle species have been identified as potentially occurring in the vicinity of SGS. [10] These include sandy beach tiger beetle (*Cicindela hirticollis gravida*), which is found in areas adjacent to non-brackish water along the coast, and the tiger beetle (*Cicindela senislis frosti*), which is found in a salt marsh environment. In addition, the globose dune beetle (*Coelus globosus*), found in coastal sand dunes and dune vegetation, may occur in the area of SGS. None of these species of beetle are expected on SGS due to lack of suitable habitat.

Another insect species of interest that occurs on the adjacent Chevron El Segundo Refinery site is the federal Endangered El Segundo blue butterfly (*Euphilotes battoides allyni*). An approximately two-acre parcel, which borders the SGS property on the southeast, has been established as an El Segundo blue butterfly sanctuary. The parcel is completely fenced and as of 2005 contained as many as 10,000 butterflies.[11] El Segundo blue butterflies are also known to occur in the dunes west of LAX. The El Segundo blue butterfly spends virtually its entire life cycle in association with a coastal dune native plant known as seacliff or coast buckwheat.[12] Past surveys of the SGS property itself have not identified any coast buckwheat or El Segundo blue butterflies on the site. A survey in 2009 did not find coast buckwheat on an adjacent 0.5-acre parcel on the north side between SGS and the Hyperion Wastewater Treatment Facility.[13] Lack of habitat on the SGS site would indicate very low probability of finding El Segundo blue butterfly or the host plant. However, the proposed project could result in disturbance along the Scattergood-Olympic transmission right-of-way adjoining SGS as a result of temporary use for employee parking during construction as well as disturbance near the butterfly sanctuary during demolition of two of the large storage tanks. Since sandy soils characteristic of coastal sand dune may exist in these areas to be disturbed, a focused habitat assessment for El Segundo blue butterfly and the host plant coast buckwheat will be conducted to determine if the project would have significant impacts.

The impact on biological resources is considered potentially significant since areas that may contain the native plant, coast buckwheat, may be affected by construction of the proposed project. This specific issue will be evaluated in the EIR.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

No Impact. See response contained in Section 3.4.4(a). SGS is not located in a riparian habitat or other sensitive natural community.

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

No Impact. See response contained in Section 3.4.4(a). All construction for the proposed repowering project would occur in upland areas of the previously disturbed existing SGS site. No federal

[9] Op Cit. SCAQMD.
[10] Ibid.
[11] Ibid.
[12] Michael Brandman Associates. 2009. *Results of El Segundo Blue Butterfly Habitat Assessment for Scattergood Hyperion SHARE Project*. El Segundo.
[13] Ibid.

protected wetlands exist within or adjacent to construction areas that would be directly or indirectly subject to removal, filling, hydrologic interruption, or other disturbance.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

No Impact. The existing SGS site is essentially devoid of habitat cover and does not support substantial wildlife movement or foraging. It does not act as a wildlife corridor or wildlife nursery (see Section 3.4.4 (a) relative to the El Segundo blue butterfly and California least tern), and does not connect to larger adjacent habitat areas. Consequently, the implementation of the proposed project would not interfere with wildlife movement, change wildlife use patterns, or impede the use of a wildlife nursery site.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

No Impact. The proposed project would not conflict with the City of Los Angeles Tree Protection Ordinance, as no trees covered by the ordinance exist in the areas of the site where new or modified facilities are to be located.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

No Impact. The proposed project site is not included in any established federal, State, or local Habitat Conservation Plan or Natural Community Conservation Plan. Consequently, the proposed project would not conflict with such plans. [14] See Section 3.4.4 (a) for additional information.

3.4.5 Cultural Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?	☒	☐	☐	☐
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?	☐	☐	☒	☐
c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?	☒	☐	☐	☐
d) Disturb any human remains, including those interred outside of formal cemeteries?	☐	☐	☐	☒

[14] City of Los Angeles. *ZIMAS – Zoning Information and Map Access System*. website http://zimas.lacity.org/, accessed October 2010.

DISCUSSION

a) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations Section 15064.5?

Potentially Significant Impact. On October 25, 2010, POWER Engineers, Inc. performed an archaeological and historical record search for the Scattergood Generating Station Unit 3 Repowering Project. The record search included an examination of the materials on file at the South Central Coastal Information Center (SCCIC) at the California State University, Fullerton, a unit of the California Historical Resource Information System (CHRIS). 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 (aka Historic resources inventory) were examined for the purpose of identifying historic properties.

The SCCIC maps showed no archaeological or historical sites within the project boundary and two archaeological sites within a one-mile buffer. The two sites within the one-mile buffer consist of a large prehistoric site consisting of hundreds of tools, bones, and thermally affected rock; the other is the El Segundo Water Tank, built in the 1940s or 1950s. The prehistoric site is located approximately 5,000 feet north of the project area in the dune area in the extreme southwest corner of LAX property, and the water tank is located approximately 4,500 feet east of the project area in a residential area. The site and/or facility are not located in a City Historic Preservation Overlay Zone.

Previous studies and surveys within the project area include a Phase I records search conducted by Environmental Research Archaeologists for the West Basin Municipal Water District in 1993 (CA-2904), and a record search and pedestrian survey conducted by Conejo Archaeological Consultants for ENSR (LADWP) in 2000 (CA-4907). In the Conejo survey, four small portions of the SGS property (totaling less than one acre) were surveyed at the sites for planned equipment additions. No cultural material was observed.

Within the 0.5-mile buffer of the project area, nine other studies have taken place. These studies were undertaken for pipelines, cell towers, or projects relating to the Chevron El Segundo Refinery or the Hyperion Treatment Plant; they identified no new cultural resources (LA-125, 3494, 4051, 4861, 5708, 6239, 6240, 6243, 10622).

SGS Units 1 and 2 (and some of the appurtenant facilities on the site) were constructed in 1958 and 1959, respectively, and Unit 3 was added to SGS in 1974. The facilities at SGS are not listed in the California Register of Historic Places or other historic register, but some equipment and generating units were constructed more than 50 years ago. Though age by itself is not a criterion for historic significance or importance, consideration of potential historic significance is typically assessed when an object undergoing modification or demolition has existed 50 years or more. Since demolition and modification of some of the existing equipment, storage tanks, and facilities at SGS would occur with the proposed project, the affected facilities will be evaluated for historic significance under criteria put forth in CEQA Guidelines Section 15064.5 and the California Register.

