NPS Form 10-900 (Oct.1990)

OMB No. 1024-0018

**United States Department of the Interior National Park Service** 

# National Register of Historic Places **DRAFT**Registration Form



1. Name of Property	
historic name PG&E Powerhouse	
other nemerical to pumber Consuments Diver Station D	
other names/site number Sacramento River Station B	
2. Location	
street & number 400 Jibboom Street	
city or town <u>Sacramento</u> □ vicinity	
state <u>California</u> code <u>CA</u> county <u>Sacramento</u> code <u>067</u> zip code <u>95811</u>	
3. State/Federal Agency Certification	_
As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this $\square$ nomination $\square$ 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 $\square$ meets $\square$ does not meet the National Register Criteria. I recommend that this property be considered significant $\square$ nationally $\square$ statewide $\square$ locally. ( $\square$ See continuation sheet for additional comments.)	
Signature of certifying official/Title Date	
California Office of Historic Preservation	
State or Federal agency and bureau	_
In my opinion, the property $\square$ meets $\square$ does not meet the National Register criteria. ( $\square$ See continuation sheet for additional comments.)	
Signature of commenting or other official Date	
State or Federal agency and bureau	
4. National Park Service Certification	
I hereby certify that this property is:  Signature of the Keeper  Date of Action  entered in the National Register  See continuation sheet.	_
☐ determined eligible for the  National Register ☐ See continuation sheet.	
determined not eligible for the  National Register	
removed from the National Register	_
other (explain):	
	_

PG&E Powerhouse	Sacramento, CA		
Name of Property		County and State	
5. Classification			
Ownership of Property (Check as many boxes as apply)	Category of Property (Check only one box)	Number of Resources within Property (Do not include previously listed resources in the count.)	
<ul><li>□ private</li><li>⊠ public-local</li><li>□ public-State</li><li>□ public-Federal</li></ul>	<ul><li>☑ building(s)</li><li>☐ district</li><li>☐ site</li><li>☐ structure</li><li>☐ object</li></ul>	Contributing Noncontributing  1 buildings sites structures objects 1 Total	
Name of related multiple pro (Enter "N/A" if property is not part of a	perty listing multiple property listing.)	Number of contributing resources previously listed in the National Register	
N/A		0	
6. Function or Use			
Historic Functions (Enter categories from instructions)		Current Functions (Enter categories from instructions)	
INDUSTRY: Power Plant		VACANT/NOT IN USE	
7. Description			
Architectural Classification (Enter categories from instructions)		Materials (Enter categories from instructions)	
Classical Revival: Beaux Arts		foundation CONCRETE	
		roof CONCRETE WITH STEEL TRUSSES	
		walls CONCRETE	
		other WINDOWS AND ROOF MONITORS: STEEL AND GLASS	

Narrative Description (Describe the historic and current condition of the property on one or more continuation sheets.)

See Continuation Sheet

PG&E Powerhouse Name of Property	Sacramento, CA County and State
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)   A Property is associated with events that have made	Areas of Significance (Enter categories from instructions)  INDUSTRY  ARCHITECTURE
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.	Period of Significance 1912-1957
☐ 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.)	Significant Dates 1912 – Constructed
Property is:	1924 – Fourth Generator Added
☐ A owned by a religious institution or used for religious purposes.	Significant Person
☐ B removed from its original location.	(Complete if Criterion B is marked above)  N/A
☐ C a birthplace or a grave.	Cultural Affiliation
☐ D a cemetery.	N/A

Architect/Builder Polk, Willis

#### **Narrative Statement of Significance**

within the past 50 years.

☐ F a commemorative property.

☐ E a reconstructed building, object, or structure.

 $\square$  G less than 50 years of age or achieved significance

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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	Primary Location of Additional Data  ☐ State Historic Preservation Office ☑ Other State agency ☐ Federal agency ☑ Local government ☐ University ☑ Other
☐ recorded by Historic American Buildings Survey # ☐ recorded by Historic American Engineering Record #	Name of repository:  1. North Central Information Center, General Records  2. City of Sacramento Preservation Office  3. Center for Sacramento History
10. Geographical Data	
Acreage of Property: 1.925 acres	
Verbal Boundary Description	
See Continuation Sheet	
Boundary Justification	
See Continuation Sheet	
11. Form Prepared By	
name/title Paula Boghosian edited by Sean de Courcy	
organization City of Sacramento Preservation Office	date February 2010
street & number 300 Richards Boulevard, 3 <sup>rd</sup> Floor	telephone (916) 808-8259
city or town Sacramento	state <u>CA</u> zip code <u>95811</u>

**Additional Documentation** 

PG&E Powerhouse	Sacramento, CA
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Continuation Sheets	
Maps A USGS map (7.5 or 15 minute series) indicating the prop	perty's location.
A <b>Sketch map</b> for historic districts and properties having la	large acreage or numerous resources.
Photographs	
Representative black and white photographs of the prop	perty.
Additional items	
None	
Property Owner	
(Complete this item at the request of the SHPO or FPO.)	
Name Jim Combs, Department of Parks and Recreation, City of Sa	Sacramento
street & number 915 "I" Street, 5th Floor	telephone (916) 808-5200
city or town <u>Sacramento</u>	state <u>CA</u> zip code <u>95814</u>

**Paperwork Reduction Act Statement**: This information is being collected for applications to the National Register of Historic Places to nominate properties for listing or determine eligibility for listing, to list properties, and to amend existing listings. Response to this request is required to obtain a benefit in accordance with the National Historic Preservation Act, as amended (16 U.S.C. 470 et seq.).

