United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations for individual properties and districts. See instructions in National Register Bulletin, *How to Complete the National Register of Historic Places Registration Form.* If any item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, architectural classification, materials, and areas of significance, enter only categories and subcategories from the instructions.

1. Name of Property

Historic Name: San Diego Gas & Electric San Juan Capistrano Substation
Other names/site number: Southern California Edison Substation
Name of related multiple property listing:
N/A
(Enter "N/A" if property is not part of a multiple property listing

2. Location

Street & number: 31050 Camino Capistrano
City or town: San Juan Capistrano State: CA County: Orange
Not For Publication: ☐ Vicinity: ☐

3. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act, as amended,

I hereby certify that this ___ nomination ___ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60.

In my opinion, the property ___ meets ___ does not meet the National Register Criteria. I recommend that this property be considered significant at the following level(s) of significance:

___national ___statewide ___local

Applicable National Register Criteria:

___A ___B ___C ___D

Signature of certifying official/Title: **Date**

State or Federal agency/bureau or Tribal Government

In my opinion, the property ___ meets ___ does not meet the National Register criteria.

Signature of commenting official: **Date**

Title : **State or Federal agency/bureau or Tribal Government**

4. National Park Service Certification

I hereby certify that this property is:

___ entered in the National Register

___ determined eligible for the National Register

___ determined not eligible for the National Register

___ removed from the National Register

___ other (explain:) _____

Signature of the Keeper Date of Action

5. Classification

Ownership of Property

(Check as many boxes as apply.)

Private:	X
Public – Local	
Public – State	
Public – Federal	

Category of Property

(Check only **one** box.)

Building(s)	X
District	
Site	
Structure	
Object	

Number of Resources within Property
(Do not include previously listed resources in the count)

Contributing	Noncontributing	
1		buildings
		sites
		structures
		objects
1		Total

Number of contributing resources previously listed in the National Register 0

6. Function or Use
Historic Functions
(Enter categories from instructions.)

INDUSTRY: Energy Facility: Electrical Substation

Current Function
(Enter categories from instructions.)
Vacant/Not in Use

7. Description

Architectural Classification
(Enter categories from instructions.)

Late 19th and Early 20th Century Revivals: Classical Revival

Materials: (enter categories from instructions.)
Principal exterior materials of the property:
Reinforced Concrete

Narrative Description
(Describe the historic and current physical appearance and condition of the property. Describe contributing and noncontributing resources if applicable. Begin with **a summary paragraph** that briefly describes the general characteristics of the property, such as its location, type, style, method of construction, setting, size, and significant features. Indicate whether the property has historic integrity.)

Summary Paragraph

The SDG&E San Juan Capistrano Substation is an electrical substation located on Camino Capistrano in the city of San Juan Capistrano. Construction began in 1917 and was completed in 1918. The building has a T-shaped plan, with the top of the T facing Camino Capistrano to the west. Overall, the building measures 87 feet 4 inches wide and 96 feet deep. The walls are poured concrete, with a flat roof. Windows are multi-faceted metal casements. The building's western portion (the top of the T), facing Camino Capistrano, includes elements of Classical Revival architecture and is one-story with a high ceiling. The eastern (rear) portion has minimal exterior ornamentation, primarily board-formed concrete and two stories. The property retains most elements of historic integrity (see below.)

Construction History

The SDG&E substation is located on Camino Capistrano, built for Southern California Edison Co. in 1918. This property originally belonged to the Buchheim family, who were ranchers and had large orange groves in this area. The substation was originally designed as a complex with the main building facing Camino Capistrano while in the back was a garage, a water tower, cooling tower and 3 "Troublemen's Cottages." One of these cottages was the place where people went to pay their electric bill. The architecture of the main building features elements of Neoclassical style, commonplace in industrial and commercial buildings of this era which includes substations and powerhouses, but unusual for this part of Orange County.

Detailed Description: Building Exterior

The western portion of the main substation building faces Camino Capistrano and measures 87 feet 4 inches wide, 32 feet 4 inches deep, and 30 feet 8 inches high. This building was intended to house the mechanical and electrical components of the substation. It is a single story concrete building with a high ceiling. Entry was by double doors on the north and south elevations. The primary public façade facing Camino Capistrano had five windows and no doors. A rail system connected the substation machine room with a transformer pad on the north side of the site. Some of the rails are still visible in front of the entrance to the machine room.

