

## **APPENDIX D**

### **Archaeological and Historical Survey of Scattergood Generating Station**



June, 2011

# SCATTERGOOD GENERATING STATION UNIT 3 REPOWERING PROJECT

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## Cultural Resource Survey Report City of Los Angeles, Los Angeles County, California

**PROJECT NUMBER:**

121680

**PROJECT CONTACT:**

GINI AUSTERMAN, M.A.

**EMAIL:**

gini.austerman@powereng.com

**PHONE:**

(714) 507-2761

**LEGAL DESCRIPTION:** T3S, R15W

**ACREAGE:** 56

**USGS QUADRANGLES:** VENICE

**KEY WORDS:** HISTORIC SITE, LADWP,  
GENERATION, SCATTERGOOD



**SCATTERGOOD GENERATING STATION UNIT 3 REPOWERING PROJECT  
CULTURAL RESOURCE SURVEY REPORT  
CITY OF LOS ANGELES,  
LOS ANGELES COUNTY, CALIFORNIA**

**PREPARED FOR:**

**LOS ANGELES DEPARTMENT OF WATER AND POWER  
LOS ANGELES, CALIFORNIA**

**PREPARED BY:**

**POWER ENGINEERS, INC.  
ANAHEIM, CALIFORNIA**

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## MANAGEMENT SUMMARY

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The Los Angeles Department of Water and Power (LADWP) is replacing 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 simple cycle configuration. The project is being undertaken to improve the reliability and efficiency of LADWP's in-basin power plants consistent with its Integrated Resource Plan and pursuant to Regional Clean Air Incentives Market (RECLAIM) program requirements. As lead agency, LADWP requested that POWER Engineers, Inc. (POWER) conduct a cultural resources inventory of the property and an evaluation of facilities affected by the proposed project.

The project area is located in the City and County of Los Angeles, California within an unsectioned portion of Township 3 South, Range 15 West and is on the 7.5' *Venice* U.S. Geological Survey (USGS) topographic quadrangle map.

The records search was conducted at the South Central Coastal Information Center and indicated that three cultural resource studies had been performed previously within the 56-acre project area and that two cultural resources have been documented within a one-mile radius of the project. POWER conducted a field survey of the entire SGS property on February 22, 2011.

One historical-period cultural resource was identified during the cultural resources inventory of the SGS property. This resource was recorded on California Department of Parks and Recreation (DPR) forms. It is recommended that the historical-era features within the SGS property, consisting of the original portion of the power plant and stack, and numerous storage tanks, do not meet the criteria for listing in the California Register of Historical Resources (CRHR) and therefore are not considered historical resources for the purposes of the California Environmental Quality Act (CEQA). For this reason, the proposed project would not have an impact on this resource.

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Appendix A: DPR 523 Form: Scattergood Generating Station

## 1.0 INTRODUCTION

This survey report has been prepared by POWER Engineers, Inc. (POWER) to summarize the results of literature review and cultural resource survey to identify cultural resources that could potentially be impacted by the proposed Scattergood Generating Station (SGS) Repowering Project. The proposed project is in Los Angeles County, California within the city of Los Angeles.

### 1.1 PROJECT OVERVIEW

The Los Angeles Department of Water and Power (LADWP) is replacing the capacity of SGS Unit 3 with natural gas-fired combustion turbines and heat recovery steam generator(s) operating in both combined and simple cycle configuration. 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.

The proposed new generators would use an independent air or water cooling system and, therefore, would not need to utilize the existing SGS once-through ocean water cooling system. Other aspects of the proposed project include the derating of the remaining existing operating units at SGS (Unit 1, Unit 2, or both units) by the necessary amount such that there would be no increase in the total new generation capacity of SGS. The project will include changes to the existing industrial wastewater treatment system as well as the existing switch yard. The implementation schedule for the SGS Unit 3 repowering now requires that the replacement units be on line by the end of 2015. The construction activities are listed in Table 1.

**TABLE 1. PROPOSED CONSTRUCTION ACTIVITIES**

Resource	Construction Activity
Feature 1- Unit 3	Units 1 and 2 will not be affected by the current construction project. After new generation is completed, Unit 3 will be decommissioned and demolished.
Feature 2- Fuel Oil Service Tank	Tank will be removed and the area will be cleared for new cooling units
Feature 3- Water Tanks	No construction activities will occur in this area; the water tanks will remain in use.
Feature 4- Storage Tanks	The four storage tanks will be removed and the area used for construction staging.

The purpose of conducting this survey was to identify whether historical resources are present that may be impacted by the project.



## **2.0 PROJECT DESCRIPTION**

### **2.1 LOCATION**

SGS is at 12700 Vista Del Mar in the City of Los Angeles (community of Playa Del Rey) (Figure 1). It is adjacent to the Pacific Ocean and approximately 1.5 miles south of Los Angeles International Airport (LAX). The facility is on approximately 56 acres that are 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. The site rises in elevation from west to east and contains several level terraces.

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 0.5 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 electrical generating plant, the NRG El Segundo Generating Station, is approximately 0.5 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.

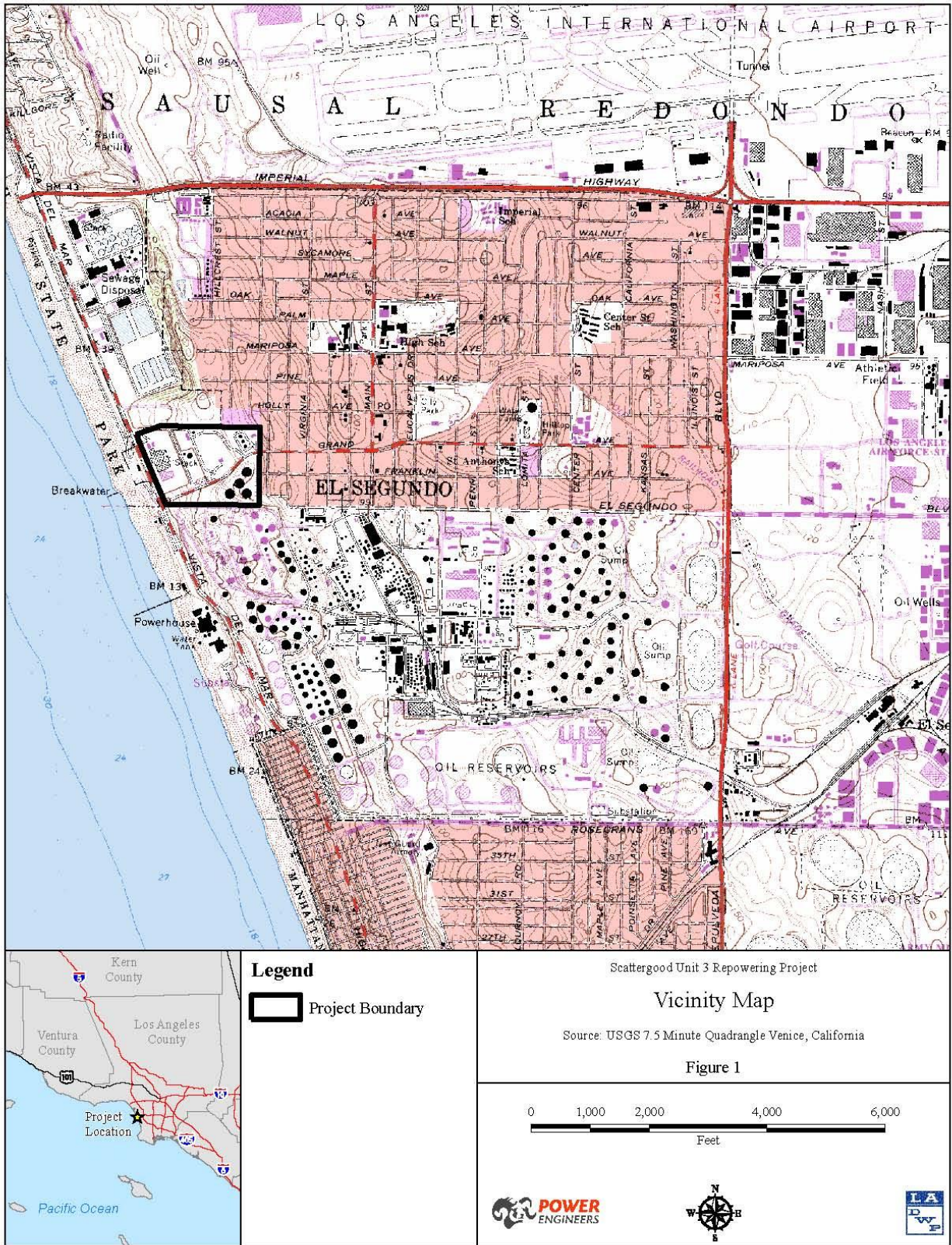


FIGURE 1. VICINITY MAP.