Unit 3, which would be decommissioned and demolished as a component of the proposed project, is 36 years old and would not be old enough, by itself, to be considered historically significant under State or federal criteria.

In summary, the proposed project may affect facilities older than 50 years; therefore, the potential historic significance of those facilities will be addressed in the EIR.

b) Cause a substantial adverse change in the significance of an archaeological resource as defined in California Code of Regulations Section 15064.5?

Less Than Significant Impact. According to the records search, there were no recorded archaeological sites on the project site or within 0.5 miles of the proposed project site. Though there were a few sites within one mile of the project site, none of the recorded sites are currently listed in the National Register of Historic Places, the California Register of Historical Resources, or any local register of historical resources.

The SGS site has been subjected to an extensive amount of construction and ground disturbance in the past, which has included former use of the property by the Gordon Sand Plant and extensive development for power generation by LADWP.[15] Archaeological spot surveys on the SGS site in 2000, in conjunction with an EIR for the construction of air pollution control equipment, characterized that project as having no impact on archaeological resources.[16] Given the large amount of past site disturbance and the lack of resources found in areas adjacent to the site, there is very low probability that pre-historic archaeological resources would be apparent at the surface or would be encountered during construction of facilities for the proposed project. The impact would be less than significant and no further study of this issue is required.

In addition, LADWP would employ a best management practice to instruct grading and excavation workers in the proper procedures to follow in the unlikely event that archaeological resources are encountered during construction. This practice includes diverting construction to other areas so that a qualified professional can examine a suspected find, determine its significance, and if necessary, take further mitigating action. This best management practice would be contained in the project grading specifications.

c) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature?

Potentially Significant Impact. The project site occurs in an area composed predominantly of surficial sedimentary units of Pleistocene and Holocene age. These sediments include deposition derived from continental, alluvial fan-derived sources, sub-aerial floodplain sources, and marine terrace and near-shore sources.[17] In particular, the Pleistocene age Palos Verdes Sand formation that occurs generally throughout the southwestern Los Angeles County coastal region has produced some of the most significant fossil discoveries in California. Nearby projects, such as the El Segundo Power Redevelopment Project on the coast to the south of the project site and the LAX Master Plan Project to the north, have incorporated paleontological survey and mitigation plans.

Aspects of the proposed project would result in significant excavation, potentially affecting the Palos Verdes Sand formation. In that there is high potential to encounter paleontological resources during site development, affecting the Palos Verdes Sand formation, paleontological resources will be evaluated in the EIR.

[15] Conejo Archaeological Consultants. 2000. *Phase I Archaeological Investigation of Limited Areas Within the Los Angeles Department of Water & Power's Harbor, Scattergood, & Valley Generating Stations*, Los Angeles County, California.
[16] Ibid.
[17] URS. 2000. *El Segundo Power Redevelopment Project Paleontological Resources*, Appendix L. By David Lawler, Paleontologist.

d) Disturb any human remains, including those interred outside of formal cemeteries?

No Impact. During the history of construction and operations at SGS, including extensive grading during construction, no human remains have been discovered. No human internment sites are expected to be discovered during the construction of the proposed project. However, in the event that remains are unearthed during construction, State Health and Safety Code Section 7050.5 and Public Resources Code Section 5097.98 provide guidance on the actions that must be taken, including procedures for contacting the Los Angeles County Coroner. These procedures follow State law and are not discretionary. The impact would be less than significant and no further study of this issue in the EIR is required.

3.4.6 Geology and Soils

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	☐	☐	☐	☒
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☐	☒
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	☐	☐	☐	☒
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	☐	☐	☐	☒

DISCUSSION

a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

i. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

No Impact. Two major active earthquake fault zones and several smaller earthquake faults are located within the general vicinity of SGS. The Palos Verdes Fault Zone is located offshore approximately 3.5 miles southwest of the station at its nearest point. The Newport-Inglewood Fault Zone is located approximately 5.5 miles northeast of the station at its nearest point. Portions of the Newport-Inglewood Fault, including the section nearest to SGS, are contained in an Alquist-Priolo Earthquake Fault Zone. However, no fault is known to pass through the station property, and fault rupture at the station is not anticipated.

ii. Strong seismic ground shaking?

Less Than Significant Impact. SGS is located within the seismically active Southern California area, and, like all locations within the region, is potentially subject to strong seismic ground shaking. Two major active earthquake fault zones are located within the general vicinity of SGS. The Palos Verdes Fault is located offshore approximately 3.5 miles southwest of the station at its nearest point, and the Newport-Inglewood Fault is located approximately 5.5 miles northeast of the station at its nearest point. Numerous other active faults are located within the general region of the project site. The proposed project provides for the removal from service of an existing steam-boiler generator unit and the construction of new generator units within the existing SGS property boundaries. The design of the proposed project facilities would be based on a comprehensive pre-construction geotechnical analysis and would conform to the latest version of the California Building Code, the Uniform Building Code, and all other applicable federal, State, and local codes relative to seismic design criteria, and it would not increase the exposure of people or structures at SGS to potential substantial adverse effects from strong ground shaking.

iii. Seismic-related ground failure, including liquefaction?

No Impact. According to City of Los Angeles Bureau of Engineering[18] and California Geological Survey[19] mapping data, the SGS property is not located on soils susceptible to liquefaction.

iv. Landslides?

Less Than Significant Impact. According to City of Los Angeles Bureau of Engineering[20] and California Geological Survey[21] mapping data, portions of the SGS property possess the potential for seismically-induced slope failure, a determination based primarily on existing slope gradient and height rather than site-specific geotechnical investigations. This includes the slope located

[18] City of Los Angeles Bureau of Engineering, Department of Public Works. *Navigate LA.* Website: http://navigatela.lacity.org/index01.cfm, accessed November 2010.
[19] California Geological Survey. *Seismic Hazard Zones: Venice Quadrangle.* Website: http://gmw.consrv.ca.gov/shmp/download/pdf/ozn_veni.pdf, accessed November 2010
[20] Op. cit. City of Los Angeles Bureau of Engineering.
[21] Op. cit. California Geological Survey.

east of the westernmost and lowest terrace at SGS, within which the existing generator units and the site for proposed project CCGS are located. In order to accommodate the proposed CCGS and the associated dry cooling system, the northern portions of this existing slope would need to be cut back and retained with a wall, which would be engineered consistent with established practice and according to applicable codes to resist the lateral pressure from the soil of the higher terrace located to the east, eliminating the potential for seismically induced slope failure. The proposed project would not otherwise disturb the existing slope, and it would not increase the exposure of people or structures to potential substantial adverse effects related to landslides.

b) Result in substantial soil erosion or the loss of topsoil?