The five windows on the western (primary) façade are metal sash windows divided into 30 lights, 5 lights wide by 6 high. Above each window is a transom-like rectangle. Broad mullions separate the five windows, which are centered on the western wall. A band molding runs parallel to the window sills. Beneath the band molding is a concrete band suggesting a plinth. Above the windows are an architrave and a frieze containing the words SAN DIEGO GAS & ELECTRIC beneath a projecting cornice (according to original plans, this area originally read SOUTHERN CALIFORNIA EDISON COMPANY, and was changed in approximately 1940.) Above the cornice is a flat parapet. The northern and southern facades have identical sets of double doors, flanked by sidelights and topped by transoms of divided metal sash windows. The eastern side of this portion of the building has two windows, corresponding to the northern and southern windows on the west wall, with the passage to the eastern “ell” open between the two buildings. The concrete on the western portion of the building has a smooth stucco finish. The roof is flat and set well below the level of the balustrade, parallel with the projecting cornice.

The two story "ell" of the building to the east is 32 feet 8 inches wide, 73 feet 6 inches deep, walls are 22 feet 10 inches high. Originally it contained offices and restrooms. The walls are board-formed concrete topped with a narrow concrete band at the same level as the architrave of the western portion of the building. The north and south walls were designed with seven windows located on the second story, metal sash with eight lights each. Beneath the sill of each window on the south wall is a recessed area of concrete suggesting a larger window opening. Also on the north wall, below the fourth and fifth of the seven windows (left to right) are two small windows (restroom windows.) On the south wall are two doors at ground level, between the third and fourth windows (left to right) directly across from the two windows. The eastern wall of the ell features one door topped with a skylight. The roof is flat and sits slightly below the edge of the exterior wall.

The placement and design of the seven windows on the north side was originally identical to those on the South side, with the exception of the 6th window, which was converted into a doorway with a ramp. At the time of the nomination’s writing, all exterior openings, windows and doors, were covered with plywood. The northern and southern double doors and sidelights were replaced with large wooden double doors, and the northern set of doors has a smaller door inset into the eastern door. The transom windows above the doors are still present under the plywood. On the eastern ell, a small gable roof was erected in front of the second window on the north side to create a ramp-accessible entrance, and an opening cut into the seventh window for a loading dock.

Building Interior

Inside the machine room is a Maris Brothers heavy duty electric crane used to lift equipment and relocate it within the building. Equipment could be rolled into the building via carts on rails in the floor or other vehicles backed into the building.
Exhibit 7, 8, 9

Next to the machine room is the north side of the office complex (ell) that has 7 windows. One of the windows was converted to a doorway with a ramp entrance. The doorway is covered with a make shift gable roof that is supported by 4 by 4 foot posts.
The seventh window frame to the east was altered to provide a small loading dock.
Photo # 3 & # 4

The South side:
The south elevation is very similar to the north side of the building.
On the front part of the former location of the machine shop is a large entrance door.
From there runs the extension of the "ell" It has the same 7 windows as seen on the north side which today are boarded up
Photo # 5, # 6, # 7

Setting of Building

The San Diego Gas and Electric Bldg. is located on Camino Capistrano, the main road that connected Los Angeles and San Diego prior to 1918, and to this day still is one of the major roads of the city. The setting of the substation was originally designed as a complex with the main building facing Camino Capistrano while in the back was a garage, a water tower, cooling tower and 3 "Troublemen's Cottages."

It is the sole remaining building of the original complex and is "T shaped" The building is intact, even with some minor alterations that were done in later years and did not affect the overall appearance of the substation. In 1918 the property had a garage and three cottages for employees. In 2002 the garage and one of the cottages were demolished by SDG&E, the other two were relocated by the City of San Juan Capistrano but are no longer located on the site.
Exhibit 1

One of these cottages was the place where people went to pay their electric bill. Old Timers that grew up in San Juan Capistrano recall when they were kids they loved to go with their parents to the substation . The reason was that the owner of the cottage who collected the money always had cookies for them.

In 1960 the company decided that the 3 cottages were no longer needed. One of them was destroyed, two of them were removed to the area of the Historic Los Rios District and restored. In addition the company removed the machinery from the interior of the substation. They did leave the Maris Bros. Hoist, manufactured in Pennsylvania, a very important piece of equipment designed to lift heavy loads and maneuver them throughout the machine room.

This machine is still intact and could even be used today. The removal of the 3 cottages did not have an impact on the front of the property. The substation looks the same as it did in 1918- the only change was the signage under the eave that originally showed the name Southern California Edison Co. This was changed in 1940 to San Diego Gas and Electric Company, within the property's period of significance. This building still occupies to this day a prominent site on Camino Capistrano and plays an important role in the history of San Juan Capistrano

Historic Integrity

The subject property was assessed for historic integrity in 2008 by Jeanette McKenna, MA/RPA, on behalf of the property owner, San Diego Gas & Electric. The McKenna evaluation stated that the property retained integrity of location and association, with only limited integrity of materials. Contrary to the McKenna report, the property retains integrity sufficient for National Register listing under Criterion A in all seven aspects for the following reasons:

1. Location: The substation is on the original location facing Camino Capistrano and has not been moved, thus it retains integrity of location.