**Estimated Burden Statement:** Public reporting burden for this form is estimated to average 18.1 hours per response including the time for reviewing instructions, gathering and maintaining data, and completing and reviewing the form. Direct comments regarding this burden estimate or any aspect of this form to the Chief, Administrative Services Division, National Park Service, P.O. Box 37127, Washington, DC 20013-7127; and the Office of Management and Budget, Paperwork Reductions Project (1024-0018), Washington, DC 20503.

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#### **Narrative Description**

The PG&E Powerhouse, also known as Sacramento River Station B, at 400 Jibboom Street in Sacramento faces west between Interstate 5 and the Sacramento River. Willis Polk, a notable Bay Area architect, designed the structure in 1912. The building is in its original location, just a quarter mile north of Sacramento's central business district. Consistent with many public utility buildings of the era, Polk designed the PG&E Powerhouse in the Classical Revival Style. Polk was also an ardent proponent of the Beaux Arts Movement, which is reflected in some of building's more ornate details. In 1912, the facility began producing electricity for the Pacific Gas and Electric Company (hereafter PG&E) as an auxiliary powerplant and transformer substation where voltage was transformed for distribution. In 1924, PG&E upgraded the facility, making it the largest steam turbine power plant in the region.

The structure is two stories in height with a below grade basement and is constructed of reinforced concrete on a steel frame. The building's footprint contains two large rectangular L-shaped blocks. The boiler rooms in the southern section of the building were originally topped with four large smokestacks. The structure is surfaced with cement plaster on the south, west, and north elevations. The building's plaster coat is decorated with horizontal scoring that mocks courses of stone. Unlike the detailed features of these facades, the building's eastern elevation was finished with rough concrete, and considered the "rear" of the building. Polk's original design called for further additions to this elevation, which never came to fruition.

Tall arched openings on the east and west elevations contain multi-paned windows (currently boarded), and the main west-facing arch entryway houses a massive classical door, surmounted with an ornate cartouche. The southern façade dons a similar arched entryway as the side facing west, though not as ornately embellished. The encircling roof parapet contains a shallow pediment form above each arch. Below the western pediment the words "Pacific Gas and Electric Company" are engraved into the concrete. The building's roof is also reinforced concrete. Atop the roof, three metal and glass monitors (currently boarded) allowed light into the building's interior.

The main building to the north is 156' 5" long, 100' 6" wide, and three stories in height. The width of the smaller southern wing is 71' 4" and is approximately two-and-a-half stories tall. The steel frame and six inch-thick reinforced concrete walls of the structure support steel Howe style roof trusses. The trusses are supported by twelve cubic yard blocks of concrete positioned on clusters of piles. A total of five hundred piles were sunk to form the building's foundation. The shallow gabled roofs of the two block sections each contain a monitor. The roof of the north block also contains a single roof monitor running east to west. The building's roof is also reinforced concrete.

The exterior of the northern wing of the building is divided into three horizontal sections—a base, a center, and a cornice/parapet. The base section is smooth in texture and approximately ten to twelve feet in height. The central section extends from the building's base to the cornice band. The upper cornice section contains a shallow parapet. An ornamental arch and cartouche crest the primary elevation, facing the Sacramento River. The primary facades to the west, north, and south are all finished with a cream tinted Santa Cruz white cement plaster.

The west elevation is the primary façade and the most striking architecturally. Facing the Sacramento River, the western elevation contains a tall arched opening with a classical door frame surmounted with an ornate cartouche. The cartouche contains a circular ornament mounted on a small structural base with cornice moldings supported on either end by sculptured male figures. The base of the composition is sculptured with floral and scroll motifs. The arched opening, behind the cartouche, has a large multi-paned window. To the north on the same elevation is a large blind panel window just adjacent to the multi-paned window. The shallow bay containing the arch and cartouche projects slightly to the west from the surface of the façade.

The southern section or wing of the building originally held the plant's steam boilers. These boilers were placed on either side of a central aisle, which extended from north to south in this section. The eastern half of this room held four 826 horsepower Sterling boilers and two batteries. Each boiler had three firing doors. The boilers were designed for 200

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pounds of working pressure at 100 degrees of superheat. There was space for an equal number on the west side, although originally only one was installed. There was one steel smokestack mounted directly over each battery of boilers. The stacks projected 100 feet above the furnace floor, and were 7' 6" in diameter. These dramatic stacks were removed after PG&E sold the building.