Less Than Significant Impact. Construction of the proposed project would result in ground surface disturbance during excavation and grading that could create the potential for erosion to occur. However, under the provisions of the California State Water Resources Control Board Storm Water Program, Storm Water General Construction Permit Best Management Practices (BMPs), including the preparation of erosion control plans and a Storm Water Pollution Prevention Plan (SWPPP), would be employed to control any potential erosion or sedimentation impacts related to the proposed project construction and operation. Therefore, the project would not result in substantial soil erosion or the loss of topsoil.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Less Than Significant Impact. See discussion under Sections 3.4.6(a)(iii) and 3.4.6(a)(iv).

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?

No Impact. Based on soil formations at SGS, which generally consist of Recent Dune Sand from the Holocene Age overlaying Older Dune Sands from the Pleistocene Age, the proposed project would not encounter expansive soils.[22]

e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

No Impact. The SGS is currently connected to the City of Los Angeles sewer system for sanitary wastewater disposal. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. It would not significantly increase the number of personnel on site or require an expansion of the existing wastewater disposal system for sanitary waste purposes. No septic tanks or alternative wastewater disposal system would be required.

[22] Los Angeles World Airports. *LAX Master Plan Final EIR: Earth/Geology, Section 4.22*. Website: http://www.laxmasterplan.org/docs/final_eir/part1/33_0422_EarthGeology.pdf, accessed November 2010.

3.4.7 Greenhouse Gas Emissions

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☒	☐	☐	☐
b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☒	☐	☐	☐

DISCUSSION

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

Potentially Significant Impact. Greenhouse gas emissions would be produced from project-related short-term construction activities and from long-term project operations. Greenhouse gas emissions during construction would occur primarily from the operation of construction equipment with internal combustion engines and the use of motor vehicles by construction employees travelling to and from the work site. Project operations would also generate greenhouse gas emissions as a byproduct of the combustion of natural gas used to power the turbine generators, as well as other equipment using petroleum-based fuel, such as the standby generators that use diesel fuel. Relative to operations, it is expected that the proposed project would reduce the total quantity of greenhouse gas emissions associated with power generation at SGS since the new units would be more fuel-efficient than the units that they replace. However, to establish the impacts for both construction and operations, the EIR will calculate and quantify the associated greenhouse gas emissions. The analysis will include calculating the net increase or decrease in greenhouse gas emissions due to both construction and operation, and then comparing the emissions to the relevant SCAQMD screening criteria to determine significance of the impact.

b) Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Potentially Significant Impact. The proposed project will emit greenhouse gases as a result of the combustion of natural gas in the CTGs. However, the project is being undertaken pursuant to the RECLAIM program, an objective of which is to reduce emissions of oxides of nitrogen (NOx) and oxides of sulfur (SOx) from stationary sources including in-basin power plants. By mandating declining annual criteria pollutant emissions objectives and limits, which is in part achieved through modernization and improved efficiency, compliance with RECLAIM would not conflict with Global Warming Solutions Act targets. However, the project's consistency with Global Warming Solutions Act targets will be quantified through emissions analysis and modeling that will be included in the EIR.

3.4.8 Hazards and Hazardous Materials

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☒	☐	☐	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	☒	☐	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☐	☒
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☐	☐	☒
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?	☒	☐	☐	☐
f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?	☐	☐	☐	☒
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☐	☒
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	☐	☐	☐	☒

DISCUSSION

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Potentially Significant Impact. During construction of the proposed project, activities involving some hazardous materials would occur, including on-site fueling and minor servicing of construction equipment. However, construction activities would be short-term in nature, and the types of materials that would be routinely involved are not considered acutely hazardous. Furthermore, the routine handling, transport, and storage of these materials are subject to federal, State, and local health and safety requirements. Therefore, project construction would not create a significant hazard to the public or environment from the routine transport, use, or disposal of hazardous materials such as vehicle fluids or due to reasonably foreseeable upset or accident.

The demolition of the fuel oil storage tanks and the demolition of Unit 3 would involve the identification, removal, and disposal of materials deemed to be hazardous. Relative to the storage tanks, cleaning would be necessary prior to demolition, which may generate oily wastes, and soils beneath the tanks would be tested for VOCs after the tank bottom is removed. Any contaminated soils would be remediated. Concerning Unit 3 demolition, the amount of hazardous materials requiring disposal has not been investigated. However, demolition wastes that could require special handling and disposal include materials coated with lead-based paint and asbestos-containing materials. The EIR will evaluate the potential for impacts due to hazardous materials removal and disposal.

The operation of the proposed project would involve the use of potentially hazardous materials, including natural gas to fuel the CCGS, SCGS, and CTG units, and aqueous ammonia and catalysts used in the SCR systems of the generator units to reduce air pollutant emissions. All of these materials are currently used at SGS related to the operation of the existing generator units. Relative to the transport, use, and, when necessary, disposal of these materials during operations, they would be handled and contained in accordance with government regulations and industry standards.

Natural gas is the primary fuel for the proposed generating systems. As is the case with the existing generator units at SGS, natural gas would be supplied to the proposed units by continuous feed from existing gas company lines. There would be no storage of natural gas on site. The natural gas used for the proposed generator units would replace that currently used in existing units that would be decommissioned or derated as part of the proposed project. Consequently, there would be no increased hazard to the public or the environment resulting either from routine use or a reasonably foreseeable accident involving natural gas.

The proposed project would employ catalysts in the SCR systems to reduce air emissions. These catalysts would be vanadium-based on a titanium support matrix. They are a toxic solid but would not be in a form that could catch fire, be introduced into the storm water system, or be dispersed by the wind, limiting the potential for off-site impacts. Spent SCR catalysts would be recycled or disposed of properly, and no significant hazard to the public or the environment resulting either from routine use or a reasonably foreseeable accident involving the catalyst material is anticipated.

The proposed generator units would each employ an SCR system to reduce NOx air emissions. The SCR systems would utilize aqueous ammonia in quantities and concentrations that are similar to what is currently used at the facility. Ammonia is a regulated toxic substance that can produce toxic effects in humans. The approved Risk Management Plan for SGS addresses ammonia hazard and was last updated in 2007 to account for the construction and operation of the current onsite ammonia storage facility. The existing ammonia storage system would remain in the same location and continue to operate after completion of the proposed project. No new or additional ammonia storage would be needed for the proposed project and the use and handling of ammonia would be approximately the same as presently occurs. Therefore, there would be no increased hazard to the public or environment resulting from either routine use or a reasonably foreseeable accident involving use of ammonia.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Potentially Significant Impact. See discussion under Section 3.4.8 (a).