2. Design: The overall design of this substation constructed in 1918 has not changed. The architecture of this building is typical for a standard utility building, a decorated primary façade and plain secondary facades, tall windows and large doors. Some alterations have been done; A loading dock was added on the north side of the building and the original main entry doors were replaced. Originally the name on the building facing Camino Capistrano read "Southern California Edison Co." which in 1940 was changed to "San Diego Gas & Electric Company", taking place during the building's period of significance and thus part of the building's historic integrity. The alterations to the building are minimal, thus the property

3. Setting: Originally in 1918 in addition to the main substation building were 3 cottages, a water tower, and a cooling tower. They were located on the side and back of the substation and since removed. Their removal does not impact the substation since their location was in the rear and not very noticeable from Camino Capistrano. The overall setting is still that of an industrial facility. The neighborhood around the substation complex has transitioned from orchards to a suburban neighborhood, in part because of the residential development made possible by the substation's presence, providing reliable high-voltage electrical power to San Juan Capistrano. Substation equipment was relocated in the 1960s from a location north of the building to a larger complex approximately 300 feet east of the building, but the building is still proximate to an electrical substation facility, its original use. High voltage power lines run directly south of the building, also indicative of the industrial/electrical setting of the property. Thus, despite limited loss of integrity of setting, the property retains sufficient integrity of setting for listing under Criterion A.

4. Materials: The materials used to build the substation were mostly concrete and metal frame casements, materials typically used for standard utility buildings of this time. The concrete exterior walls and most of the metal casement windows are still present and intact. The electrical substation equipment has been removed from the building but this equipment was generally not visible from the building exterior, especially areas visible to the public. Subsequent alterations and additions to the property are minimal (loading dock, conversion of window to door, removal and covering of casement window frames.) Thus the property retains sufficient integrity of materials to retain eligibility.

5. Workmanship: there are no records left telling who the contractor or construction company was, still the workmanship on this building is outstanding Dating back to 1918 - close to 100

years- ago, the building looks the same as in the photographs taken in 1918. The construction workers must have been professionals knowing how to build a substation that would last. The most important design elements of the primary façade are still present and visible, alterations to secondary facades are minimal and do not obscure the original building. The property thus retains integrity of workmanship.

6. Feeling: This building through the years has become an important landmark for the immediate area. It is located close to the Mission and the historic homes in Mission Flats and faces "Long Park" across Camino Capistrano that is a very popular park in this neighborhood. Looking at this building gives people the feeling that they look back in history and makes them aware of the importance of electricity in the lives of Orange County and Los Angeles County residents. Thus, the property retains integrity of feeling.

7. Association: This substation is associated with the regional connection between San Diego and Los Angeles. Its construction in 1918 made development of Orange and parts of Los Angeles County possible. It was the only source of electricity at that time and provided services that permitted Orange and Los Angeles County to support larger populations and development. The property is still owned by San Diego Gas & Electric. Thus, the property retains integrity of association.

Comparison with McKenna Report on Integrity

1. Location: McKenna agrees that the property retains integrity of location.

2. Design: McKenna argues that replacement of entry doors and some windows, addition of one door and a loading dock, removal of gutters and light fixtures, and exterior substation equipment constitutes a loss of integrity of design. However, none of the windows on the primary façade were removed or altered. The fenestration patterns of the building have not changed except for a window converted to a door and an exterior loading dock on the building rear. The gutters and light fixtures are minor exterior features of the building, not major contributing design elements. The exterior elements of the substation were not part of the resource being nominated, the substation building itself. Thus they did not constitute a part of the nominated property and their loss does not constitute a loss of design integrity.

3. Setting: McKenna argues that loss of the remainder of the complex and substation machinery constitutes a lack of integrity of setting. Because it is the substation building, not the complex as a whole, that is being nominated, these features are incidental to interpretation of the substation building, including its internal equipment, which were never visible to the public and thus not part of the external setting of the building.

4. Materials: McKenna argues that loss of light fixtures, rain gutters, and generators constitute a loss of integrity. The light fixtures and rain gutters were not primary design elements of the building, and because the property was a substation, not a power plant, it never contained generators. McKenna does indicate that the Maris Bros. hoist is still present within the building, intact and serviceable, and that the casement windows are also “worth saving.”