## **3.0 REGULATORY FRAMEWORK**

### **3.1 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA)**

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.

Under CEQA, a project is considered to have a significant effect on the environment if it causes a substantial adverse change in the significance of a historical resource or unique archaeological resource. *Substantial adverse change* means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of the resource would be materially impaired or diminished. Furthermore, it is recommended by CEQA that cultural resources be preserved in-situ whenever possible through avoidance of the resource. Whenever a historical resource or unique archaeological resource (Public Resources Code [PRC] 21083.2) cannot be avoided by project activities, effects shall be addressed and mitigated as outlined in PRC 15126.4 and 15331 of CEQA.

#### **3.1.1. Historical Resources**

According to CEQA, lead agencies are required to identify historical resources that may be affected by any undertaking involving state or county lands, funds, or permitting. Also, the significance of such resources that may be affected by the undertaking must be evaluated using the criteria for listing in the California Register of Historical Resources (CRHR) (PRC §5024.1, Title 14 CCR, Section 4852). Generally, a resource is considered by the lead agency to be historically significant if the resource has integrity and meets the criteria for listing in the CRHR. Resources already listed or determined eligible for the National Register of Historic Places (NRHP) and California Historic Landmarks (CHL) are by definition eligible for the CRHR. Historical resources included in resource inventories prepared according to California State Office of Historic Preservation (OHP) guidelines or designated under county or city historic landmark ordinances may be eligible if the designation occurred during the previous five years.

For a resource to be eligible for the CRHR, it must satisfy each of the following three standards:

- A property must be significant at the local, state or national level, under one or more of the following criteria:
  1. It is associated with events or patterns of events that have made a significant contribution to the broad patterns of the history and cultural heritage of California and the United States.
  2. It is associated with the lives of persons important to the nation or California's past.
  3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values.
  4. It has yielded, or may be likely to yield, information important to the prehistory or history of the State or the Nation;
- A resource must retain enough of its historic character or appearance to be recognizable as a historic property, and to convey the reasons for its significance; and
- It must be fifty years old or older (except for rare cases of structures of exceptional significance).

*Integrity* is defined as the authenticity of a historical resource's physical identity, evidenced by the survival of characteristics that existed during the resource's period of significance. CRHR regulations

specify that integrity is a quality that applies to historical resources in seven ways: location, design, setting, materials, workmanship, feeling, and association.

### **3.1.2. Unique Archaeological Resources**

Under CEQA, the lead agency must also determine whether a proposed project will have a significant effect on unique archaeological resources. PRC 21082.2(g) states:

“a ‘unique archaeological resource’ means an archaeological artifact, object, or site about which it can be clearly demonstrated that, without merely adding to the current body of knowledge, there is a high probability that it meets any of the following criteria:

1. Contains information needed to answer important scientific research questions and that there is demonstrable public interest in that information.
2. Has a special and particular quality such as being the oldest of its type or the best available example of its type.
3. Is directly associated with a scientifically recognized important prehistoric or historic event or person”

A non-unique archaeological resource does not meet these criteria and does not need to be given further consideration other than simple recording unless it happens to qualify as a historical resource.

### **3.1.3. Native American Human Remains**

CEQA also says (PRC 15064.4) that when an initial study identifies the existence of, or probable likelihood, of Native American human remains within the project, a lead agency will work with the appropriate Native Americans as identified by the Native American Heritage Commission (NAHC). A letter was sent to the NAHC April 29, 2011. As of June 1, 2011, a response had not been received.

## **4.0 ENVIRONMENTAL SETTING**

The study area is in Los Angeles County within the Los Angeles Basin. The natural topography of the study area is valley lowland intersected by rolling hills and surrounded by mountain ranges. Elevations range from 680 to 1,900 feet above mean sea level (AMSL). Most of the study area has been developed, and the only remaining large areas of native habitat occur along the Los Angeles and San Gabriel Rivers and in the San Gabriel Mountains.

### **4.1 CLIMATE**

The climate of the Los Angeles Basin is classified as Mediterranean, with hot, dry summers and cool, wet winters. Average annual precipitation ranges from 12 inches per year in the coastal plain to 40 inches per year in the San Gabriel Mountains to the north (WRCC 2009). Within the inland alluvial valleys in the study area, such as that of the Los Angeles and San Gabriel Rivers, precipitation averages 18 inches per year with most of the precipitation occurring between November and March. High surface water flows occur in the spring and low flows occur in the summer. Winter and spring floods commonly result from storms during wet years. Similarly, during the dry season, infrequent summer storms can cause floods in local streams.

Over the last ten million years, climate in the Los Angeles region has fluctuated between cold and warm, wet and dry. During the Pleistocene, prehistoric animal species known to have lived in the region include the American lion, saber-toothed cat, prehistoric bison and mammoth. Portions of the project area are underlain by Pleistocene age alluvial soils (Bryant and Hart 2007; Dibblee and Minch 2004a). The Holocene marks the transition from the last ice age.

Alluvium, colluvium, and slope-wash deposits of late Pleistocene and Holocene are found within drainage features, including valleys and streams. The alluvial deposits grade indiscernibly with colluvium and slope-wash deposits flanking the lower slopes next to the valleys. Generally, the alluvial deposits within the project area are Pleistocene fluvial or fan deposits and Holocene fluvial deposits in the active San Gabriel River flood plain.

### **4.2 NATURAL SETTING**

The following information was provided by Ninyo and Moore (2009).

The entire study area is located within the Los Angeles Basin, which is bounded on the north by the Transverse Ranges Geomorphic Province of California (Norris and Webb 1990). The Los Angeles Basin has been divided into four blocks, which are generally separated by prominent fault systems: the northwestern block, the southwestern block, the central block, and the northeastern block. The project is located within the southeastern block, which is bounded on the east by the onshore segment of the Newport-Inglewood fault zone.

The southwestern block includes anticlinal and synclinal structural features within the basement rocks that are overlain by younger sedimentary rocks and alluvium. The Los Angeles Basin is transverse by several major faults. The Palos Verdes and Newport-Inglewood fault zones are major active faults within the southwestern block of the Los Angeles Basin.

The Pacific Ocean is located within 0.2 mile to the southwest of the project. Vegetation within the project area is limited to ornamental landscape vegetation, including ice plant and mature eucalyptus trees.

The project area supports wildlife common to industrial and residential areas such as raccoon (*Procyon lotor*), skunk, opossum (*Didelphis virginiana*), ground squirrel and kangaroo rat. Common birds are brown pelicans, gulls, cormorants, terns, and various shore birds hawks, gulls, herons, swallows, finches and sparrows. Reptiles and amphibians include common and western aquatic garter snakes (*Thamnophis couchii*), northern and southern alligator lizards (*Elgaria coerulea* and *E. multicarinata*), and several species of salamanders and frogs.

## **5.0 CULTURAL SETTING**

### **5.1 PREHISTORIC CONTEXT**

Research in the area suggests that, as typical of most Southern California indigenous populations, the local hunter/gatherer groups adapted to the environment by utilizing the natural resources available on a seasonal basis. Around 2000 BP (before present), the population growth increased, which led to a gradual change toward a more sedentary lifestyle in semi-permanent villages with smaller associated campsites (Moratto 1984). As populations increased, they began to utilize a wider range of environments and natural resources. Their social organization developed to include more complex mortuary practices and social hierarchy, craft specialization and regional trade (Moratto 1984; Jones and Raab 2004).

The project area is located in the Los Angeles coastal basin. Research indicates prehistoric occupation in this general Southern California region 12,000 years prior to the Spanish expeditions (Bean and Smith 1978a; Kroeber 1925; Moratto 1984). Southern California regional chronology is defined by major stages of cultural change; numerous attempts have been made to apply a specific chronology by Wallace (1955) and Warren (1968). Four general cultural periods, or horizons, are used to describe prehistoric occupation in Southern California: the Early Hunter, Milling Stone, Intermediate, and Late Periods (Wallace 1955).

Early Hunter Period (pre-8000 BP) sites are characterized by large projectile points used by small nomadic groups to hunt large game animals. The absence of grinding tools suggests that the local inhabitants did not utilize plant foods to a large degree, but rather followed the seasonal migration of Pleistocene megafauna (Altschul et al. 2005).

Milling Stone Period (8000 BP to 3500 BP) sites are characterized by ground stone artifacts that represent a shift from primarily hunting large animals towards wider coastal faunal and plant resource exploitation. Tools such as manos and metates and core/cobble tools were used to process seeds and other plant resources. Subsistence strategies still included hunting of migratory game as well as other mammals, sea birds, and fish. Shellfish and freshwater crustaceans were also collected (Altschul et al. 2005, 2007).