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

No Impact. The nearest schools to SGS are:

Kumon Math and Reading Center	0.35 miles
Richard Street Elementary School	0.46 miles
El Segundo High School	0.57 miles
St Anthony's Catholic Church School	0.80 miles
El Segundo Middle School	1.00 mile

No schools are located within one-quarter mile of SGS. No impact would occur, and no further study of this issue is required.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

No Impact. Government Code Section 65962.5 refers to a list of facilities that may be subject to the Resource Conservation and Recovery Act (RCRA) corrective action program. SGS is listed on the database (*Environmental Protection Agency Envirofacts Data Warehouse, RCRAInfo Database*) because the facility is a generator of hazardous waste.[23] The proposed project site is not contained on any lists compiled pursuant to Section 65962.5 or on the California Department of Toxic Substances Control database (EnviroStor) for contaminated sites.[24, 25, 26, 27] Hazardous wastes from the facility are managed in accordance with applicable federal, State, and local rules and regulations. The hazardous waste generated from proposed project activities would consist primarily of spent catalyst, which is not expected to present a significant risk to human health or the environment. The catalyst would be disposed or recycled at an approved facility. In addition, some of the facility's air pollutant emissions are considered hazardous (and will be assessed in the EIR under Air Quality). In that SGS is a regulated facility and subject to inspection and reporting by EPA and California Department of Toxic Substances Control, no significant hazardous solid waste impacts would occur, and no further study of this issue is required.

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?

Potentially Significant Impact. The SGS is located within about one mile of LAX's southwestern-most boundary. The project site is not located in or near any of the runway clear zones, or on the approach/departure path of any of its active runways.[28] However, the City of Los Angeles zoning code established land use restrictions within specified distances from the airport runways. Accordingly, a 150-foot height limit (above base runway elevation) is applicable to the project site; this would limit all project elements to a height not exceeding 276 feet above mean sea level (AMSL). Exhaust stacks on the proposed units would potentially exceed the LAX height restriction. This potential impact will be addressed in the EIR.

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23 EPA, *Envirofacts Data Warehouse, RCRAInfo Database*, Website: http://www.epa.gov/envirofw
24 Department of Toxic Substances Control. *DTSC's Hazardous Waste and Substances Site List – Site Cleanup (Cortese List)*. Website: http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm.
25 EPA. *CERCLIS Hazardous Waste Sites*. Website: http://www.epa.gov/superfund/sites/cursites/index.htm.
26 EPA. *National Priorities List*. Website: http://www.epa.gov/superfund/sites/npl/index.htm.
27 Department of Toxic Substances Control. *EnviroStor*. Website: http://www.envirostor.dtsc.ca.gov/public/default.asp.
28 Los Angeles County Department of Regional Planning, Airport maps. Website: http://planning.lacounty.gov/aluc.

There are no general aviation airports or airstrips within two miles of SGS. The closest is the Hawthorne Airport, about 4.5 miles from SGS. The proposed project would not interfere with air navigation or contribute to an increased safety hazard for SGS personnel related to local air operations. No impact would occur, and no further study of this issue is required.

f) For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area?

No Impact. The proposed project is not located within the vicinity of a private use airport, general aviation airport, or airstrip. No safety hazards would occur.

g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

No Impact. The proposed project would be located in the interior of the existing SGS site. It would not impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan for any area outside the station. Procedures for emergency response and evacuation are provided to all LADWP employees at the station. These procedures would be updated as necessary in the Risk Management Plan for SGS to account for the proposed generator units and associated facilities. All personnel involved in the construction of the proposed project would also receive training regarding emergency response and evacuation measures at the station during the construction phase of the proposed project. The impact would be less than significant, and no further study of this issue is required.

h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

No Impact. The proposed project site is located in an urbanized area, surrounded primarily by existing industrial and residential development, and is not subject to risk from wildland fires[29]. No construction or operational activity related to the proposed project would create a significant wildfire risk.

3.4.9 Hydrology and Water Quality

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of preexisting nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	☐	☐	☒	☐

[29] City of Los Angeles. *General Plan Safety Element, Exhibit D Selected Wildfire Hazard Areas in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed June 2010.

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on or off-site?	☐	☐	☒	☐
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on or off-site?	☐	☐	☒	☐
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
f) Otherwise substantially degrade water quality?	☐	☐	☐	☒
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	☐	☐	☐	☒
j) Inundation by seiche, tsunami, or mudflow?	☐	☐	☐	☒

DISCUSSION

a) Violate any water quality standards or waste discharge requirements?

Less Than Significant Impact. Relative to surface water quality and discharge, construction activities would comply with applicable requirements of the SWRCB and RWQCB, including compliance with NPDES permit regulations as discussed above in Section 3.4.6(b). Compliance with NPDES requirements, including preparation of a construction SWPPP, would ensure that construction impacts are less than significant.

Potential impacts related to operations involving sanitary and industrial waste generation and discharge are discussed in Section 3.4.17(a).

b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?

No Impact. The proposed project would not use local groundwater supplies or substantially interfere with local groundwater recharge operations. No impact would occur and no further study of this issue is required.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?

Less Than Significant Impact. There are no drainage courses, streams, or rivers that cross the project site or are adjacent to the project site. None of these features would be affected by the construction or operation of the project. The storm water drainage and control system for the site would be redesigned to accommodate the additional facilities to be constructed; however, no significant change in runoff or drainage patterns would occur as the site is presently in a developed condition. See also Section 3.4.9(e).

d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?

Less Than Significant Impact. The storm water drainage and control system for the site would be redesigned to accommodate the additional facilities to be constructed; however, no significant change in runoff or drainage patterns would occur as the site is presently in a developed condition. See also Section 3.4.9(e).

e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Less Than Significant Impact. The proposed project would involve the construction of new generator units and associated facilities within the existing SGS site. Under the proposed project, storm water runoff would be collected at existing and new catchment devices and directed to holding tanks on-site. The captured storm water would be detained, tested, treated as necessary, and released to the SGS outfall. Drainage design will be completed during the design phase of the project; however, it is not anticipated that the project would substantially increase runoff since the site presently contains very minor amounts of pervious surface. Should it be necessary to regulate the volume of storm water runoff, SGS would temporarily retain the necessary volumes in on-site storage tanks. Consequently, the proposed project would not create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff. The impact would be less than significant, and no further study of this issue is required.