5. Workmanship: McKenna states "There is no evidence that the design or craftsmanship used in the construction of this building is associated with any particular culture or people." This statement does not appear accurate, as the property is clearly associated with a culture or people, namely 20th century Californians, specifically the Southern California Edison Company, who constructed the building. The property utilizes practices common to industrial buildings of its era, including the decorated primary façade, intended for the face of the building presented to the general public, and more utilitarian board-formed concrete on secondary facades. This pattern is typical of electrical utility buildings of its era, including the Pacific Gas & Electric Powerhouse in Sacramento and the Jessie Street Substation in San Francisco. Both of these buildings were designed by master architect Willis Polk, but architects throughout the state utilized similar designs. The architect of the SDG&E San Juan Capistrano Substation is unknown, but the use of this common practice indicates design and craftsmanship specific to its era and context.

6. Feeling: McKenna states "There is no evidence to suggest the existing building expresses any aesthetic or historic sense of a particular period. The tasks once completed at this location were conducted indoors and not visible from the street front. Further, all materials associated with the activities have been removed from the site (and surrounding areas.) Except for the name on the building, there is no physical evidence of the original use of the building." This statement also suggests incorrect assessment of integrity of feeling. The activity taking place inside most buildings is not visible from the exterior. If perception from the exterior is deemed important to integrity of feeling, then the activity inside is irrelevant to this aspect of integrity, because it was not visible even when the property was in use.

7. Association: McKenna states "Although an association with the development of the utility services within and throughout Southern California has been referenced above, this association is not manifested in the physical remains on the property. The association can be made, but not through the presence of the existing substation building." The existing substation building, whose detailed primary façade was the most prominent and visible aspect of the substation complex, intended to be viewed by the community in front of the more prosaic and utilitarian elements of the complex.

Essential Physical Features Under Criterion A

The property's essential physical features under Criterion A are based on the overall appearance and presence of the substation building, as the public face of the site. The primary façade and secondary facades retain a generally high level of historic integrity in the aspects outlined above, based on individual assessment of the property and comparative analysis with comparable resources located in California. The building interior and surrounding complex has had significant alteration, but as a property closed to the public, the loss of substation equipment does not constitute a loss of integrity significant enough to preclude listing under Criterion A. The property's features are visible enough to convey their significance, not concealed under modern construction. In the case of windows and doors, covered only with plywood, original windows and doors are retained under a removable and clearly temporary covering.

8. Statement of Significance.

Applicable National Register Criteria

(Mark "x" in one or more boxes for the criteria qualifying the property for National Register listing.)

[X] A. Property is associated with events that have made a significant contribution to the broad patterns of our history

[ ] B. Property is associated with the lives of persons significant in our past.

[ ] C. Property embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values, or represents a significant and distinguishable entity whose components lack individual distinction

[ ] D. Property has yielded, or is likely to yield, information important in prehistory or history.

Criteria Considerations

(Mark “x” in all the boxes that apply.)

[ ] A. Owned by a religious institution or used for religious purposes

[ ] B. Removed from its original location

[ ] C A birthplace or grave

[ ] D A cemetery

[ ] E A reconstructed building, object, or structure

[ ] F A commemorative property

[ ] G Less than 50 years old or achieving significance within the past 50 years

Areas of Significance
(Enter categories from instructions.)
Engineering

Period of Significance
1917-1964

Significant Dates
1918 (building completion)
1928 (building sale)

Significance cont.

Significant Person
(Complete only if Criterion B is marked above.)

Cultural Affiliation

Architect/Builder

Statement of Significance Summary Paragraph (Provide a summary paragraph that includes level of significance, applicable criteria, justification for the period of significance, and any applicable criteria considerations.)

The San Diego Gas & Electric Capistrano Substation is eligible for the National Register under Criterion A at the local level of significance for the property's association with electrical power distribution in southern California. This substation was the original location where electrical power distribution networks in Los Angeles and San Diego were connected, providing long-range distributed electrical power to this portion of Orange County for the first time. The property's period of significance is 1917-1964, the period from the property's construction until the end of the property's function as an electrical substation.

Narrative Statement of Significance (Provide at least **one** paragraph for each area of significance.)

Criterion A: Engineering/Electrical Power Distribution in Orange County

The San Diego Gas and Electric Building (former Southern California Edison Co. Bldg.) is the earliest surviving electrical utility building in Orange County and played for many years a significant role in the development of San Juan Capistrano and its region of Orange County, with close ties to the history of San Diego. The building is directly associated with the Southern California Edison Company's expansion and growth in the wake of regional efforts to expand hydroelectric power capacity in the Los Angeles area, and its presence facilitated the suburban growth of San Juan Capistrano through reliable transmission of electrical power. It is located on property that, prior to the substation's construction in 1917-1918, was part of the Aaron Buchheim Ranch that spread from Capistrano Beach to El Toro.