The Intermediate Period (3500 BP to 1000 BP) is considered a transitional period during which the mortar and pestle and the projectile point became the dominant tools for obtaining and processing food. Coastal populations increased the emphasis on marine resources, practicing both shoreline and deep sea fishing (Altschul et al. 2005, 2007).

The Late Period (1000 BP to 300 BP) lasts until the Spanish arrived in the area and began the building of the mission system in the late 1770s AD (*Anno Domini*). Tribes increased their regional trading, which resulted in incorporation of ceramics and basketry first developed elsewhere. The local populations increased in size as well as in social complexity. The use of the bow and arrow is indicated by the presence of small projectile points during this period (Altschul et al. 2005, 2007).

## 5.2 ETHNOGRAPHY

The project area is within the ethnographic boundaries of the Gabrieliño tribe. It is believed that this group of Shoshonean-speaking people migrated from the Great Basin and assimilated into the local population (Kroeber 1925).

### 5.2.1. Gabrieliño

The Gabrieliño (or Tongva) were among the largest, wealthiest and most powerful aboriginal groups in Southern California. Of Shoshonean lineage, their tribal territory was centered in the Los Angeles Basin, but their influence extended as far north as the San Joaquin Valley. The territory included the Los Angeles, San Gabriel, and Santa Ana watersheds; several smaller tributary streams in the Santa Monica and Santa Ana mountains; the Los Angeles Basin; and nearby coastal areas as well as the Channel Islands. The Gabrieliño language is derived from the Takic origins (Altschul et al. 2005, 2007).

Primary villages were occupied year-round and smaller secondary gathering camps were occupied seasonally by small family groups. Throughout Gabrieliño territory, there may have been 50 to 100 villages occupied at any one time, with the villages containing 50 to 200 people each (McCawley 1996).

Different groups of Gabrieliño adopted different lifestyles depending on local environmental conditions, although all were based on gathering plant foods, hunting, and fishing. Villages were politically autonomous, each with its own leader. It was not until 1769 that the Spanish attempted to colonize Gabrieliño territory. As a result of disease and forced re-settlement, the population had declined dramatically by 1900 (Bean and Smith 1978). Several Gabrieliño villages (CA-LAN-62, CA-LAN-63 and CA-LAN-64) have been recorded in the Playa Vista area four miles northeast of the project (Altschul et al. 2005, 2007).

## 5.3 HISTORICAL CONTEXT

Three historical periods are generally recognized in California: the Spanish exploration and settlement of California during the 18th and 19th centuries (the California Missions), the brief tenure of Mexico (Mexican Independence), and the subsequent American takeover and annexation of California (United States' Control of California).

Euro-American occupation began with the establishment of the California missions by the Spanish, continuing with the Spanish and American colonization and settlement, agricultural advances, and urbanization after World War I and World War II.

### 5.3.1. The California Missions

The colonization of Alta California was tied to the Spanish settlements along the Gulf of California. The Spanish missionization and settlement of California began in 1768 when King Carlos III saw other European empires as threats to Spain's claim on Alta California (Lightfoot 2005). The King ordered Visitador-General José de Gávez to organize soldiers and missionaries from Mexico to colonize the distant territory. On May 13, 1769 Commander Don Gaspar de Portolá, Sergeant José Francisco de Ortega, and Fray Junípero Serra, who was a Franciscan missionary, departed with soldiers and supplies for San Diego from Velicatá, Baja California. Upon arriving in San Diego, Fray Serra founded California's first mission San Diego de Alcalá (Toupal et al. 2007).

In the late 18th century, the Spanish mission fathers of San Gabriel (Los Angeles County), San Juan Capistrano (Orange County), and San Luis Rey (San Diego) began colonizing the land and gradually used the interior valley (in what is now Western Riverside County) for raising grain and cattle. During this

period, Spain claimed all of California and Mexico. In 1822, Mexico successfully revolted against Spain, and California came under Mexican jurisdiction. The missions and their lands were secularized beginning in 1834 and the land was transferred as “grants” to Californians who were citizens of Mexico.

The Mission San Gabriel was founded in 1771; the local indigenous population, the Tongva group, was disrupted by the missionization process. This process “converted” the native inhabitants, who were brought into the mission and subjected to its religious and occupational system. Within a short period of time, the native Tongva language and culture all but vanished. The native population was also severely impacted by the introduction of European disease, poor nutrition and excessive manual labor. The tribal population was decimated (Castillo 1998). The mission lands surrounding what is now the project area were devoted to cattle grazing, ranching and small-scale farming.

### **5.3.2. Mexican Independence**

Early settlement was associated with the establishment of the missions along the Pacific Coast, but began to increase as the missions went through the process of secularization, which was not complete when Mexico won its independence from Spain in 1821. The new government wanted to limit the power of the Catholic Church, so it pursued dual policies of secularization and emancipation of native groups. Between 1822 and 1829, the new government also abolished social status based on racial or national background, and granted citizenship to native people (Haas 1995; Weber 1982). The government’s secularization efforts eventually succeeded in breaking the Church’s power, but land was not returned to the Native Americans because much of what could be used for livestock and agriculture had been granted to California and Anglo rancheros.

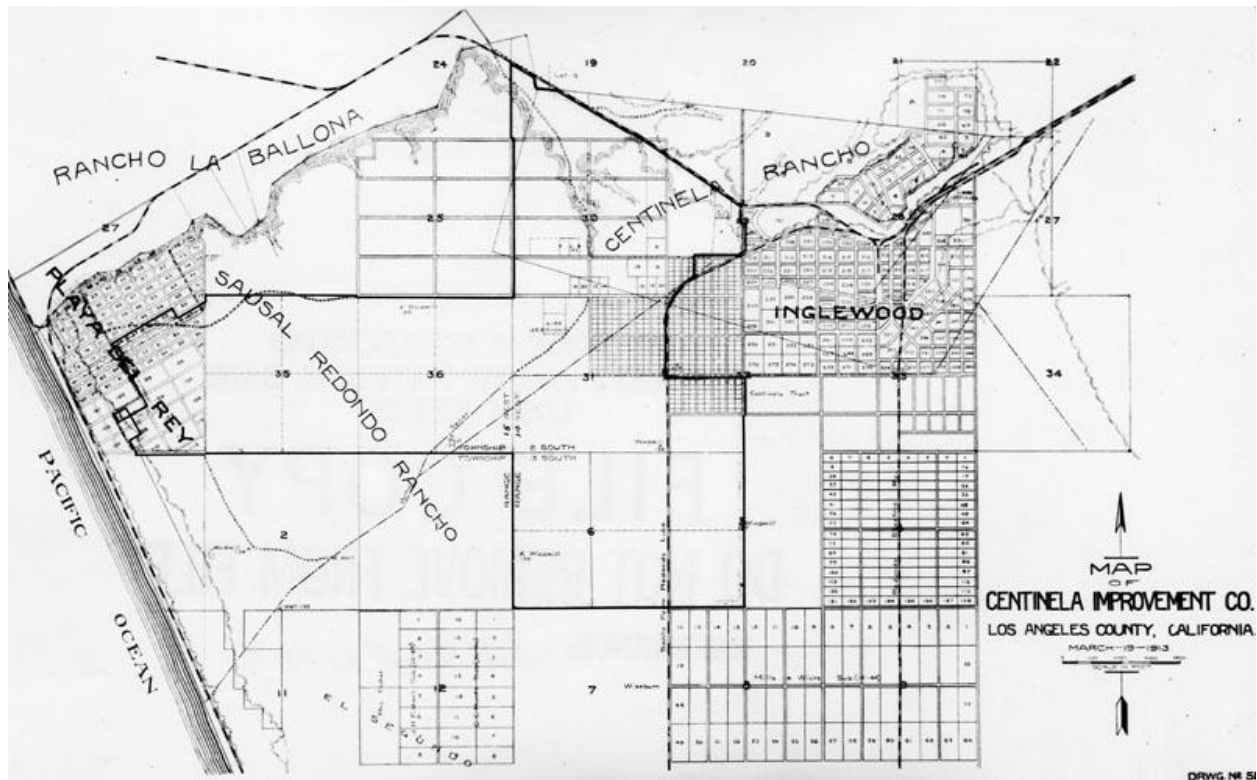
Another change that came with the Mexican government was the removal of restrictions on trade with other countries. This change also affected trade along the Old Spanish Trail, which connected Los Angeles with Santa Fe, New Mexico. Not only did trade along this route increase, but potential settlers found a new option. As a result, immigration to California from New Mexico began in the early 1840s. The first settlers to come from New Mexico arrived in 1842 and were recruited specifically for their fighting skills, as the California rancheros needed help protecting their livestock.