Construction activities would comply with applicable requirements of the SWRCB and RWQCB, including compliance with NPDES permit regulations. Best management practices would be employed during project construction to control any potential erosion or siltation impacts related to construction activities. Compliance with NPDES requirements would ensure a less than significant impact, and no further study of this issue related to construction is required.

f) Otherwise substantially degrade water quality?

No Impact. Based on the type and magnitude of activities anticipated during project construction and operations, the proposed project would not otherwise substantially degrade water quality.

g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

No Impact. The SGS is not located within a 100-year flood hazard area as indicated on the Federal Emergency Management Agency (FEMA) Flood Insurance zone maps for Los Angeles County.[30] [31] The proposed project would not provide any new housing, nor would it increase the risk related to flood hazard for existing housing in the vicinity currently located outside the 100-year flood hazard area. No impact would occur, and no further study of this issue is required.

h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?

No Impact. According to the most recent FEMA Flood Insurance Rate Map for the area and the City of Los Angeles General Plan Safety Element, the project site is not located within an area subject to a 100-year flood hazard.[32, 33]

i) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

No Impact. The proposed project provides for the removal from service of an existing power generator unit (Unit 3) and the construction of replacement capacity via new CCGS and SCGS units within the existing SGS property boundaries. It would not increase the risk of loss, injury, or death involving flooding on the site or in the vicinity. No impact would occur, and no further study of this issue is required.

j) Inundation by seiche, tsunami, or mudflow?

No Impact. The proposed project would not increase the risk associated with seiche, tsunami, or mudflow at the site. There are no reservoirs nearby that would create a seiche hazard. Tsunami inundation hazard maps published by the California Department of Conservation show that the potential tsunami run-up in the vicinity of SGS would remain west of Vista Del Mar.[34] The inundation maps show the maximum considered tsunami run-up from a number of extreme, yet realistic, tsunami sources. No impact would occur, and no further study of this issue is required.

[30] LACDA Overflow Map, May 14, 2001.
[31] FEMA Map Service Center. *Flood Insurance Rate Map (FIRM) 06037C1075F*. 2008 Website: http://msc.fema.gov/webapp/wcs/stores/servlet/FemaWelcomeView?storeId=10001&catalogId=10001&langId=-1, accessed November 2010.
[32] Ibid.
[33] City of Los Angeles. *General Plan Safety Element, Exhibit F 100-Year & 500-Year Flood Plains in the City of Los Angeles.* November 1996. Website: http://cityplanning.lacity.org/cwd/gnlpln/saftyelt.pdf, accessed November 2010.
[34] State of California, Department of Conservation, Los Angeles County, *Tsunami Inundation Maps, 2009.* Website: http://www.consrv.ca.gov/cgs/geologic_hazards/Tsunami/Inundation_Maps/LosAngeles.aspx.

3.4.10 Land Use and Planning

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☐	☒
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	☐	☐	☐	☒

DISCUSSION

a) Physically divide an established community?

No Impact. The construction and operation of the proposed project would be completely contained within the existing 56-acre SGS property, which is owned by LADWP and occupied by facilities devoted to the production and transmission of electricity. Therefore, construction and operation of the proposed project would not result in physical division of any established communities.

b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

No Impact. The project would be located in the interior of the existing 56-acre SGS property, which is owned by LADWP. The site is within the City of Los Angeles and is designated as Public Facilities by zoning ordinance and general plan. The existing and proposed uses are consistent with the zoning and general plan designations.[35] No conflicts with general plan policy or zoning regulations would occur.

Though SGS is situated adjacent to the Pacific Ocean, the site itself is not in the coastal zone boundary as defined by the California Coastal Act (CCA). SGS (and Hyperion Wastewater Treatment Facility) were excluded from the coastal zone boundary through specific language in the CCA (Section 30166(c), Chapter 2.5, Division 20, and California Public Resources Code). However, SGS's existing ocean cooling water intake and discharge structures are in the coastal zone. As noted in the project description, the proposed repowered units would not utilize the existing once-through ocean water cooling system, but instead would use a dry cooling system composed of a number of large electric powered fans located adjacent to the generating equipment. No physical modifications to the existing once-through ocean water cooling structures would occur under the proposed project. Therefore, the policies of the CCA and Local Coastal Plan do not apply to the proposed project.

[35] Op cit. City of Los Angeles. ZIMAS – Zoning Information and Map Access System.

c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

No Impact. The proposed project would not conflict with any habitat conservation plan. The site is not within a habitat conservation plan or a natural community conservation area.[36]

3.4.11 Mineral Resources

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	☐	☐	☐	☒

DISCUSSION

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

No Impact. See discussion in Section 3.4.11(b).

b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

No Impact. The proposed project site is not identified as a locally important mineral resource site delineated on a local general plan, specific plan, or other land use plan.

3.4.12 Noise

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	☒	☐	☐	☐
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☒	☐	☐	☐
c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☒	☐	☐	☐

[36] Ibid.

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?	☒	☐	☐	☐
e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒
f) For a project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?	☐	☐	☐	☒

DISCUSSION

a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Potentially Significant Impact. The proposed project would be located in the interior of an existing electrical generation station that includes three large steam-boiler generating units and other facilities that create noise during operations. As well as adding new generating units to SGS, the proposed project would permanently remove an existing generating unit from operations and reduce the operating capacity of other existing units, partially or entirely offsetting the noise that would be created by the new units. However, although the proposed units would be individually smaller than the existing unit that would be removed from service, they would be sited in different locations than the existing unit, thereby altering the nature, level, and propagation of noise generated by operations at SGS. Further evaluation of noise that would be created by proposed project operations in relation to applicable standards will be conducted in the EIR.