In 1917 the San Diego Consolidated Gas and Electric Company, together with the Southern California Edison Company, constructed a high voltage transmission line from San Diego to San Juan Capistrano, and built a substation on Camino Capistrano. The subject property served as this connecting point, forming an important part of the electrical infrastructure of Orange County until 1964 when the electrical components were removed from the substation. According to a 2008 report on the nominated property by Jeanette McKenna, the substation building is "associated with the regional connection between San Diego and Los Angeles, and the merging of utilities provided by Southern California Edison and the San Diego Gas & Electric Company." (McKenna, p, 32) The substation represents the connecting point for two major southern California electric utility companies during a period of enormous regional growth. Building this substation was the key to development of the company's extensive network of transmissions and distribution lines and additional substations throughout Southern California.

In 1914 San Juan Capistrano experienced an increase in visitors to the Mission San Juan Capistrano and its businesses. Residents called this period "San Juan's decade of progress." Most of the advancements were technological: electricity, telephone and paved streets. Prior to 1918, electricity in San Juan Capistrano was supplied by an old Fairbanks - Morse generator that was powered by a gasoline engine. This system had inherent limitations, including high operating

cost and low overall capacity. Location of an electrical substation in San Juan Capistrano served the dual purpose of linking two regional electric companies and providing greater capacity for electrical power, and thus urban growth, for the rural community of San Juan Capistrano.

At that time the Southern California Edison Company built the substation on the outskirts of San Juan Capistrano. San Diego Gas and Electric connected to the substation via a 75 mile transmission line strung from San Diego to San Juan Capistrano. According to Carl Romer, secretary to Jerome O'Neill, owner of the Santa Margarita Ranch, a large part of this transmission line went over Santa Margarita Ranch land, which had its own generator with a battery system. The Ranch gave SDG&E permission to build over their property in exchange for having their own electric power line installed by the firm. This arrangement was beneficial for the ranch, overcoming the higher cost and lower capacity of their gasoline-powered generator.

In 1928, the substation was purchased by the San Diego Consolidated Gas & Electric Company, and was known as the Capistrano Substation. In approximately 1940 the name painted on the building was changed to the present "San Diego Gas and Electric Company "- as it is shown above the boarded up windows on the West side of the building facing Camino Capistrano. The name initially read "Southern California Edison Co." according to building plans. It is not known whether the name was repainted between 1928 and 1940 to represent the SDCG&E company name.

In 1918 when the substation was constructed on Camino Capistrano it was somewhat removed from town with orange and walnut groves surrounding it. Its location faced the main highway that was and still is Camino Capistrano, the route from Los Angeles to San Diego.
Today the orange groves are replaced by houses that surround the building on three sides. It is also very close to the Mission District, thus becoming an important part of the city's historic landscape, listed on the City of San Juan Capistrano's "BOD" (Building of Distinction) list.

Behind the substation were three "Troublemen's Cottages," intended for use of employees. One of these cottages was the place where people went to pay their electric bill. Old timers that grew up in San Juan Capistrano recall when they were kids, they loved to go with their parents to the substation, because the employee who collected the money always had cookies for them.

Historic Context: San Diego Gas & Electric Company

San Diego Gas & Electric's earliest predecessor company was formed in 1881 by a group of San Diego citizens who decided to supply gas service to the city, formed as the San Diego Gas Company. Their initial product was oil gas (a synthetic gas made from crude petroleum) but it was replaced by coal gas in 1883 due to impurities in the generated oil gas carrying unprocessed oil and tar into the mains. In 1886 the company diversified into electric power generation, powering electric art streetlights, installed by the Jenney Electric Company. In the same year the company was purchased by E.S. Babcock, a businessman involved in the development of Coronado. Babcock renamed Jenney Electric as the Coronado Gas and Electric Company in 1887. Babcock originally announced plans to start his own gas company, but instead offered to consolidate with San Diego Gas Company. SDGC agreed, and reincorporated as San Diego Gas & Electric Light Company in May of 1887.

San Diego's land boom of the late 1880s provided increased business for the fledgling company, as the city grew from 4000 people to more than 30,000. The city's first incandescent lighting service began in 1888, using the same power plant used to power electric streetcars. The streetcar company failed quickly, but the generated was utilized for incandescent lighting. In 1892, SDG&ELC purchased the powerplant for its own use. Collapse of the city's real estate bubble in 1889 slowed company growth until 1905.