In 1821, Mexico gained independence from Spain. From 1821 until the end of the Mexican-American war in 1848, Southern California remained part of Mexico. The missions were secularized in the 1830s and the lands were granted the loyal Mexican soldiers as part of the Secularization Act. Large portions of Mission lands were granted between 1831 and 1846; the rancho livestock were drawn from mission herds (Caughey 1961). Cattle were raised primarily for tallow and hides. The Mission Indians were now released from the Missions, but many continued to work on the ranchos and farms.

What is now the SGS Unit 3 project area became part of the “Rancho Sausal Redondo” (“*Ranch of the Round Clump of Willows*”) granted to Antonio Ygnacio Avila in 1837. The Rancho Sausal was nearly 25,000 acres that extended from as far west as what is now Playa del Rey, as far east as Inglewood, and as far south as Redondo Beach (Figure 2). The land consisted of grazing lands, with portions later planted in wheat and barley on which cattle and sheep grazed (City of El Segundo 2011).

At Avila’s death, the rancho was sold to Robert Burnett, owner of the neighboring Rancho Centinela, who continued to use the land for cattle and sheep grazing and later for dry farming. A sharp decline in cattle prices in the 1860s, floods and droughts, particularly the drought of 1875-1876, led to a decline of most of the livestock herds. Looking for other means of income, ranchers in the vicinity turned to dry farming. Over 22,000 acres of the rancho were under cultivation by the end of the 1870s (Keilbasa 2011).





**FIGURE 2. 1913 MAP OF RANCHOS SAUSAL REDONDO AND CENTINELA.**

Courtesy of The Bancroft Library, University of California, Berkeley; <http://bancroft.berkeley.edu/>

### **5.3.3. United States' Control of California**

In 1849, the Treaty of Guadalupe Hidalgo was signed between Mexico and the United States, and the region that would become the State of California came under the jurisdiction of the United States. The transition from Mexican rule to American was not without conflict. Battles were fought near the areas surrounding Los Angeles. The Battle of the San Gabriel River and the Battle of La Mesa were both won by American troops. Los Angeles was occupied by the Americans on January 10, 1847 (Cleland 1926). The discovery of gold created massive population and economic growth throughout the state of California, which was admitted to the union in 1850.

Rancho Centinela changed hands several times in the 1850s and '60s. In 1873, Daniel Freeman had amassed a fortune by growing barley, olives, lemons, limes and almonds. With the Americans' arrival, the demand for water and land increased. With the Land Boom of the 1880s, the large ranchos of Los Angeles County were broken up, and the new landowners were less tolerant of Indian people. Freeman sold 11,000 acres of his prime orchard land to a land development company who sold parcels of 20-, 40-, 80-, and 160-acre plots. The parcels were farmed and grazed more intensively, further reducing the land and resources that provided so much of the Native American food supply. The California natives also found employment less of an option, especially at skilled jobs, as these were taken by the newcomers (Dutschke 1988). In 1887, the California Central Railway laid tracks to Redondo Beach, and eventually the small parcels became the cities of Inglewood, El Segundo, Redondo, and Playa Del Rey (Faris 1988).

### **5.3.4. Los Angeles County**

The County of Los Angeles was established on February 18, 1850, several months before the state was admitted to the Union. The city and the county are geographically, culturally, and economically

interwoven. Los Angeles is the heart of Southern California, beginning as a “large village” at the turn of the 20<sup>th</sup> century. The mild Mediterranean climate and abundance of recreational areas drew people from around the country. Although the cattle industry had failed by the late 1860s, the rancho lands continued to grow crops and raise dairy cattle. By the mid-20<sup>th</sup> century, the Los Angeles area was leading the country in agricultural productivity.

In 1860, the Los Angeles Water company completed the first water system within the city boundary, utilizing the Los Angeles River. In 1902, the City formally took ownership of the first municipal water works system. This water supply was adequate for the population of the city at that time barring a drought or dry season. By 1870, Los Angeles had grown to a population of just over 5,000. By the turn of the century, the city had grown to over 100,000 residents who relied on the Los Angeles River system for their water needs. The development of the public utilities for the growing city was due to two men, William Mulholland and Ezra Scattergood. Mulholland was the first superintendant and chief engineer for the new municipal Water Department; Scattergood was responsible for bringing electrical power to the area.

Discovered by Edward Doheny in 1892, oil was drilled at a furious rate and soon Los Angeles became one of the world’s major petroleum fields. Industrialization thrived in the first half of the century. In 1911, representatives from the Standard Oil Company surveyed and purchased 840 acres of cheap undeveloped land adjacent to the seashore for their next oil refinery. The refinery opened for business on November 27, 1911(City of El Segundo 2011).



**FIGURE 3. EL SEGUNDO OIL REFINERY, 1920.**

Courtesy Historical Photo Collection of the Department of Water and Power, City of Los Angeles  
<http://www.lapl.org/resources/en/dwp.html>

The site was dubbed “*El Segundo*” (Spanish for “the second one”) because the site was to be Standard Oil’s second oil refinery in California. The Point Richmond refinery was already christened as “*El Primero*” (City of El Segundo 2011).

The city remained a one-industry town until the 1920s, when Mine’s Field, a landing strip used by early barnstormers, was chosen as the site for the new Los Angeles Municipal Airport. Then, in the mid-1950s, Southern California Edison purchased a 43-acre site for a major electrical generating station (City of El Segundo 2011).

World War II changed the face of Los Angeles, as the aircraft and aerospace industry became a major contributor to the economy. The federal government funded plant expansion as well as research and development. Los Angeles became a center of the military-industrial complex. Servicemen and their families became a large element of the post-war population surge, and the construction industry peaked in the decade following the war. Commercial and industrial facilities and the local infrastructure grew rapidly to support the expanding population. At that time, the population density around the metropolitan area varied greatly, as low as one person per square mile in mountainous areas and as high as 50,000 per square mile near downtown Los Angeles.

The addition of the Los Angeles International Airport, which officially opened in 1930, had a major role in turning El Segundo into an aerospace center. The likes of Douglas Aircraft, Hughes Aircraft, Northrop and North American Aviation (Rockwell) all located in El Segundo during the 1940s and 1950s. Most of these aircraft-related companies would eventually transition into the aerospace/defense industry. In 1960, the creation of the Aerospace Corporation and Los Angeles Air Force Base gave El Segundo the esteemed title of “The Aerospace Capital of the World” (City of El Segundo 2011).

Today, the city encompasses over five square miles, spanning from the Los Angeles International Airport on the north, to the Chevron Refinery on the south, to the Pacific Ocean on the west and Aviation Boulevard on the east (City of El Segundo 2011).

### **Los Angeles Department of Water and Power**

The history of the Department of Water and Power is intricately linked with that of Ezra F. Scattergood. Scattergood became Mulholland’s counterpart for the Power System, and was the driving spirit in the development of the municipal electric system (USC 2011).



**FIGURE 4. EZRA SCATTERGOOD, 1932**

Courtesy Historical Photo Collection of the Department of Water and Power, City of Los Angeles  
<http://www.lapl.org/resources/en/dwp.html>

In 1902, the Department of Water and Power was established in order to provide water to the city of Los Angeles. Scattergood developed hydroelectric power for the construction of the Los Angeles Owens River Aqueduct, placing power plants at the end of a tunnel under Elizabeth Lake. The electric revenues from the plants helped pay for the tunnel and reduced construction costs of the aqueduct (LADWP b). This was the first time electric energy had been used in such a construction project (USC 2011).

The first power pole in Los Angeles was built in 1916. After San Francisquito Power Plant 1, north of Los Angeles, was placed in service in 1917, energy was delivered over a new transmission line. This was the beginning of the distribution of municipally generated electricity in Los Angeles. The City Power System, which began in 1917, exists under and by virtue of the Charter of the City of Los Angeles enacted in 1925 (USC 2011).

The success of the plants enabled the Bureau of Los Angeles Aqueduct Power to buy out most of the private power companies in the city. The largest acquisition came in 1922, when the Bureau purchased Southern California Edison's distribution system in Los Angeles. By 1939, the City Power System had become the sole general distributor of electric energy in Los Angeles (USC 2011).

During the next few years, Los Angeles exploded into a booming metropolis, and under Scattergood's leadership, the LADWP kept pace with rapid changes by constructing new facilities and seeking new energy supplies. Meanwhile, Scattergood continued to push for low-cost power to support industrial

expansion. Low rates became the backbone of Los Angeles' industrial development and spurred even more growth in the city.

When Scattergood died in 1947, he left a rich legacy. Under his direction, the Power System grew from an organization with one employee into the largest municipal utility of its kind in the world.