In addition, noise related to construction activity could potentially expose nearby sensitive receptors, such as residential uses, to noise levels above established standards. Although this activity would be temporary, occurring only during the construction phase of the project, it may still be considered significant. Further evaluation of noise that would be created by proposed project construction activities in relation to applicable standards will be conducted in the EIR.

b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Potentially Significant Impact. The operation of the proposed project is not expected to expose persons to excessive groundborne vibration or groundborne noise levels. However, certain activities during project construction may expose persons to excessive groundborne noise levels. Although this impact would be temporary, related to only the construction phase of the proposed project, it may still be considered significant. Further evaluation of potentially significant impacts related to groundborne noise generated by construction activities for the proposed project will be conducted in the EIR.

c) A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Potentially Significant Impact. The proposed project would be located in the interior of an existing electrical generation station that includes three large steam-boiler generating units and other facilities that create noise during operations. As well as adding new generation units to SGS, the proposed project would permanently remove an existing generating unit from operations and reduce the operating capacity of other existing units, partially or entirely offsetting the noise that would be created by the new units. However, although the proposed units would be individually smaller than the existing unit that would be removed from service, they would be sited in different locations than the existing unit, thereby altering the nature, level, and propagation of noise generated by operations at SGS. Further evaluation of noise that would be created by proposed project operations in relation to ambient noise levels in the vicinity will be conducted in the EIR.

d) A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project?

Potentially Significant Impact. A substantial temporary increase in ambient noise levels in the project vicinity above levels existing without the project may occur related to project construction. Although this impact would be related to only the construction phase of the proposed project, it may still be considered significant. Further evaluation of noise that would be created by proposed project construction activities in relation to ambient noise levels in the vicinity will be conducted in the EIR.

e) For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. SGS is located approximately one mile south of LAX. However, related to aircraft noise from the airport, SGS lies outside the 65-decibel Community Noise Equivalent Level, which is defined as the normally acceptable level of aircraft noise for noise-sensitive land uses according to the California Airport Noise Standard.[37] Furthermore, since the proposed project would be sited within a currently operating generating station and would consist of the removal of an existing generating unit from service and the replacement of its capacity with new generating units, no aspect of the project would increase the existing exposure of people in the area to noise from aircraft operations.

f) For a Project within the vicinity of a private airstrip, would the Project expose people residing or working in the Project area to excessive noise levels?

No Impact. The proposed project is not located within the vicinity of a private airstrip.

[37] California Code of Regulations, Title 21, §5012, Airport Noise Standard. Website: http://weblinks.westlaw.com/result/default.aspx?cite=21CAADCS5012&db=1000937&findtype=L&fn=%5Ftop&pbc=4BF3FCBE&rlt=CLID%5FFQRLT416681844152810&rp=%2FSearch%2Fdefault%2Ewl&rs=WEBL10%2E10&service=Find&spa=CCR%2D1000&sr=TC&vr=2%2E0. Accessed November 2010.

3.4.13 Population and Housing

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☐	☒
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

DISCUSSION

a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

No Impact. The proposed project would provide no new homes or businesses. The project would not increase the power generating capacity at SGS, and, therefore, would not indirectly induce population growth in the area in the context of total power generation and demand for the LADWP service area.

Due to the relatively low number of personnel required for project construction in the context of the Los Angeles urban area and the temporary nature of construction, no substantial population growth in the area would occur related to construction. The operation of the proposed project would not significantly increase the number of personnel on site and thus would not induce population growth or the need for new housing in the area.

b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

No Impact. The project would be located completely within the existing 56-acre SGS. There is no existing housing within the project property, nor does the project require removal of any housing outside the property.

c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

No Impact. See response in Section 3.4.13(b).

3.4.14 Public Services

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:				
Fire Protection?	☐	☐	☐	☒
Police Protection?	☐	☐	☐	☒
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☐	☒
Other Public Facilities?	☐	☐	☐	☒

DISCUSSION

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

Fire protection?

No Impact. Fire protection for SGS is provided by the Los Angeles Fire Department from Station 51, located at 10435 South Sepulveda Boulevard.[38] Within the context of SGS operations and facilities, the proposed project would not generate a requirement for additional fire protection.

Police protection?

No Impact. Police protection for SGS is provided by the Los Angeles Police Department from the Pacific Community Police Station, located at 12312 Culver Boulevard.[39] The station is also guarded and patrolled by LADWP security personnel. Within the context of SGS operations and facilities, the proposed project would not generate a requirement for additional police protection.

Schools?

No Impact. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. It would not directly generate a demand for school services, nor would it lead directly or indirectly to substantial population growth such that new or physically altered school facilities would be required.

[38] City of Los Angeles Department of City Planning. *Zone Information & Map Access System (ZIMAS)*. Website: http://zimas.lacity.org/. Accessed November 2010.
[39] Ibid.

Parks?

No Impact. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. It would not directly generate a demand for parks, nor would it lead directly or indirectly to substantial population growth such that new or physically altered park facilities would be required.

Other public facilities?

No Impact. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. No new housing or businesses would be constructed as part of the project, nor would the project directly or indirectly induce population growth in the area such that new or physically altered governmental facilities would be required to adequately provide services.

3.4.15 Recreation

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☐	☒
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	☐	☐	☐	☒

DISCUSSION

a) Would the Project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

No Impact. Neither the construction nor operation of the proposed project would generate any additional population that would increase the use of existing neighborhood or regional parks or other recreational facilities.

b) Does the Project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?

No Impact. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. It does not include recreational facilities or require construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

3.4.16 Transportation and Traffic

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?	☒	☐	☐	☐
b) Conflict with an applicable congestion management program including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	☒	☐	☐	☐
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?	☒	☐	☐	☐
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☒	☐	☐	☐
e) Result in inadequate emergency access?	☐	☐	☐	☒
f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☐	☒

DISCUSSION

a) Conflict with an applicable plan, ordinance, or policy establishing a measure of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Potentially Significant Impact. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. Operation of the proposed project would not cause any increase in traffic in relation to the existing traffic load and capacity of the street system nor would it adversely affect any other mode of transportation because it would not significantly increase beyond current levels the number of workers or vehicles required to operate facilities at the station.

However, construction of the proposed project would require a large workforce, the delivery of large quantities of material and equipment to the site, and the transport and disposal of demolition debris. This condition would be temporary, related to only the period of time needed for construction of proposed facilities and, subsequently, the demolition of Unit 3, but it may cause an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system. Further

evaluation of potentially significant impacts related to traffic generated by construction and demolition activities for the proposed project will be conducted in the EIR.

b) Conflict with an applicable congestion management program including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Potentially Significant Impact. Operation of the proposed project would not substantially increase the amount of daily inbound and outbound traffic at the SGS because it would not significantly increase beyond current levels the number of workers or vehicles required to operate facilities at the station. No further analysis of this issue related to project operations is required.

However, construction of the proposed project would require a large workforce and the delivery of large quantities of material and equipment to the site. This condition would be temporary, related to only the construction phase of the proposed project, but construction traffic may exceed a level of service standard established by the county congestion management agency for designated roads or highways. Further evaluation of potentially significant impacts related to traffic generated by construction activities for the proposed project will be conducted in the EIR.

c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that result in substantial safety risks?