The northern wing of the building was originally occupied by two turbine generators, water condensers, and auxiliary machinery (transformers and electrical equipment outside the building converted voltage from direct current to alternating current). The northern section of the building contained an open basement, a main floor, and an upper story, with a partially open central space that extended from below-grade to the roof. The generators were placed in bays on the first floor of the building in the large interior space. These generators adjoined the boiler room to the south. An arched front entrance opens directly into this central space. The formed-concrete generator bays are 38' wide, 100' long, and 52' high. An electrically-driven crane with a capacity of 80,000 pounds operated along the length of the interior. The crane was mounted on girder-supported rails, mounted atop steel trusses. The crane was manufactured by the Cyclops Iron Works of San Francisco. A set of concrete columns supported the partition between the boiler room and generator room. A row of concrete columns on the other side of the generator room supported the upper galleries. Each boiler cost \$16,000, the condenser \$63,000, and the electrical equipment \$105,000. All the generators, transformers, metal cranes, catwalks, and other electrical equipment were removed over time. The interior of the building is void of any other equipment that would indicate its original use, with just concrete shell and support structures remaining.

In the north wing a circulating pump drew water from the Sacramento River through a 30" cast iron pipe. The water was forced through the plant's condensers where the exhaust steam liquefied, before passing back to the river through a similar pipe. A nearby well was sunk in order to supply water for the boilers if river water became too muddy, or the water level dropped too low. The pipe which drew water from the Sacramento River to the Power Station has been capped, but remains in the building.

There were six 1,500 kilowatt General Electric transformers on the main floor close to the northern wall. In the northeast corner of the building, a wide steel and concrete staircase led from the first to the second and third levels. Turbogenerators and 60,000 volt oil circuit breakers were located on the second floor of the main building. The high-voltage power lines joined the circuit breakers through bar disconnectors, which crossed a closed monitor rising above the roof. Transmission lines then passed through 6" circular openings in the double glass windows. All steam and electrical equipment, inside and outside the building, has been removed.

West of the plant, a wooden piling pier and wharf extended from the levee out into the river. The 30" cast iron intake and discharge pipes were carried underground from the pump pit in the station. The water-intake pipe was suspended within the pier, before descending into the Sacramento River. The wharf was removed after the plant closed. Vestiges of the pier and remnants of the pipe remained along the river's edge until 2002. Few remnants remain of the PG&E Wharf today; the remnants of a few piers are visible at the shoreline just south of the Water Intake Structure.

#### **Historic Integrity**

The PG&E Powerhouse maintains its historic integrity of location, design, setting, materials, workmanship, feeling, and association. The building has never been moved from its original location. No significant alterations have been made to the buildings exterior design over time. Additionally, the interior volumes and open spaces have remained unaltered so that the utilitarian nature of the buildings interior design remains intact. The building still maintains its setting as it pertains to the Sacramento River and the park-like plan of City-Beautiful architect Willis Polk. While the condition of the building's interior materials varies the majority remains intact. All historic architectural workmanship remains unaltered. The feeling of the building reflects its location in an industrial zone. Finally, the PG&E signage and clear relationship to Sacramento's growth and development into an electrically powered city help the building maintain its historic association.

The location of the building has not changed since its construction. While development has encroached on the location

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somewhat, PG&E Powerhouse remains one of the dominant features of the waterfront. This riverfront setting has changed somewhat since the plant's construction in 1912, but the large lot surrounding the building minimizes the impact of more recent incursions in the area.

Polk designed the Sacramento PG&E Powerhouse with exterior Beaux Arts architectural features. The building maintains these design elements, making PG&E Powerhouse an excellent example of Beaux Arts Classic Revival style. Most important to the style are the exterior classical details including, the pediments, arches, cornice, and mock courses of stone on the south, west, and northern elevations, which are all intact. Additionally, the fine craftsmanship of the figures above the main entryway are typical Beaux Arts design features. While these statues have suffered minor chipping and abrasion, the basic form and details exist. Like other buildings designed in Beaux Arts style in California, the PG&E Powerhouse was also designed with a classic tripartite vertical division—with a base, columns, and a crown—which has not been altered. The eastern elevation of the building was never finished and remains rough concrete. While this feature dates back to the building's period of significance (1912-1957), it does not appear to have been part of Polk's original design, and is not typical of the Beaux Arts style.

Concrete emerged as a common construction material during the early twentieth century. Reinforced concrete lent itself nicely to Beaux Arts Classicism because it could be finished to resemble stone or marble. Additionally, plaster and terracotta details were easily applied to Beaux Arts concrete buildings. Sacramento River Station B is an example of a reinforced concrete building around a steel frame. The steal girders were riveted together, a practice later replaced with spot welding. This lasting construction method has called for little maintenance over the years, and despite some minor cracking on the building's plaster coat and terracotta figures, the building appears to maintain integrity with regard to its materials and workmanship.

After PG&E sold the building in 1957 all the equipment in the building and all metal elements, including equipment, catwalks, pipes, and stacks were stripped, leaving only the concrete walls, floors, supports for the equipment, and window and door openings. With the all internal equipment—especially the massive boilers, crane, and catwalk elements—the existing interior is now a large open area, which would not have been the case prior to the removal of the building's more functional elements. This equipment was not part of Polk's design, and was temporary in nature; therefore, its removal does not affect the integrity of the building.