### **Scattergood Generating Station**

In Southern California, the LADWP constructed its first two steam stations in Seal Beach in 1925 and 1928, both of which were reliable and profitable (JRP 2006). After WWII steam generation technologies and efficiencies were improved and steam became the primary source of energy, steam power plants began being constructed along the Los Angeles County coastline, in addition to inland facilities. These steam plants provided power by gas and oil-fired steam.

Post-war population growth in the Los Angeles area increased rapidly, fostering demand for housing and commercial development. Suburban communities grew also, and the need to provide utilities to the burgeoning population placed demands on the LADWP for increased facilities. Steam technology was cheaper and more abundant than the alternative hydroelectric generation. Throughout California, LADWP and other providers built facilities similar in design that were located on affordable land close to fuel and water supplies and load centers. The architectural design of the facilities, known as “ ‘outdoors’ turbo-generator units,” used minimal structural material, allowing the facilities to be economically upgraded and expanded to meet the population and market growth (JPR 2006).

The Scattergood Steam Plant, named in honor of Ezra Scattergood, is on a 57-acre site facing the Pacific Ocean, just south of Playa Del Rey. The property was acquired in 1954 and was located between the Los Angeles Hyperion sewage plant and the Standard Oil Company's El Segundo refinery. At the time, the property was an industrial area that was largely unimproved. Included in the property was the tideland frontage, which provided access to the large volume of water that was needed for cooling purposes in the operation of a steam generation plant (Intake 1954).

The SGS plant is one of the LADWP's largest electrical power generating stations. Two of the station's three generating units were completed in 1958 and 1959 and have a net generating capability of approximately 170,000 kilowatts each. The third unit, completed in 1974, has a net capability of 309,000 kilowatts (LADWP 1977).

The Scattergood plant was designed and constructed in a semi-enclosed structure, using the most advanced technology available at the time. The plant was continually updated as new technology became available; the station was recognized for its high efficiency rating.

All three units are controlled and monitored from two centralized rooms. Fuel oil is burned to produce steam, which drives the turbine generators. The fuel type used for generation was modified to natural gas during the 1970s. Natural gas is supplemented by digester gas from the neighboring Hyperion Treatment Plant to fuel the steam turbines. Sea water for cooling is pumped and returned to the Pacific Ocean, while the water used to produce the steam is cooled and reheated in a separate and continuous cycle (LADWP 1977). Both overhead and underground sections of the first circuit of transmission lines were constructed to connect the generating plant to Receiving Station “D” at Venice Boulevard to the northeast. Eventually, the Scattergood plant was connected to additional receiving stations to deliver large amounts of energy to help meet the constantly growing need for electricity in Los Angeles (Intake 1959).



**FIGURE 5. SCATTERGOOD POWER PLANT, 1968**

Courtesy Historical Photo Collection of the Department of Water and Power, City of Los Angeles  
<http://www.lapl.org/resources/en/dwp.html>

Unit 1 began producing power for commercial use on December 7, 1958, and Unit 2 was synchronized and began providing power on July 1 of the following year. The steam plant was officially dedicated on September 10, 1959. This event also marked the 50<sup>th</sup> anniversary of the establishment of the Bureau of Los Angeles Aqueduct Power in 1909; Ezra Scattergood was chief electrical engineer for the Bureau at that time.

## **6.0 INVENTORY METHODS**

### **6.1 HISTORIC BACKGROUND AND RECORDS SEARCH**

POWER conducted a records search at the Eastern Information Center (EIC), housed at California State University, Fullerton. California Historical Resources Information System (CHRIS) records were reviewed to determine the location of previously recorded cultural resources in the study area. The records search provided locations and other data on previously recorded archaeological and architectural resources and the locations of prior cultural resource surveys. Also consulted were the NRHP, Archaeological Determinations of Eligibility (ADOE) provided by the EIC, CRHR, California Historic Landmarks (CHL) lists, and the California Points of Historic Interest (CPHI).

### **6.2 FIELD METHODS**

POWER archaeologists conducted a pedestrian survey of the SGS project area. The entire property was inspected; however, the majority of the generating plant property is previously developed or paved over, so systematic transects were not used. The facility is situated on a set of terraces, the slopes of which are covered with dense vegetation. The ground surface was visually examined for evidence of prehistoric or historic archaeological materials and historical structures.

## 7.0 INVENTORY RESULTS

### 7.1 RESULTS OF BACKGROUND RESEARCH AND RECORD SEARCH

As a result of the records search and archival research, two previously recorded sites were identified within a one-mile radius of the project (Table 2). One site is CA-LAN-2345, a prehistoric artifact scatter, located 0.75 mile to the northwest, and the other is 19-187885, the City of El Segundo water storage tank, which is 0.75 mile to the east of the project. No cultural resources were previously recorded within the project boundaries.

**TABLE 2. PREVIOUSLY IDENTIFIED CULTURAL RESOURCES LOCATED WITHIN ONE MILE OF THE PROJECT AREA.**

Primary # / Trinomial	Prehistoric/Historic	Site Type	Previous Recommendations or Determinations for National Register or California Register Eligibility
CA-LAN-2345	Prehistoric	Artifact Scatter	Unevaluated
19-187885	Historic	Water tank	Not eligible

The background research also indicated that 23 previous cultural resource studies have been conducted within one mile of the project, three of which were located within the project area (LA-04907, -06239 and -06240). The previous studies are listed below in Table 3.

**TABLE 3. CULTURAL RESOURCE STUDIES WITHIN ONE MILE OF THE PROJECT AREA.**

Report Number	Author	Year	Title
LA-00096	Leonard, Nelson	N.d.	<i>Archaeological Study of LAX</i>
LA-00125	No author	N.d.	<i>Hyperion Plant, hand-written field notes</i>
LA-00309	Wlordarski, R.	1987	<i>Archaeological Reconnaissance Report for Areas Relating to the North Outfall Replacement Sewer Project, Los Angeles County, California</i>
LA-01625	Woodward, Jim	1987	<i>Archaeological Survey of Manhattan State Beach, Los Angeles County, California</i>
LA-02904	Stickel, Gary	1993	<i>A Phase I Cultural Resources Literature Search for the West Basin Water Reclamation Project</i>
LA-01265/LA-2950	Reed, L.W.	1992	<i>Consolidated Report: Cultural resources Studies for the Proposed Pacific Pipeline Project</i>
LA-03673	Frank, Myra	1987	<i>Historic Property Survey Report, North Outfall Relief Sewer Project</i>
LA-04051	D'Altroy, T.N.	1975	<i>Evaluation of the Potential Impact on Archaeological Resources of the Proposed Hyperion Treatment Plant- Interim Sludge Processing and Disposal System</i>
LA-04647	Duke, Curt	1999	<i>Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 902-04 in the County of Los Angeles, California</i>
LA-04860	Lapin, Philippe	2000	<i>Cultural Resource Assessment for the Pacific Bell Mobile Services Facility LA 942-02, in the County of Los Angeles, California</i>
LA-04861	Duke, Curt	2000	<i>Cultural Resource Assessment for Pacific Bell Mobile Services Facility LA 483-03, in the County of Los Angeles, California</i>
LA-04907*	Maki, Mary	2000	<i>Phase I Archaeological Investigation of Limited Areas Within the Los Angeles Department of Water and Power's Harbor, Scattergood and Valley Generating Stations, Los Angeles County, California</i>
LA-05708	McKenna et al.	2002	<i>Cultural Resource Assessment/Evaluation for NEXTEL Communications Site CA-6518-D, Los Angeles, Los Angeles County, California</i>
LA-06239*	Wesson, A., Bass, B., and B. Hatoff	2000	<i>El Segundo Power Redevelopment Project, Cultural Resources, Appendix J</i>



Report Number	Author	Year	Title
LA-06240*	JRP Historical Consulting Services	2000	<i>El Segundo Power Redevelopment Project Historical Resources, Appendix K</i>
LA-06243	Duke, Curt	2002	<i>Cultural Resource Assessment AT&amp;T Wireless Services, Facility 05195C, Los Angeles, California</i>
LA-07708	Michael Brandman Associates	2004	<i>Direct and Indirect APE Historic Architectural Assessments for the Sprint Telecommunications Facility Candidate LA60XC361E (El Segundo Water Tank) 350 Main Street, El Segundo, Los Angeles County, California</i>
LA-07711	Michael Brandman Associates	2004	<i>Record Search Results and Site Visit for Sprint Telecommunications Facility Candidate LA60XC361E (El Segundo Water Tank) 350 Main Street, El Segundo, Los Angeles County, California</i>
LA-07722	Maki, Mary	2005	<i>Records Search Results for the Chevron El Segundo Refinery, El Segundo, Los Angeles County, California</i>
LA-07851	Getchell, B., and J. E. Atwood	2006	<i>Archaeological and Historical Evaluations for the Proposed Airport Surveillance Detection Equipment, Model 3X (ASDE-3X), to Serve Los Angeles International Airport (LAX), Los Angeles, Los Angeles County, California</i>
LA-09925	Richards, Michael	2009	<i>A Report of the Monitoring During Trench Excavation, Light Grading, and Planting for the Imperial Highway Stormwater Best Management Practices Project, near the Los Angeles International Airport (LAX) in the City of Los Angeles, Los Angeles County, California</i>
LA-10622	White, Laura	2009	<i>Cultural Resources Records Search and Site Visit Results for the T-Mobile USA Facility LA33654C Richmond Elementary), City of El Segundo, Los Angeles County, California</i>
?	Romani, John	1976F	<i>Archaeological Impact Statement Development of the Hyperion Treatment Plant Secondary Treatment Facility, W.O. 31225, Located at 12000 Vista Del Mar, Playa Del Rey</i>