Potentially Significant Impact. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. It would not contribute to an increase in air traffic levels. However, due to the proximity of SGS to LAX, height restrictions are in effect to avoid potential obstructions to aircraft operations. At SGS, this height restriction is 150 feet above the 126 foot elevation AMSL, or 276 feet AMSL.[40] The proposed project would include exhaust stacks on the new generator units. The maximum estimated height for the stacks would be 200 feet above the finished grade elevation. On the terrace to the east of the existing generating units, where proposed generation units would be sited, this would potentially place the top of the exhaust stacks above the 276 feet AMSL LAX height restriction. This potential impact will be addressed in the EIR.

d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Potentially Significant Impact. The proposed project provides for the removal from service of an existing electrical generator unit and the construction of new generator units within the existing SGS property boundaries. The operations of the project would not substantially alter the type and amount of inbound or outbound traffic to SGS. Construction of the project would include many truck deliveries of materials, supplies, and equipment to the site, including a number of oversize loads to deliver large prefabricated components of the generator units. The turning movement of trucks, especially oversize loads, into and out of the property may create a hazard to through traffic because of the large size and slow speed of the trucks. Further evaluation of potentially significant impacts related to hazards due to incompatible uses during project construction will be conducted in the EIR.

e) Result in inadequate emergency access?

No Impact. The proposed project would not result in inadequate emergency access. Construction activities would take place within the existing SGS property boundaries, and would not impact

[40] Ibid.

existing emergency access to the station or to locations outside the station. During project operation, no changes would occur at SGS that would significantly affect emergency access to the site.

f) Conflict with adopted policies, plans, or programs regarding public transit, bikeways, or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?

No Impact. The proposed project would not conflict with adopted policies, plans, or programs supporting alternative transportation. Construction activities would take place entirely within the boundaries of the SGS property and would not require the removal or relocation of alternative transportation facilities (i.e., bus stops and bike lanes).

3.4.17 Utilities and Service Systems

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	☒	☐	☐	☐
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☒	☐	☐	☐
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	☐	☐	☒	☐
d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?	☒	☐	☐	☐
e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the providers existing commitments?	☐	☐	☒	☐
f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?	☐	☐	☒	☐
g) Comply with federal, state, and local statutes and regulations related to solid waste?	☐	☐	☐	☒

DISCUSSION

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Potentially Significant Impact. SGS is currently connected to the City of Los Angeles sewer system for sanitary wastewater disposal. The proposed project would not significantly increase the number of personnel on site during operations or require an alteration of the existing wastewater disposal system for sanitary waste purposes. Sanitary waste related to the increased on-site workforce during project

construction would be handled through the use of portable chemical toilets, the waste from which would be removed by a private contractor and disposed at an approved offsite location that would comply with the wastewater treatment requirements of the RWQCB Los Angeles Region.

The handling of all other wastewater generated during operations at SGS is governed by the facility's existing NPDES discharge permit. The SGS discharges governed by the permit include treated industrial process wastewater, treated storm water, and once-through ocean cooling water. SGS's NPDES permit (CA0000370, Order No. 00-083) was effective June 29, 2000 and is currently active. An application for permit renewal has been submitted to the RWQCB by LADWP and is currently pending review.

Existing Units 1, 2 and 3 utilize ocean water for cooling and by permit are allowed to draw in and discharge about 495 millions of gallons per day (mgd) of ocean water for this purpose. The NPDES permit also allows for approximately 0.248 mgd of treated plant process wastewater to be discharged with the once-through cooling water.

The proposed project would result in a substantial reduction in the use of ocean water for generator cooling. The decommissioning of Unit 3 and repowering with air-cooled generating units would reduce the maximum volume of ocean water drawn through the cooling system at SGS by about 55 percent. The anticipated derating of Units 1 and/or 2 could further reduce the amount of ocean water needed for cooling of these units. In general, the substantial reduction in ocean water used for cooling at SGS is a positive aspect of the proposed project by virtue of the reduction in entrainment and impingement impacts to marine organisms. Consequently, the impacts of the proposed project on the once-through cooling system, specifically, the reduction in use of once-through cooling water, would not be further evaluated in the EIR. It is also noted that the renewal of the SGS facility RWQCB discharge permit (which includes the once-through cooling system) is an action that is a separate regulatory process and has a timeline that is different from the proposed repowering. Consequently, the changes in the once-through cooling operations in the context of permit renewal will not specifically be addressed in the EIR.

Under current operations at SGS, industrial wastewater is generated from processes and sources such as boiler system water treatment, boiler blowdown, and floor drains. The permitted quantity of this industrial wastewater discharge is a very small fraction (0.05 percent) of the total facility permitted discharge volume. This wastewater is currently collected and detained in either a large aboveground holding tank or one of two settling basins prior to being mixed into the once-through ocean-water cooling stream at a high rate of dilution and discharged with the cooling water. The effective storage volume of the wastewater system is approximately 1.6 million gallons. Prior to discharge, the wastewater is monitored for compliance with the SGS NPDES permit limits for various constituents and concentration levels. To physically accommodate the proposed project facilities, the two existing settling basins would be removed from service and their function would be replaced by new aboveground holding tanks.

The decommissioning of existing generator Unit 3 under the proposed project would eliminate the wastewater production associated with its operation. However, the proposed project generator units and associated cooling systems would also generate wastewater from similar industrial processes. At the same time, as discussed above, the maximum flow and volume of water in the once-through cooling system would decrease significantly based on the decommissioning of Unit 3. This decrease in cooling water volume and flow could lead to an increase in the concentration of regulated wastewater constituents in the cooling water discharge depending on the volume of wastewater generated, the available wastewater detention capacity, and/or the wastewater treatment capabilities at SGS after project implementation. This issue will be further addressed in the EIR.

b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Potentially Significant Impact. As discussed above, SGS is currently connected to the City of Los Angeles sewer system for sanitary wastewater disposal. The proposed project would not significantly increase the number of personnel on site during operations or require an alteration of the existing wastewater disposal system for sanitary waste purposes. Sanitary waste related to the increased on-site workforce during project construction would be handled through the use of portable chemical toilets, the waste from which would be removed by a private contractor and disposed at an approved offsite location. The volume of sanitary waste generated during construction would not require the expansion of existing wastewater treatment facilities.