The riverfront setting coupled with the Beaux Arts architectural style gives the building enduring feeling as an important structure from the early 20th Century. Despite the development of some small hotels and motels to the north, and construction of a section of elevated freeway (U.S. Interstate 5) to the east, the PG&E Powerhouse continues to dominate its historic setting on the Sacramento River.

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#### **Narrative Statement of Significance**

The PG&E Powerhouse is best understood in two significant historic contexts: the early 20th Century move from gas to electric power, and the late 19th and early 20th Century architectural style of the Beaux Arts, fueled by the City Beautiful Movement. The building is significant at the local level under National Register Criterion A for its role in Sacramento's transition from gas lighting to electric power. Additionally, the PG&E Powerhouse is significant at the local level under Criterion C as an excellent example of a Beaux Arts/Classical Revival style utility building, designed by master architect Willis Polk. The building's period of significance begins with its construction in 1912 and ends when PG&E sold the building in 1957.

#### **Criterion A**

The PG&E Powerhouse is eligible for listing in the National Register under Criterion A for its role in Sacramento's transition from gas to electrical power. With the additional fourth generator in 1924, Station B became the largest and most important steam power plant north of San Francisco, and arguably the most important public utility building in the area.

PG&E, who commissioned the plant's construction in 1912, has had a major influence on the development of public utilities in California. The PG&E Powerhouse building represents PG&E's response to the increasing demand for electrical energy resulting from the rapid growth of the city during the early years of the twentieth century. In particular, the new station was intended to prevent interruptions in service which were occurring with increasing frequency, especially during the winter months. The property was purchased in 1910, and the location was attractive because of the nearby Sacramento and American Rivers, in addition to being just outside the city center. These features made this location ideal for a large power facility.

When built, the PG&E Powerhouse was one of eleven steam-powered electrical generating plants owned by PG&E. According to the original blueprints for the plant, the turbines burned oil. The turbines had the ability to generate 5,000 kilowatts of electricity, and produce 6,702 horsepower. The total cost of the plant's construction was \$774,000. This then exorbitant price made Station B one of the most costly plants built in Northern California during this period. Despite the hefty price tag, public opinion about the endeavor was favorable. On July 27, 1912, the Sacramento Bee anticipated the plant's opening with enthusiasm, claiming "When the plant is operating Sacramento will enjoy the best electrical service obtainable outside of Oakland and San Francisco." The role of the Station as a supplemental power source for the City of Sacramento made it a critical component of PG&E's regional system of power generating stations.

Despite the power generated by Station B's original configuration, the Folsom powerhouse, and Pumping Station #2, citizens of Sacramento began to experience occasional interruptions in electric service by the 1920s. These interruptions led to PG&E's decision in 1924 to add a fourth turbine generator to Station B at a cost of \$100,000. A Sacramento Bee article on February 9, 1924 stated "Should the hydro-electric power which now supplies the city from four sides, go off for any reason, the new station will automatically take care of service far out into the valley on either side of the city. If an interruption should occur north of Marysville, Chico or Woodland, this plant can be brought into service and power furnished from Sacramento. Later as the growth of Sacramento requires, the whole capacity of the plant will be reserved for Sacramento." The addition of the fourth turbine marks a historically significant upgrade for the powerhouse.

With the addition of the new generators the PG&E Powerhouse became the largest electric power plant in Northern California north of the Bay Area. Intended to serve as an auxiliary power source, the generator increased the capacity of the station threefold, from 6,702 horsepower to 20,122 horsepower. The power generated was available to the entire Sacramento region and amounted to one third more power than could be used by the city of Sacramento itself at that time. The power available as a result of the addition was equal to any city in the United States with a population of 150,000.

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The PG&E Powerhouse served as the source of auxiliary power through the 1930s. During the 1940s and early 1950s, PG&E used Station B for test purposes only. In November of 1954, the plant was formally closed. The plant was sold to the Associated Metals Company of Oakland in June of 1957. Between 1954 and 1957 Associated Metals salvaged all mechanical equipment and finishes from the building. PG&E assisted Associated Metal through 1965 dismantling the plants remaining power generating equipment.

In 1960, the California Department of Transportation gained ownership of the site as part of the right-of-way for Interstate 5. In the 1990s, the California Department of Water Resources proposed reusing the building. The Department of Water Resources intended to use the PG&E Powerhouse for a new California Water Center and made a considerable investment in seismically upgrading the structure for reuse, and cleaning or containing the contaminated soil on the property. Later, the State's Department of Parks and Recreation took over ownership, and in 1974 the Station was given to the State's Department of General Services. The State's visions for the PG&E Powerhouse never came to fruition and the building and surrounding land was eventually sold to the City of Sacramento's Department of Parks and Recreation in 2002.

#### **Criterion C**

The PG&E Powerhouse is eligible for listing on the National Register under Criterion C as an excellent Sacramento example of the Beaux Arts Classical Revival style. Furthermore, the prominent California architect Willis Polk, who designed the PG&E Steam Power Plant, is widely considered as a significant contributor to the evolution of this architectural style in Northern California.