\* study located within the project boundary

## 7.2 RESULTS OF SURVEY

POWER archaeologists Gini Austerman, M.A., and Johanna Marty, B.A. conducted an intensive archaeological pedestrian survey of the SGS property on February 22, 2011. During the survey, it was determined that all portions of the project area have been highly disturbed as a result of the original construction. Previous archaeological survey found no resources in the surveyed areas of the current project and few resources have been found in the surrounding area. However, the age of the oldest structures date from the late 1950s, which indicates a potential for the presence of historic resources as defined by CEQA. The current survey primarily addresses the archaeological and historic resources; the project will not affect the historic-era buildings and, therefore, they were minimally documented. No excavation of any sort was performed during the survey, but areas of exposed soil and natural soil profiles (along terraces and sand dunes) were examined for cultural stratigraphy. Due to surface disturbance from past and modern use and dense grass in many areas, ground visibility was poor, restricted to approximately 10 percent.

Four 1959-era buildings and associated features within the property were noted and documented as LADWP Site 1. These features are the original structure of the power plant Units 1 and 2 (Feature 1), a large fuel oil service tank in the center of the property (Feature 2), three water storage tanks at the eastern boundary of the project (Feature 3), and four large storage tanks in the southeast corner of the property across Grand Avenue (Feature 4). Two smaller structures were noted on the *Venice* 7.5 minute topographic quadrangle map, 1964 (p.r. 1981), but were not located during the field survey.

### **7.2.1. Feature 1 – Steam Generating Plant**

Feature 1 consists of the original Scattergood Steam Plant, constructed in 1958. To clear the site, a total of 3.5 million cubic feet of sand was removed and relocated to nearby beaches. Construction of this plant, named for E. F. Scattergood, known by Los Angeles as “the father of municipal power,” was part of a long-range program of constructing electrical facilities to address the growing need for power in the City (Intake 1956).



**FIGURE 6. BULLDOZERS REMOVING SAND IN PREPARATION OF SCATTERGOOD PLANT CONSTRUCTION, CA. 1958.**

The main building for the steam plant is constructed with a steel framework that was 400 feet long by 257 feet wide with a height of over 100 feet. The first two generating units, Units 1 and 2, including turbine-generators, boilers, condensers and other related equipment, each had a capacity of 156, 000 kilowatts. They were placed into operation in 1958 and 1959, respectively (Intake 1957). Unit 3 was constructed and placed into operation in 1974 (Intake 1969).

Units 1 and 2 are located on the lowest terrace, adjacent to the Vista Del Mar, and they utilize a common exhaust stack. Cooling water, used to convert exhaust steam, is drawn from the ocean through tunnels and discharged back again, circulating a total of over five billion gallons per day. After the steam from the boilers has turned the turbines, which in turn drive the generators, it passes through condensers and is converted back into water that can be re-circulated through the boilers (Intake 1959:3).

Fuel oil, stored in the tank farm on the property (Feature 4), was used for the boilers. When the steam plant was completed in 1958, power was delivered from the steam plant to the power system through two 138 kilovolt (kV) circuits extending from the plant.



**FIGURE 7. SCATTERGOOD CONSTRUCTION IN PROCESS, CA. 1958.**

Operation of the original generating unit was handled from a control room equipped with the most advanced remote control devices of the day. 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 (Intake January 1959).



**FIGURE 8. OVERVIEW OF FEATURE 1 POWER PLANT AND STACK.**

The electrical energy generated at the site is sent to a switchyard located on the upper (eastern) portion of the site. 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.

POWER archaeologists surveyed this area in February, 2011 and noted the entire area surrounding the steam plant has been disturbed by the original construction as well as the subsequent addition of Unit 3. The ground surface is paved with asphalt; the terraces are covered with landscape vegetation including ice plant. The ground visibility was zero percent. No evidence of prehistoric cultural material was noted, nor is it likely to exist, given the amount of disturbance.

The original building was in good structural condition and is currently in use. In the early 1970s, Unit 3 was added onto the original power plant structure. Additional pipelines have been incorporated into the power plant machinery and systems have been updated, resulting in modifications to the original structure. Additional power structures have been added to the overall site, including towers and pipelines that are located throughout the property. The site is at its original location, but the 1958-59 plant has been substantially altered and, therefore, its structural integrity has diminished.

### **7.2.2. Feature 2 – Service Tank**

Originally built in 1958, this tank is located on a terrace above the steam plant in the center of the property approximately 300 feet to the northeast of Units 1 and 2. The service tank is 100 feet in diameter, and was used to contain fuel for the steam generator boilers. The use of fuel oil has been replaced by natural gas, which is supplied by continuous feed from a dedicated pipeline that enters the SGS property from the south via Grand Avenue.

POWER surveyed the area surrounding the tank and found it to be disturbed by previous construction; the ground surface is paved by asphalt. The terrace is covered in landscape vegetation including ice plant; the ground visibility is zero. No surface artifacts were noted. The area north of the tank is currently being used for storage and disposal of a variety of material including carpet, out-of-date machinery, industrial refuse, and construction material.



**FIGURE 9. FEATURE 2, SERVICE TANK**

### **7.2.3. Feature 3 – Water Tanks**

This feature consists of three metal water tanks, ca. 1958, located in the extreme northeastern portion of the project area on the upper-most terrace. Two are raw water tanks, measuring approximately 75 feet in diameter, and the third is a condensate water tank, approximately 90 feet in diameter. These tanks are not affected by the repowering project; they are not being taken out of service and will remain in use.



**FIGURE 10. FEATURE 3, WATER TANKS**

#### **7.2.4. Feature 4 – Fuel Oil Storage Tanks**

On the southeastern portion of the SGS property, across Grand Avenue from the main generator units (Feature 1), there are four large fuel oil storage tanks. Originally constructed in 1958, 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. These tanks are constructed of metal; three of the tanks have the capacity of about 175,000 barrels and the fourth has a capacity of about 200,000 barrels. The tanks are currently not in use and all four tanks are planned to be removed. This area will be used for construction staging during the proposed project.

This area has been disturbed by the previous construction, and the likelihood of locating prehistoric or historic cultural material is low. Survey of the surface and bank of the nearby slopes did not reveal any prehistoric or historical-period artifacts or features.



**FIGURE 11. FEATURE 4, FUEL OIL TANKS.**

## 8.0 EVALUATION

The Scattergood Steam Generation Station does not appear to meet the criteria for listing on the CRHR. The site is exceptional neither in the context of the development of the LADWP, nor as an example of post-war steam power generation.

The Scattergood SGS is a component within the LADWP system of power generation and delivery; this property does not appear to represent a significant property within LADWP or the broader context of settlement in Southern California during the post-WWII years. Many power plants were constructed in response to increased population in the area, and these plants contributed to the local economy. However, within this context, the SGS does not exhibit a significant contribution, and therefore does not qualify under Criterion 1.

Ezra Scattergood was an important figure in the history of LADWP and the development of power in Southern California; however, this particular property does not appear to embody or resonate any quality that represents Scattergood. Although the facility bears his name, Scattergood did not reside or work at this particular location; Scattergood died before the property was even acquired by LADWP. The SGS does not qualify for listing under Criterion 2.

As previously discussed, the majority of the plants constructed during the post-WWII years were built in a similar style, the outdoor and semi-outdoor design. Many of the plants are nearly identical in characteristics, although the sizes of boilers and generators may vary. Most are located near water and fuel supplies, and all were built to provide power to an expanding population.

A study of a facility similar to the Scattergood SGS was conducted in 2006 by JRP. The report evaluated the South Bay Power Plant, located in Chula Vista, which is south of the current project. JRP states within its report that the outdoor style of power plant design was “essentially ‘off the shelf’ ” (i.e., typical of the technology used during the post-war era). The style was economically effective in controlling the building material and overall cost of the enormously expensive projects (JRP 2006).