A new land boom, beginning in 1902, spurred reinvestment in electrical and gas capacity. In April 1905 the company was sold to H.M. Byllesby & Company, who reincorporated again as the San Diego Consolidated Gas & Electric Company. New turbine-electric generators and the beginnings of high-voltage transmission lines were the hallmark of this period, connecting with Southern California Edison in 1918. In 1940, the name of the company was changed to San Diego Gas & Electric Company. (Bill Dyke, 1965)

Historic Context: Southern California Edison

Southern California Edison's first predecessor company was the West Side Lighting Company, formed in 1896. WSLC merged with Los Angeles Edison Electric, a company that owned the rights to Thomas Edison's name in southern California, operating direct-current electric generators. In 1901, John Barnes Miller took the helm of Los Angeles Edison Electric, acquiring smaller utility companies and building power plants. Long-distance power transmission began in 1907 with the Kern River-Los Angeles Transmission Line, running 118 miles and supported by steel towers. The company was renamed Southern California Edison in 1909. (Lehman Brothers Collection, Harvard Business School)

Another major predecessor of Southern California Edison was Pacific Light and Power, an electric utility founded by streetcar magnate Henry Huntington. Huntington used his experience building street railways in San Francisco, in combination with land development and power companies, to consolidate a triad of companies in Los Angeles. Huntington is best known for his ownership of Pacific Electric, an interurban electric railroad and streetcar company, but his holdings also included the Los Angeles Railway, a local streetcar company, a real estate

company, Huntington Land & Improvement Company, and Pacific Light & Power Company. The latter two companies were formed in 1902 in order to purchase land and develop them as suburban subdivisions, and to generate electrical power for his electric railroads and the new residents of those subdivisions. This development "triad" of streetcar, suburb and power became a highly profitable venture for Huntington during a period of rapid expansion in Los Angeles. Later acquisitions of gas companies allowed him to supply natural gas to these subdivisions, also operated by Pacific Light & Power. (Friedricks, 1991)

As electric utilities the Los Angeles region made greater and greater use of hydroelectric power, PL&P expanded with a new station on Big Creek, opened in December 1913. This station provided so much power that surplus could be sold to Southern California Edison and Los Angeles Gas & Electric, the other two major utilities operating in the region. The creation of the Owens Valley Aqueduct in 1915, and the city of Los Angeles' intent to build hydroelectric power stations along the aqueduct, motivated Huntington to pursue consolidation of all three companies. Already complex negotiations between all three companies and local government were made even more complicated by an effort to create a municipal power company. The negotiations were concluded in December of 1916 with defeat of the municipalization effort. In the spring of 1917, the merger was approved, and PL&P was reorganized as part of Southern California Edison. (Friedricks, 1991; Fogelson, 1993) This merger set the stage for even greater regional connections, including expansion into Orange County and connection with San Diego Gas & Electric's network at San Juan Capistrano, starting construction in 1917.

Comparative Analysis

Comparative analysis with other similar properties (substations and electrical power generators) built during the same era (early 20th century) and either listed in the National Register of Historic Places by nomination or determined eligible for listing by Section 106 consensus demonstrates that the loss of internal mechanisms and equipment, and surrounding structures associated with electrical power distribution, do not preclude the eligibility of a property associated with the context of electrical power generation and distribution. They also demonstrate the common practice of electrical utility buildings with decorated primary facades but utilitarian secondary facades, providing a more attractive public "face" to the building but lowering overall building costs by excluding decoration where it is not visible to the public. Also, despite the generally common practice of building design of this sort, surviving examples of this sort of electrical substation are rare, and this property has a specifically identified historic context that makes it unique and significant. McKenna did not question that the property was significant in her report, but made the claim that the property did not retain sufficient integrity to remain eligible. The issue of integrity is discussed in Section 7.