Willis Polk was born in Kentucky in 1867. Growing up, Polk learned about architecture from his father Willis Webb Polk, who ran an architectural firm in St. Louis beginning in 1873. Polk's father was also president of St. Louis' Merchants Exchange. As a young man, Polk was tutored at home until he was fourteen when he became an apprentice to Jerome Legg, another St. Louis architect. In 1881, the Polk family moved to San Francisco, where Polk assisted his father in his architectural office. After two years, Polk began to work as an ambitious draftsman, moving from one firm to another. As was customary for aspiring architects in 1900, Polk departed for two years of study in France under architectural masters at the Escole de Beaux Arts, Paris.

When Polk returned from Paris in 1902, he moved to Chicago where he worked for the nationally renowned architect and planner Daniel H. Burnam (see above regarding Beaux Arts Style). Under Burnam's instruction, Polk designed several large structures and buildings, including the First National Bank of Chicago, the Railroad Terminal in Indianapolis, and the Merchant's Exchange in San Francisco.

Willis Jefferson Polk was an important Bay Area architect responsible for the design of several other similar power facilities and substations in Northern California, but is better known for a series of buildings throughout Chicago and the Bay Area.

In 1904, Polk established Willis Polk & Company, a San Francisco architectural firm that began to receive commissions for a number of pre-1906 buildings, such as San Francisco's First National Bank. Polk also completed the Ferry Building, originally begun by A. Page Brown. After the earthquake and fire of 1906, Polk's company became active in the reconstruction of San Francisco. Polk's first work after the disaster included reconstructing the Merchant's Exchange and the Mills Building that had only been completed one year prior. Soon after, Polk received a number of important commissions—including the remodeling of the James Flood Mansion on Nob Hill, an enlargement of the Mills Building, an annex to the Chronicle Building, and the Halladie Building—all in San Francisco. Polk also designed many residences throughout the San Francisco Peninsula. Additionally, Polk assumed an important leadership role in California's emerging architectural community as chairman of the Architectural Commission and organizer of the well-known Panama-Pacific International Exposition of 1914 and 1915 where the Palace of Fine Arts (a grand Beaux Arts/City Beautiful gesture) made its début. Polk's influence is evident in Sacramento by the National Bank of D.O. Mills (currently listed on both the California and National Register), the Western Pacific Railroad Depot, and PG&E River Station B Power Plant.

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Polk's utility buildings in the San Francisco Bay Area were primarily buildings built for PG&E or its predecessors. The design of River Station B is consistent in style with the other public buildings designed by Polk's firm. The building clearly reflects the formal Beaux Arts Classicism that Polk learned while studying in Paris. This style is also prevalent in many of Polk's other works throughout California. However, the asymmetrical composition of the two juxtaposed rectangular forms is rather atypical compared to Polk's other buildings, but instead reflects the PG&E Companies "typical" steam plant electrical generating facility layout. The large cartouche centered in the windowed arch of the building is a grand Beaux Arts gesture. Other expressions of the style include the surface pattern replicating stone courses, large north windows, the decorative frieze and cornice that encircles the building, and the two large handsome arched windows of the east and west façades. The large decorated entry doors facing the river contribute to the structures imposing disposition. The exterior of the building reflects a sophisticated utilitarian structure whose elegant presence is enhanced by its solitary and imposing riverside setting.

The design and formality of River Station B influenced the design of other utility facilities constructed in Sacramento. In particular, Sacramento's water treatment facility is located across Interstate 5 to the east. Built in the early 1920s, the main structure of the water processing plant is an elegant version of a Classical Revival structure. Other Sacramento utility plants, such as the water pumping substation on Riverside Boulevard and the power substation on Power Inn Road also reflect Classical Revival styles.

Sacramento's PG&E Steam Plant is a sophisticated representation of its architectural type and one of the three Sacramento works of the master architect Willis Polk. The River Station served as an important functional element of the electrical power system developed by the PG&E, which was vital to Sacramento's early 20th Century development and industrialization. For these reasons, Sacramento River Station B is eligible for the listing on the National Register under criterion C for its contribution to the development of Sacramento and Northern California, and for its architectural stylistic influence on the city.

#### **Historic Context**

#### Criterion A: Electric Power in Northern California

During the late nineteenth and early twentieth centuries many small independent utility companies, both gas and electric. emerged in California. While competition among these small companies drove down prices, soon it became apparent that these utilities lacked the capital to invest in a modern power infrastructure grid. Moreover, when small companies concentrated on defending certain geographic areas against competitors, it ultimately stifled their growth. In California's then laissez faire environment small utilities developed a pattern of growth, merger, and takeover. The cycle replicated itself regardless of region or environment. First, small utility providers in local markets looked to merge with neighboring companies to offer consolidated local service. Mergers proved successful and soon a single company provided service to entire regions. In an age typified by corporate trusts, California's result was entirely predictable. Giant utility companies like PG&E gained hegemonic control of entire sectors of the state's utility industry. Powerful providers also meant an unrivaled amount of capital flowed into California's infrastructure. Business entrepreneurs and risk-takers fueled this gilded-age culture. In the end, these large companies brought their superior means to bear and forever transform California's built environment. Remnants of this transformation still exist in the form of buildings such as the PG&E Powerhouse.