In order to accommodate the industrial wastewater related to proposed project operations, the existing wastewater settling basins at SGS (which must be relocated to accommodate proposed project facilities) would be replaced with new aboveground holding tanks. No new or expanded off-site wastewater treatment facilities would be required to accommodate project operations. Furthermore, the new wastewater processing facilities at SGS are included as part of the proposed project basic scope, and potential impacts related to their construction, such as those involving air quality, traffic, or noise, are previously accounted for in the appropriate section of the environmental analysis.

The construction phase of the project would require the use of water for various purposes, such as dust suppression or as a constituent of concrete. However, the quantity of water associated with project construction would be minimal in the context of the capacity of existing water treatment facilities.

Under current operations at SGS, water is utilized for several functions in the power generation process, primarily as condensate makeup for the steam boilers. The decommissioning of existing generator Unit 3 under the proposed project would eliminate water consumption associated with its operation. However, the proposed project generator units and associated cooling systems would also require water for such uses as air inlet evaporative cooling, injection for NOx control, cooling water system makeup, and the HRSG steam cycle. Although it is not anticipated that the net water consumption at SGS (i.e., the net change in water consumption after project implementation) would necessitate the construction of new water treatment facilities or expansion of existing facilities, the potential for this to occur will be further analyzed in the EIR.

c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Less Than Significant Impact. The proposed project would modify surface drainage at SGS including through the alteration of site topography necessary to accommodate the new generator facilities and through an increase in impermeable pavement and other structures. However, storm water that falls on these impermeable areas would generally be collected in surface drains and conveyed to the SGS wastewater detention facilities, from which it would be discharged through the station's once-through cooling water system. Based on the surface area that would be affected by the proposed project in the context of the existing generating station, the additional contribution of storm water runoff associated with the project would be negligible relative to the existing local and regional storm water collection system and would not result in the construction of new storm water drainage facilities or expansion of existing facilities.

d) Have sufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed?

Potentially Significant Impact. As discussed above, under current operations at SGS, water is utilized for several functions in the power generation process, primarily as condensate makeup for the steam boilers. The decommissioning of existing generator Unit 3 under the proposed project would eliminate water consumption associated with its operation. However, the proposed project generator units and associated cooling systems would also require water for such uses as air inlet evaporative cooling, injection for NOx control, cooling water system makeup, and the HRSG steam cycle. The net consumption of water (i.e., the net change in water consumption after project implementation) will be further analyzed in the EIR to determine if sufficient water supplies are available to serve the project from existing entitlements and resources or if new or expanded entitlements are needed.

e) Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has adequate capacity to serve the Project's projected demand in addition to the providers existing commitments?

Less Than Significant Impact. See discussion in Section 3.4.17(b) in relation to wastewater treatment facilities.

f) Be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs?

Less Than Significant Impact. The proposed project provides for the removal from service of an existing power generator unit and the construction of replacement units within the existing SGS property boundaries. Project operations would not significantly change the solid waste disposal requirements for SGS such that the landfill that serves the site would exceed its permitted capacity. Small amounts of hazardous waste would be generated during proposed project operations. Over time, the catalyst material used in the SCR process loses its effectiveness and must be replaced. The spent catalyst would be recycled, or it would be transported by a licensed hazardous waste transporter to a permitted hazardous waste treatment, storage, or disposal facility. The relatively small amount of hazardous waste generated by the proposed project would not contribute significant quantities of material to these facilities.

The construction of the proposed project would temporarily generate increased solid waste at the site. Construction debris would be recycled or transported to a landfill site and disposed of appropriately. In accordance with California legislative act AB 939, LADWP's construction contractor would ensure that source reduction techniques and recycling measures are incorporated into project construction. The amount of debris generated during project construction is not expected to significantly impact landfill capacities.

g) Comply with federal, state, and local statutes and regulations related to solid waste?

No Impact. The proposed project would be located within the existing SGS property boundaries. Solid wastes at the station are currently accumulated, handled, and disposed in accordance with federal, State, and local regulations. In accordance with best management practices and as required by regulation and law, during construction and operation of the proposed project, LADWP would comply with all federal, State, and local solid waste diversion, reduction, and recycling mandates, including compliance with the County-wide Integrated Waste Management Plan and the Citywide Construction and Demolition Debris Recycling Ordinance. No impact would occur, and no further study of this issue is required.

3.4.18 Mandatory Findings of Significance

Environmental Issues	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	☒	☐	☐	☐
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	☒	☐	☐	☐
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	☒	☐	☐	☐

DISCUSSION

a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Potentially Significant Impact. The SGS site, which is extensively developed and has been used for power generation for more than 50 years, is not known to contain State and/or federally listed species or their habitats. However, the El Segundo blue butterfly, a federal Species of Special Concern and California State endangered species, is known to inhabit areas near the project site. In that project construction activities could affect adjacent vegetated areas that have not been surveyed for butterfly habitat within the past two years, the impact is considered potentially significant. This issue will be discussed in the EIR.

SGS Units 1 and 2 were constructed in 1958 and 1959, respectively, and Unit 3 was added to SGS in 1974. Some of the equipment associated with Units 1 and 2 exceeds the age of 50 years and may be altered or demolished as part of the proposed project. Consequently, the EIR will include an evaluation to determine whether any of the facilities proposed to be demolished or altered would be considered important from an historic standpoint.

In addition, the project is underlain by the Pleistocene age Palos Verdes Sand formation, which is potentially fossil-bearing. The EIR will include an evaluation to determine whether any significant fossil resources could be affected by the proposed project.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Potentially Significant Impact. The proposed project may have impacts that have been identified in the Initial Study as individually limited, but may be cumulatively considerable, depending on other current or probable future projects in the vicinity. The EIR will evaluate potential project-related cumulative impacts.

As discussed Section 3.4.3, the proposed project could contribute to cumulative air quality impacts within a region that is non-attainment for O_3, PM_{10}, and $PM_{2.5}$. The production of GHG related to project construction and operations could result in cumulative impacts that contribute to global climate change. Cumulative noise and traffic impacts could also occur during project construction. These impacts are potentially significant and would be discussed further in the EIR.

c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?

Potentially Significant Impact. As discussed in previous sections, environmental effects that would cause substantial adverse effects on human beings, either directly or indirectly, may occur from implementation of the proposed project. Further evaluation of potentially significant impacts will be conducted in the EIR relative to air quality (related to project operation and project construction); noise (related to project operation and project construction); and transportation/traffic (related to project construction).

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