Jessie Street Substation in San Francisco, California, was listed in the National Register in 1974 after a 1968 property survey. The building was constructed by the San Francisco Gas & Electric Company in 1881. The building underwent two enlargements in 1883 and 1892, and in 1905 was selected for an architectural update, featuring design by architect Willis Polk. Some of the work for this building rehabilitation was underway when the 1906 San Francisco earthquake resulted in severe damage to the station. Polk drew up new plans following the earthquake, and

the substation was reopened in 1909. The primary façade facing Jessie Street is highly decorated in a Beaux Arts motif, incorporating masonry brick and terra cotta architectural embellishments, but the secondary facades are undecorated masonry walls, incorporating several older portions of the building as expanded over the years. The property was no longer in use as a substation at the time of listing, its electrical equipment having been removed years earlier. (Corbett, 1974)

PG&E Powerhouse in Sacramento, California was listed in the National Register in 2010. The building was constructed in 1912 as an oil-burning electrical generator facility, intended to supplement Pacific Gas & Electric's hydroelectric power system on the American River, based in Folsom. Architect Willis Polk also designed this building for PG&E. The powerhouse is constructed of poured concrete, featuring a primary façade that incorporates elements of Beaux Arts and Classical Revival architecture, including horizontal scoring that mocks courses of stone. The western half of the building's three walls feature other elements including massive doors with arched entrances, topped with cartouches, a roof parapet with shallow pediment form above each arch, and the words "Pacific Gas and Electric" embossed in concrete. This façade faces the Sacramento River, an aspect visible to passengers of riverboats and Southern Pacific Railroad trains on the I Street Bridge a few hundred yards south of the powerhouse. However, the rear portions of the building are simple board-formed concrete, on the sides facing the Southern Pacific Shops across Jibboom Street, a heavy industrial area. The plant ceased operation in 1954 and all boilers, electrical generators, smokestacks and other salvageable metal components of the powerhouse were removed by 1965. Despite this loss of electrical equipment, the property was listed in the National Register under Criteria A and C, acknowledging the building's role as an electric power station (albeit secondary to the hydroelectric system) in addition to its architectural distinction.

Pacific Electric Substation #14 in Santa Ana, Orange County, California, was listed in the National Register in 1983. Constructed in 1907, the masonry building was intended to transform electrical power from high-voltage AC to DC for use by Pacific Electric streetcars and interurban trains (power provided by Southern California Edison predecessor company Pacific Light & Power.) Architect and builder are unknown, but the substation's architectural style was duplicated in other Pacific Electric substations. The building's electrical equipment was removed in 1950 and the building was utilized for storage, but this loss of electrical power transmission equipment did not preclude National Register listing.

Pacific Electric Railway Company Substation #8 in Altadena, Los Angeles County, California, is similar in design and use to PE Station #14 in Santa Ana, a masonry building with gabled roof. The building was constructed in 1906, located where Pacific Electric interurban trains met the Mount Lowe Railway, a five-mile tourist railroad that carried passengers into the San Gabriel Mountains. The building replaced earlier power generation facilities on Echo Mountain that were destroyed in a fire, utilizing long-distance power from Pacific Light & Power instead of locally generated electricity. The building was converted to office space in the 1940s and new display windows added to the building when the building became a photography studio. The property was listed in the National Register in 1977 despite removal of all electrical substation equipment decades earlier.

Comparative Analysis Conclusion

There are other examples of listed substations and power generation facilities in California, including properties determined eligible via Section 106 consensus determination, but almost all of the properties no longer retain their power generation or transmission equipment. Generally, the removal of this equipment marked a change in use or historic context that marks the end of the period of significance. The four properties listed above demonstrate multiple comparative examples of electric power transmission and generation sites that were eligible for and listed in the National Register of Historic Places despite having their power transmission components removed many years before listing. All date from the era of the Capistrano substation's construction. All saw significant changes of setting, in part due to the role of electrical substations in suburban development resulting in transition from rural to suburban or urban setting during the property's period of significance. Each has a clearly identified area of significance, including architecture, urban development and transportation, and engineering.

The Capistrano Substation shares common features with other nominated substations, including a decorated primary façade with simplified secondary facades, removed electrical equipment, and a clearly identified historic context for its association with the first linkage of two major suppliers of electrical power during an era of dramatic suburban development and expansion of electrical power capacity in southern California.

9. Major Bibliographical References

Bibliography (Cite the books, articles, and other sources used in preparing this form.)

Boghosian, Paula and Sean deCourcy, "National Register of Historic Places Nomination Form: PG&E Powerhouse," National Park Service, 2010.

Corbett, Michael, "National Register of Historic Places Nomination Form, Jessie Street Substation," National Park Service, 1974.

Dyke, Bill, "Seventy-Five Years of Light", San Diego Historical Society Quarterly July 1956, Volume 2, Number 3

Friedricks, William, *Henry E. Huntington and the Creation of Southern California*. (Ohio State University: Columbus, 1991)

Fogelson, Robert, *The Fragmented Metropolis: Los Angeles, 1850-1930* (UC Press, Berkeley, 1993)

Hallan-Gibson, Pamela, *Two Hundred Years in San Juan Capistrano,* 1990

Klassy, Karwin, "National Register of Historic Places Nomination Form, Pacific Electric Substation #14 (Altadena)", National Park Service 1979

McKenna, Jeanette A., Historic Property Evaluation .San Juan Capistrano Sub-Station, April 21, 2008

Thomas, Harold, "National Register of Historic Places Nomination Form, Pacific Electric Sub-Station #14," National Park Service, 1983

Tryon, Mary Ellen, *A Guide to Historic San Juan Capistrano,* Paragon Publishers 1999

Underbrink, Susan, letter to State Historic Preservation Officer, dated May 16, 2013.