The construction and design of the Scattergood SGS is similar to the majority of the older steam generation plants in the Southern California region. The site does not exhibit distinctive characteristics of a type, period, region or method of construction, nor does it represent the work of an important individual or possess high artistic value. The site is not unique or significant and, therefore, does not qualify for listing under Criterion 3.

The extensive disturbance to the original land surface during construction of the facilities in the 1950s most likely disturbed or destroyed any prehistoric or historic archaeological resources, if any had ever been present. The very low probability of intact archaeological deposits means that the property does not have a potential to yield information important to the prehistory or history of the State or local area (Criterion 4).



## **9.0 CONCLUSIONS**

As part of the LADWP's effort to comply with CEQA, regarding the demolition of structures within the SGS property in Los Angeles, California, POWER conducted a study of the property that included documentation of its physical setting, recordation of its history, and evaluation of its historic significance for the CRHR and for the process of CEQA (Section 15064.5 (a)(2)-(3), (CEQA)). POWER also conducted a field survey of the SGS property on February 11, 2011. If a property meets any of the significance criteria for the CRHR, it is further evaluated for its historical and structural integrity. The SGS 1958-era buildings were evaluated for historic significance and recorded on the attached DPR523 form using considerations outlined in PRC §5024.1, Title 14 CCR, Section 4852. It has been determined that the historic structures at SGS—consisting of Feature 1, the power plant; Feature 2, service tank; Feature 3, water storage tanks; and Feature 4, fuel oil tanks—do not appear to meet the significance criteria. Although the site retains physical integrity, the power station lacks overall historic significance for inclusion to the CRHR, and therefore is not a historic resource or a unique archaeological resource for the purposes of the CEQA ((Section 15064.5 (a)(2)-(3), (CEQA)).

If previously undocumented cultural resources are identified during earthmoving monitoring activities, a qualified archaeologist should be retained to assess the nature and significance of the find, diverting construction excavation if necessary.

During project construction, if human remains are encountered, State Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Los Angeles County Coroner has made a determination of origin and disposition pursuant to Public Resource Code Section 5097.98. The County Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). With the permission of the landowner and his/her authorized representative, the MLD may inspect the site of the discovery. The MLD shall complete the inspection within 48 hours of notification by the NAHC. The MLD may recommend scientific removal and nondestructive analysis of human remains and items associated with Native American burials.

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## **11.0 REPORT PREPARERS**

### **POWER Engineers, Inc.**

Gini Austerman, Archaeologist  
Jim Rudolph, Principal Investigator

## **12.0 FIELD PERSONNEL**

### **POWER Engineers, Inc.**

Gini Austerman, Archaeologist  
Johanna Marty, Archaeologist

## **APPENDIX A: DPR 523 FORM: SCATTERGOOD GENERATING STATION**

State of California — The Resources Agency  
DEPARTMENT OF PARKS AND RECREATION  
**PRIMARY RECORD**

Primary #  
HRI #  
Trinomial  
NRHP Status Code

Other Listings  
Review Code

Reviewer

Date

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\*Resource Name or #: Scattergood Generating Station

**P1. Other Identifier:**

\*P2. Location:  Not for Publication  Unrestricted

\*a. County: Los Angeles

\*b. USGS 7.5' Quad: Venice, CA

Date: 1981 T 3 S ; R 15 W ; unsectioned ; S.B. B.M.

c. Address: 12700 Vista Del Mar City: Los Angeles

Zip: 90293

d. UTM: Zone: 11 ; 368048 mE/3753801 mN (G.P.S.)

e. Other Locational Data:

The Scattergood Generating Station is located in Los Angeles, CA., overlooking the Pacific Ocean and Dockwiller State Beach. From Los Angeles on I-110 S, take exit 14 A to merge onto the I-105 W toward Los Angeles International Airport. Continue on I-105 W for approximately 7 miles. Take exit 1B to merge onto Sepulveda Blvd and proceed for 1.2 miles. Turn right on Grand Ave. and proceed for 2 miles. Turn right onto Vista Del Mar. Elevation: Sea Level

\*P3a. **Description:** (Describe resource and its major elements. Include design, materials, condition, alterations, size, setting, and boundaries)  
This site is a working power plant which consists of three steam powered generating units, associated out buildings and infrastructure. This plant was named for E. F. Scattergood, known by Los Angeles as 'the Father of Municipal Power', it's construction was part of a long-range program of constructing electrical facilities to address the growing need for power in the city.

Four 1959-era buildings within the property were noted and documented as LADWP Site 1 and associated features. These features are the original structure of the power plant Units 1 and 2 (Feature 1), a large fuel oil service tank in the center of the property (Feature 2), three water storage tanks at the eastern boundary of the project (Feature 3), four large storage tanks in the southeast corner of the property across Grand Avenue (Feature 4). Two smaller structures were noted on the *Venice 7.5* minute topographic quadrangle map, 1964 (p.r. 1981), but were not located during the field survey.

\*P3b. **Resource Attributes:** HP 9 Public Utility Building

\*P4. **Resources Present:**  Building  Structure  Object  Site  District  Element of District  Other (Isolates, etc.)



P5b. Description of Photo:  
View of Scattergood Generating Station facing East

\*P6. **Date Constructed/Age and Sources:**

Historic  
 Prehistoric  Both

\*P7. **Owner and Address:**

L.A. Dept. of Water and Power  
111 North Hope Street  
Los Angeles, CA 90012

\*P8. **Recorded by:**

Gini Austerman and Johanna Marty  
POWER Engineers, Inc.  
731 East Ball Road, Ste. 100  
Anaheim, CA 92805

\*P9. **Date Recorded:** 2/22/11

\*P10. **Survey Type:** Pedestrian Survey

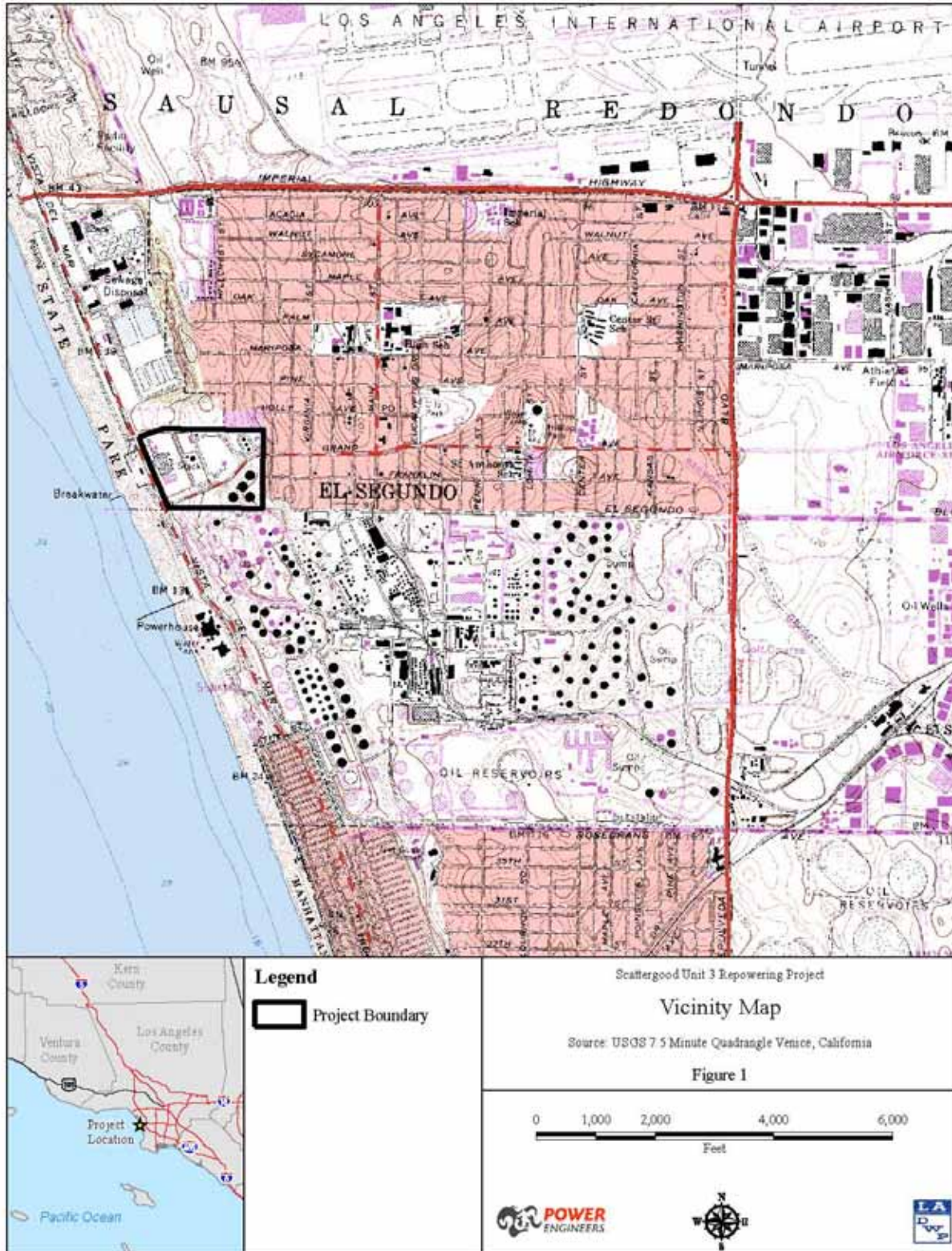
\*P11. **Report Citation:** (Cite survey report and other sources, or enter "none.")