The first of the small gas utility companies in the western United States was a direct ancestor of PG&E. In 1852, the San Francisco Gas Company was created by Scottish-born entrepreneur Peter Donahue and his brother, James. Located near the San Francisco waterfront, at the intersection of First and Howard Streets, the first gas plant began transforming coal into manufactured gas by 1854. That same year gas began to heat and light homes and businesses throughout the city. Gas grew in popularity and the Donahues reaped a generous profit from their enterprise. After only two years in operation the original plant was enlarged to meet the growing demand. However, it was not long before competition to the Donahue's company emerged. In 1870, the City Gas Company began competing with the San Francisco Gas Company,

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and by 1873 the two companies merged to form the San Francisco Gas and Light Company.

On June 5, 1854, just after San Francisco began receiving gas service, William Glenn obtained a franchise to build and operate a gas plant in the nearby state capital, Sacramento. Glenn sold his franchise to a group of entrepreneurs led by Angus Frierson who established the Sacramento Gas Company on August 22, 1854. By October, the Sacramento Gas Company began construction of a plant in an area north of the Southern Pacific Railyards, an area known at that time as Slater's Addition. However, heavy flooding that year delayed breaking ground on the project until the following spring. The plant was completed and began providing gas service in December, 1855. In the first year the daily output of gas in Sacramento was only 8,000 to 10,000 cubic feet, and the company served just 13 customers. Businesses comprised most of the gas clientele in Sacramento early on because the price of gas was so expensive. In 1863 the City agreed to pay the Sacramento Gas Company to install 45 street lamps. These lamps would only be lit during sessions of the State Legislature.

It was not until 1871 that a serious competitor to the Sacramento Gas Company emerged. In that year W.E. Brown, Robert E. Clark, and Albert Gallatin established the Citizens Gas and Light Company in Sacramento. The fledgling company installed gas lines and fixtures along portions of the riverfront. In a competitive spirit the Citizens Gas and Light Company maintained 18 miles of street mains, compared to the 10 miles of lines owned by the Sacramento Gas Company. In 1887, following cycle of consolidations and mergers with other utilities, including electric providers, the Citizens Gas Company began offering both gas and electric service to Sacramento residents.

According to PG&E historian Charles Coleman, the evolution of the Sacramento Gas company was typical of gas and electric utilities in throughout California—first small pioneer gas companies, then competition and merger, then merger with electric companies, then consolidation into regional systems, and finally into the one, integrated, interconnected system of today that focuses on supplying California with affordable electricity.

The brothers H.P. and Charles Livermore visited the town of Folsom in rural Sacramento County and envisioned a factory powered by the by the American River. However, the rapid growth of California's electric industry inspired H.P. Livermore to propose a more radical idea. Long distance transmission of power had not proven reliable, yet Livermore insisted the production of electricity at Folsom could power the growing Sacramento metropolis 22 miles downstream. In particular, Livermore claimed power generated at Folsom could modernize Sacramento, including expanded electric street railways. Livermore soon incorporated the Sacramento Electric Power and Light Company to help engineer his project. He structured his own company as a franchise for the development of street railways in Sacramento. This way Livermore could try to lure large eastern investors to invest in a long-distance transmission system from Folsom to Sacramento. Before long, Livermore had solid offers from both Westinghouse and General Electric.

Working in cooperation with Sacramento financier Albert Galatin, General Electric quickly crafted a deal with the Sacramento Electric Light and Power Company to begin work on the Folsom Powerhouse in early 1894. By the summer of 1895, Folsom's generators began producing electricity for transmission at 11,000 volts to Sacramento, 22 miles away. By October, the plant's four generators were in operation with a total capacity of 3,000 kilowatts. The completion of the Folsom Powerhouse marked a milestone in long-distance transmission of electricity. Engineers came from throughout the United States to inspect the plant, and the *Journal of Electricity* described Sacramento as "the first American city to demonstrate the practicability of long-distance transmission [of electricity] at high voltage."

Despite the technical innovation achieved by the Folsom plant, the Sacramento Electric Power and Light Company faced powerful opposition from competitors and massive debt. The company struggled to gain a sound financial footing in California's utility market until 1903, when the company was bought-out by the larger California Gas and Electric Company—a consolidation of several other power companies located throughout California. Established during the 1890s by Eugene J. deSabla and John Martin, California Gas and Electric had aggressively pursued the development of new hydro-electric plants and the acquisition of existing ones throughout the state. By 1905, California Gas and Electric could

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boast of providing gas and electricity to 22 counties. On October 10<sup>th</sup> of the same year the growing utility merged with San Francisco Gas and Electric Company (heir to Peter Donahue's San Francisco Gas Company), finally emerging as PG&E. N.W. Halsey, owner and financier of the merger, hailed from a powerful eastern brokerage company. The first president of PG&E, John Britton, was previously president of the Oakland Gas Light and Heat Company and later director of the California Gas and Electric Company.