_____, "Southern California Edison Company," Lehman Brothers Collection, Harvard Business School Baker Library, accessed 2/20/2015 via http://www.library.hbs.edu/hc/lehman/chrono.html?company=southern_california_edison_company

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Previous documentation on file (NPS):

____ preliminary determination of individual listing (36 CFR 67) has been requested
____ previously listed in the National Register
____previously determined eligible by the National Register
____designated a National Historic Landmark
____ recorded by Historic American Buildings Survey #_____
____recorded by Historic American Engineering Record # _____
____ recorded by Historic American Landscape Survey # _____

Primary location of additional data:

____ State Historic Preservation Office
____ Other State agency
____ Federal agency
_X__ Local government
____ University
____ Other
Name of repository: ___City Hall, San Juan Capistrano
_____

Historic Resources Survey Number (if assigned): _____

Geographical Data

Acreage of Property ___Less than 1 acre_____

Latitude/Longitude Coordinates
Datum if other than WGS84:_____
(enter coordinates to 6 decimal places)

1. Latitude: Longitude:

Verbal Boundary Description (Describe the boundaries of the property.)

The boundary is the immediate footprint of the SDG&E Substation.

The West Side of the building faces Camino Capistrano
To the South is Calle Bonita
To the North is Calle Lorenzo
Way back of the Property on the East Side is Calle Rosalia

Boundary Justification (Explain why the boundaries were selected.)

The boundary is the footprint of the building upon the original parcel upon which the substation was located upon its completion in 1918. Because the surrounding ancillary equipment is no longer extant, the boundary does not extend to the entire parcel originally utilized by the building and its ancillary equipment.

See Assessors Block and Parcel Map, March 1967

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10. Form Prepared By

name /title: Ilse M. Byrnes Byrnes
organization: _____
street & number: PO Box 1029
city or town: San Juan Capistrano state: CA
zip code: 92693
e-mail ilse.byrnes@gmail.com
telephone: (949) 493-4222
date: 11/11/2014

Additional Documentation

Submit the following items with the completed form:

- **Maps:** A **USGS map** or equivalent (7.5 or 15 minute series) indicating the property's location.
- **Sketch map** for historic districts and properties having large acreage or numerous resources. Key all photographs to this map.
- **Additional items:** (Check with the SHPO, TPO, or FPO for any additional items.)

Photographs

Submit clear and descriptive photographs. The size of each image must be 1600x1200 pixels (minimum), 3000x2000 preferred, at 300 ppi (pixels per inch) or larger. Key all photographs to the sketch map. Each photograph must be numbered and that number must correspond to the photograph number on the photo log. For simplicity, the name of the photographer, photo date, etc. may be listed once on the photograph log and doesn't need to be labeled on every photograph.

Photo Log

Name of Property: San Diego Gas and Electric Building
City or Vicinity: San Juan Capistrano
County: Orange State: CA
Photographer: Ilse M. Byrnes
Date Photographed: Feb. 2013
Description of Photograph(s) and number, include description of view indicating direction of camera:
1 of __8
1. West side of building facing Camino Capistrano
2. Name of building on West side
3.North side - entrance to machine room with Railroad tracks barely visible
4 North side -entrance to machine room and extension of building with ramp and doorway
5. View of building South/East showing the T shape.
6. Close up of South side
7. South side main door to machine room
8 . View to East of surrounding area

Figure Log (See continuation sheets)

Historic Photographs : ca. 1917/18 (Huntington Digital Library Collection)
1. View of Camino Capistrano looking South
2. South side of building under construction
3. Roof under construction
4. Overview of partially constructed substation looking West
5. Front of building - South/West corner
6. West side of building
7. Inside building with crane
8. Machinery
9. Control Panel

Exhibits: (See continuation sheets)

1. Capistrano Substation Property Plan
2. Remnants of the Rail Road Tracks
3. Details of roof line
4. Architectural Diagram of West and East side of building
5. Architectural Diagram East side of building
6. View of East side
7 Architectural Diagram North side
8 . Interior view of crane in machine room
9 Makers mark on crane
10. Detail of crane