Austerman 2011 Scattergood Steam Generating Station Unit 3 Repowering Project Cultural Resource Survey.

\*Attachments:  NONE  Location Map  Sketch Map  Continuation Sheet  Building, Structure, and Object Record  
 Archaeological Record  District Record  Linear Feature Record  Milling Station Record  Rock Art Record  
 Artifact Record  Photograph Record  Other (List):

DPR 523A (1/95)

\*Required information





**BUILDING, STRUCTURE, AND OBJECT RECORD**

\*Resource Name or # Scattergood Generating Station – Feature 1

- B1. Historic Name: Scattergood Generating Station  
B2. Common Name: Scattergood Generating Station  
B3. Original Use: Steam power generation  
B4. Present Use: Power generation

\*B5. **Architectural Style:** Industrial

\*B6. **Construction History:** (Construction date, alterations, and date of alterations)

Feature 1 consists of the original Scattergood Steam Plant, constructed in 1958 on a 56 acre parcel on the ocean front. To clear the site, a total of 3.5 million cubic feet of sand was removed and relocated to nearby beaches. Construction of this plant, named for E. F. Scattergood who was known by Los Angeles as 'the Father of Municipal Power', as part of a long-range program of constructing electrical facilities to address the growing need for power in the city.

The main building for the steam plant is constructed with a steel framework that was 400 feet long by 257 feet wide with a height of over 100 feet. The first two generating units, Units 1 and 2, including turbine-generators, boilers, condensers and other related equipment, each had a capacity of 156, 000 kilowatts. They were placed into operation in 1958 and 1959, respectively (Intake 1957). Unit 3 was constructed and placed into operation in 1974.

Unit 1 and 2 generator units are located on the lowest terrace, adjacent to the Vista Del Mar, they utilize a common exhaust stack which is approximately 300 feet in height. The great turbine-generator units are housed in enclosures that are approximately 150 feet in height. They are driven by steam generated in boiler structures that are 133 feet high and enclose a furnace volume of approximately seven medium-sized houses. Cooling water, used to convert exhaust steam, is drawn from the ocean through tunnels and discharged back again, circulating a total of over five billion gallons per day. After the steam from the boilers has turned the powerful turbines, which in turn drive the generators, it passes through enormous condensers and is converted back into water that can be re-circulated through the boilers.

The concrete stack is over 300 feet tall. Fuel oil, stored in the tank farm on the property (Feature 4), is used for the boilers. When completed, power was delivered from the steam plant to the power system through two 138k circuit terminating at a receiving stations extending from the plant.

Operation of the original generating unit was handled from a control room equipped with the most advanced remote control devices of the day. 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.

This feature will not be affected by the current project.

\*B7. **Moved?**  No  Yes  Unknown **Date:** **Original Location:**

\*B8. **Related Features:** Yes, the generation units are part of a working power plant and have associated infrastructure and outbuildings. See the primary record for a listing and an attached BSO forms

B9a. Architect:

b. Builder: H.B. Nicolson (Williams 1959)

\*B10. **Significance: Theme:**

**Area:**

**Period of Significance:**

**Property Type:**

**Applicable Criteria:**

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

B11. Additional Resource Attributes: (List attributes and codes)

\*B12. **References:**

Williams, Frank C. 1934 Intake: monthly magazine for employees of the Los Angeles City Owned Department of Water and Power (October, 1972).

Intake: monthly magazine for employees of the Los Angeles City Owned Department of Water and Power (June, 1972).

B13. Remarks:

(This space reserved for official comments.)

\*B14. **Evaluator:** Gini Austerman, M.A.

\***Date of Evaluation:** May 3, 2011

(Sketch Map with north arrow required.)



**BUILDING, STRUCTURE, AND OBJECT RECORD**

\*Resource Name or # Scattergood Generating Station – Feature 2

- B1. Historic Name: Scattergood Generating Station
- B2. Common Name: Scattergood Generating Station
- B3. Original Use: Fuel Storage

B4. Present Use: Fuel Storage

\*B5. Architectural Style: Industrial

\*B6. Construction History: (Construction date, alterations, and date of alterations)

Originally built in 1958, this tank is located on a terrace above the steam plant in the center of the property approximately 300 feet to the northeast of Units 1 and 2. The service tank is 100 feet in diameter, and was used to contain fuel for the steam generator boilers. The use of fuel oil has been replaced by natural gas, which is supplied by continuous feed from a dedicated pipeline that enters the SGS property from the south via Grand Avenue.

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. This feature will be demolished as a result of the proposed project.

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features: Yes, these features are part of a complex of features which comprise the power plant. See the primary record for a listing and an attached BSO forms

B9a. Architect:

b. Builder:

\*B10. Significance: Theme:

Area:

Period of Significance:

Property Type:

Applicable Criteria:

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

B11. Additional Resource Attributes: (List attributes and codes)

\*B12. References:

B13. Remarks:

\*B14. Evaluator: Gini Austerman, M.A.

\*Date of Evaluation: May 3, 2011

(Sketch Map with north arrow required.)



**BUILDING, STRUCTURE, AND OBJECT RECORD**

\*Resource Name or # Scattergood Generating Station – Feature 3

- B1. Historic Name: Scattergood Generating Station
- B2. Common Name: Scattergood Generating Station
- B3. Original Use: Water Storage

B4. Present Use: Water Storage

\*B5. Architectural Style: Industrial

\*B6. Construction History: (Construction date, alterations, and date of alterations)

This feature consists of three metal water tanks, ca. 1958, located in the extreme northeastern portion of the project area on the upper-most terrace. Two are raw water tanks, measuring approximately 75 feet in diameter, and the third is a condensate water tank, approximately 90 feet in diameter. These tanks are not affected by the repowering project; they are not being taken out of service and will remain in use.

\*B7. Moved?  No  Yes  Unknown Date: Original Location:

\*B8. Related Features: Yes, these features are part of a working power plant, See the primary record for a listing and an attached BSO forms

B9a. Architect:

b. Builder:

\*B10. Significance: Theme:

Area:

Period of Significance:

Property Type:

Applicable Criteria:

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

B11. Additional Resource Attributes: (List attributes and codes)

\*B12. References:

B13. Remarks:

\*B14. Evaluator: Gini Austerman, M.A.

\*Date of Evaluation: May 3, 2011

(Sketch Map with north arrow required.)



**BUILDING, STRUCTURE, AND OBJECT RECORD**

\*Resource Name or # Scattergood Generating Station – Feature 4

B1. Historic Name: Scattergood Generating Station

B2. Common Name: Scattergood Generating Station

B3. Original Use: Fuel Storage Tanks

B4. Present Use: No longer in use

\*B5. **Architectural Style:** Industrial

\*B6. **Construction History:** (Construction date, alterations, and date of alterations)

On the southeastern portion of the SGS property, across Grand Avenue from the main generator units (Feature 1), there are four large fuel oil storage tanks. Originally constructed in 1958, 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. These tanks are constructed of metal; three of the tanks have the capacity of about 175,000 barrels and the fourth has a capacity of about 200,000 barrels. The tanks are currently not in use and all four tanks are planned to be removed. This area will be used for soil storage during the proposed project.

\*B7. **Moved?**  No  Yes  Unknown **Date:** **Original Location:**

\*B8. **Related Features:** Yes, these features are part of a complex of features which comprise the power plant. See the primary record for a listing and an attached BSO forms

B9a. Architect:

b. Builder:

\*B10. **Significance: Theme:**

**Area:**

**Period of Significance:**

**Property Type:**

**Applicable Criteria:**

(Discuss importance in terms of historical or architectural context as defined by theme, period, and geographic scope. Also address integrity.)

B11. Additional Resource Attributes: (List attributes and codes)

\*B12. **References:**

B13. Remarks:

\*B14. **Evaluator:** Gini Austerman, M.A.

\*Date of Evaluation: May 3, 2011