Between 1900 and 1910, the population of California had increased by 60 percent, and with it came an increased demand for electric power. PG&E established an electric plant (Pumping Station #1) at Front and T streets in 1907. While the City of Sacramento was primarily powered by the Folsom Powerhouse, PG&E built The Sacramento River Station B in 1912 to respond to growing fears that the demand for electricity would outpace production of Folsom's hydroelectric plant. By 1914, PG&E began building a pumping station (Pumping Station #2) on Riverside Boulevard near 11<sup>th</sup> Avenue, south of the central city.

#### Criterion C: City Beautiful Movement and Beaux Arts Architecture

The City Beautiful movement was a city planning and architectural movement that gained a following during the 1890s and early 1900s. At this time, American cities were faced with increasing populations, both due to the domestic shift of Americans from rural to urban areas, and from international immigration. According to American historian Thomas Hines (1991), not only had population increased during the period between 1860 and 1910 from 31.4 million to 91.9 million, but the percentage of Americans living in cities increased as well—by 1910, 46% of American's lived in urban areas with population over 2,500.

In Gilded Age America, rapid industrialization and technological progress were the norm. Around the turn of the century, these conditions inspired a group of progressive reformers to imagine a cure for the moral decay that was perceived to accompany poverty-stricken urban environments. Enlightened intellectuals, artists, and a few elites argued that the negative aspects of industrialization could be cured through grand public works and more thoughtful city planning. Moreover, supporters of this idea thought city beautification would encourage social order and improve the lives of the urban working classes. This idea became known as "City Beautiful." The movement's committed enthusiasts lobbied municipalities around the country to build grand city monuments and public works installations that lasted (although in ever-evolving forms) throughout the twentieth century. A popular architectural style of the period, commonly referred to as Beaux-Arts, soon became associated with this sort of progressivism.

Architect Daniel Burnham articulated the ideals of the city beautification movement in the call to American architects when he said "Make no little plans, they have no magic to stir men's blood..." This ideal lent itself well to the Beaux Arts Style already popular among many American Architects. Burnham envisioned architecture that would create American cities to rival noble civic architecture found in European urban centers. Reformers also argued that the Beaux Arts tendency toward massive forms and grand statements would create an urban environment that could offer a sense of government legitimacy in a time plagued by social and political uncertainties.

In 1893, the Beaux Arts Style was displayed for City Beautiful reformers at Chicago's World Columbian Exposition. Led by Burnham, the exposition legitimized the City Beautiful Movement. The movement's leaders argued that by building a model city of grand scale—complete with a state-of-the-art transport systems, and no *visible* poverty—social ills would vanish from even the largest urban centers. Once coupled with the City Beautiful movement, this style influenced the design of American public and private buildings, utilitarian or otherwise, for years to come.

The style borrowed its name, meaning "fine arts," from the Ecole de Beaux Arts in France where many prominent American architects studied during the period. Dominated by massive classical forms, Beaux Arts also draws on picturesque traditions born in France and Victorian England. Additionally, trademarks of the style include its monumental scale, large arched openings, multi-panes windows, pillars, columns, pediments, sumptuous ornamentation, figurative

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sculpture, cartouches, swags, and various detailing inspired by the natural environment. Along with public buildings, a few of America's industrial barons adopted the style on lavish mansions.

In Sacramento, as in other cities in the United States, the classical design and planning principles of the Ecole des Beaux Arts and City Beautiful Movement were largely influential from the 1880s through the 1920s. Many architects, Ecole-trained or not, subscribed to the monumental, classical principles of the City Beautiful Movement. Willis Polk, notable Bay Area architect who designed Sacramento River Station B, studied at the Ecole des Beaux Arts in Paris before coming to California. Polk's design maintains classical composition and ornament that provide striking image and character, reminiscent of the World's Columbian Exposition and the grand buildings of Europe. The elements that lend Sacramento River Station its Beaux Arts character include monumental massing, a flat roof, classical detailing and sculptural elements.

Polk also designed the D.O. Mills Bank Building in Sacramento in the Beaux Arts Style and chose the same style for the River Station. Other notable buildings in Sacramento designed in the Beaux Arts Style include the State Capitol, the Library Building, the Courts Building, the Public Market Building, and the Sacramento City Hall.

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#### Interviews

Paul Brady, retired Pacific Gas & Electric Company employee Sherry Cook, Corporate Library Lyle Faver, Pacific Gas & Electric Company employee Walter Gray, California State Railroad Museum Director James Henley, Sacramento History and Science Center Director Amy Rose, Pacific Gas & Electric Company employee Leo Scott, retired Pacific Gas & Electric Company employee: Land Division Robert Stinkronard, retired employee Marshall Wilson, retired employee

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#### **Verbal Boundary Description**

Sacramento River Station B is bounded on the southern edge by Robert T. Matsui Waterfront Park; on the east by Jibboom Street; on the north by the south property line of parcel number 001-0012-021-000; and, on the west by the Sacramento River. The area remains industrial in character, including the nearby water treatment facility. However, commercial development such as motels and gas stations have encroached into the district. After 1957 the site became a wrecking and salvage yard. Later, evidence of toxins on the site kept Sacramento River Station's parcel vacant. A cellular transmission tower was eventually built in the north-west quadrant of the site, but today the parcel remains otherwise undeveloped.

#### **Boundary Justification**

The designated boundary coincides with the original assessor parcel containing the plant and auxiliary elements, with a minor modification. A small portion of the eastern end of the original parcel was removed from the parcel with the construction of Interstate 5 immediately to the east of the plant. The original parcel has been re-designated as the three parcels: 001-0190-004, 001-0190-012, and 001-0190-005. The small square excluded portion (parcel 001-0190-005) on the north edge of the designated parcel was retained by the Pacific Gas & Electric Company when the property was sold to the state. This separate parcel contains a small electrical tower, but no elements affiliated with the plant's former operation. All remaining original elements of the plant operation including the pier remnant and pump/intake station located in the river opposite the plant structure are included in the two remaining parcels.

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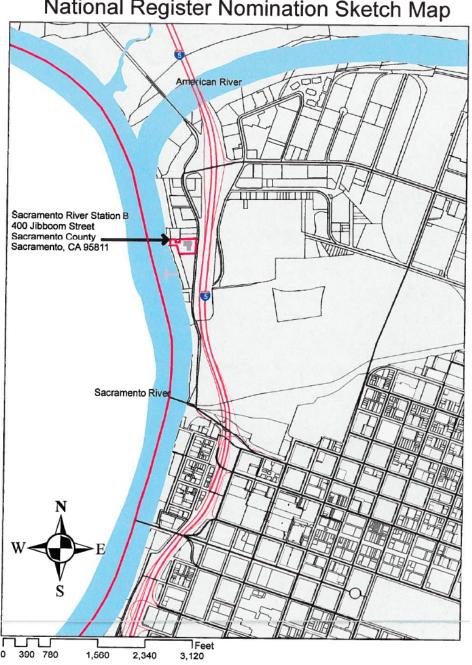
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**Sketch Map Continuation Sheet** 

Sacramento River Station B: National Register Nomination Sketch Map



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#### **Photograph Log**

#### **Common Photographic Label Information:**

Resource Name: Sacramento River Station B

Location: Sacramento, Sacramento County, California

Negative Location: Page & Turnbull Inc. Sacramento Office Files

2401 C Street, Suit B, Sacramento, CA 95816

**Photographer:** Staff: Page & Turnbull Inc.

**Date Taken:** 9/01/2009

Photograph Number	Description of View	
1	Looking north (southern elevation) from Robert T. Matsui Waterfront Park	N
2	Looking southeast (west and north elevations) from Sacramento River levee	SE
3	Looking southwest (north and west elevations) from Jibboom Street	SW
4	Looking northwest (eastern elevation) from Jibboom Street	NW
5	Looking northeast (main entryway) inland from Sacramento River levee	NE
6	Looking south (boiler room) down southern wing	S
7	Looking south (turbine room) at turbine support structure	S
8	Looking east (turbine room) along interior wall	E
9	Looking west (turbine room) at subsurface water intake pit	W
10	Looking northwest (intake pit) into subsurface water intake pit	NW

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### Figure Log 1

#### **Common Figure Label Information:**

Resource Name: Sacramento River Station B

Location: Sacramento, Sacramento County, California

Negative Location: Center for Sacramento History, 551 Sequoia Pacific Blvd, Sacramento, CA 95811-0229

Photographer: Bob McCabe, Bob McCabe Collection

Date Accessed: 9/01/2009

Figure Number	Description of View	<b>Camera Direction</b>
1	Looking north (c. 1912) at southern elevation	N
2	Facing southeast (1924) with all smokestacks active	SE
3	Facing northeast (c. 1912) from across the Sacramento River	NE
4	Facing southwest (c. 1912) with Southern Pacific Train in foreground	SW
5	Facing northwest (c. 1960) with oil tanks in foreground	NW

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### Figure Log 2

#### **Common Figure Label Information:**

Resource Name: Sacramento River Station B

**Location:** Original PG&E Co. Plans

Negative Location: Pacific Gas and Electric Company Archives

Accessed by: Staff: Page & Turnbull Inc.

Date Created: c. 1912

Figure Number	Description
6	South and north elevations
7	Aerial first floor
8	Equipment and stairs
9	Equipment and stair detail
10	Roof detail
11	West elevations and pilings

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#### Figure Log 3

#### **Common Figure Label Information:**

Resource Name: Sacramento River Station B

**Location:** Sacramento Bee Photographic Morgue

Negative Location: Center for Sacramento History.551 Sequoia Pacific Blvd, Sacramento, CA 95811-0229

Accessed by: Staff: Sacramento Preservation Office

Date Created: c. 1970

Figure Number	Description of View	<b>Camera Direction</b>
12	Facing northeast toward loading door	NE
13	Facing north toward loading door	N