Celebrating Our Nation's First Central Electric Power Station:

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Background Information on Plaque Dedication

Pacific Place, 22 Fourth Street, San Francisco

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Before the exploits of Thomas Edison became widely known in the United States, only a few scientists or tinkerers could imagine the revolutionary implications of a then-new power source. During the decade 1865-75, bold experimenters from Paris and Rome to New York and San Francisco ushered in the Age of Electricity, often invoking mythological spirits— gods of lightning— to explain this mysterious force.

Jubilant San Franciscans in 1876 hailed the arc lights introduced by Father Joseph Neri, a Jesuit teacher at Saint Ignatius College (Market Street near Fifth). His achievement celebrated the nation's Centennial. Soon, a few firms— Palace Hotel, Chronicle, and Union Iron Works— installed the new lights, generating their own power by "in house " dynamos.

On June 30, 1879, George Roe, a Canadian broker living in San Francisco, incorporated the California Electric Light Company. In September, the visionary firm produced and transmitted electricity for commercial sale to 21 privately owned arc lamps from the first central power station in the world. The primitive plant— actually a shed of 4 by 4 timber uprights and walls of sheet iron— enclosed a steam engine and boiler, a huge coal pile, and two small dynamos (patented April 24, 1877 by engineer Charles Brush for Cleveland's Telegraph Supply Company).

This modest enterprise prospered; after many mergers, it grew into the present Pacific Gas & Electric Company. With the passage of a century, the Company prepared to honor a "Centennial of Light" in 1979. Along with other festivities, its January newsletter announced: "Among observances here will be placing of a plaque at the Fourth and Market Street site... of our first power station." On October 15, Barton Shackelford, PG&E president, and Frederick Mielke, board chairman, presided at the flag-draped dedication ceremony.

After the event, a cement mason embedded a bronze plaque in the terra-cotta-tile-over-concrete entry to 22 Fourth Street (southwest corner of Market Street). Accordingly, this entry substituted for the precise back-lot site of the long-forgotten CELC original station. The 1979 marker made a statement about a primitive station's location. It also posed provocative questions about the contribution of electrical workers to California's growth.

Do any records exist of the first mechanics employed by the California Electric Light Company? Who were they? Where did they develop their skills? How were they recruited? We know much of the life of George Roe who founded the CELC, but nothing of the blue-collar workers who literally ushered in the Age of Electricity on the Pacific coast.

At least three years before Edison opened New York's Pearl Street Station (commonly credited with the start of electrification in the United States), the CELC's shed at Fourth below Market supplied power in "downtown" San Francisco. This chapter in economic history is fully documented. Unfortunately, we have only fragmentary knowledge about the early telegraph and utility company employees, outside linemen and inside wiremen, and makers and installers of equipment, who banded together in California's first electrical workers' unions.

Should not the anonymous mechanics who harnessed nature's energy to bring light to fellow citizens be honored alongside a physical power plant? Cannot a bronze plaque serve multiple purposes? Before taking up these questions, I look back at the CELC and its workers.

The CELC's wood-frame shanty with a coal-fired steam boiler did not survive a year. On April 24, 1880, when it succumbed to fire, its employees equipped a new plant at 117 O'Farrell Street. Demand for electricity expanded as incandescent lamps replaced arc lights. Accordingly, the CELC moved to 220 Jessie Street where it built a plain brick building. After 1906, distinguished architect Willis Polk rebuilt the Jessie Street Substation; now recognized as a San Francisco landmark.

We know much of our physical landscape, its gems and wonders, but little of the workers—their lives and skills— who shaped our industrial infrastructure. For example, Charles L. Barrett, an early PG&E executive, reveals the lack of detail on the origins of our electrical work force in a brief passage of reminiscences. After fire had leveled the second CELC, he observed:

> There were no workmen in San Francisco familiar with this class of work [Brush dynamos], but 'necessity was the mother of invention' again, and ways and means were devised for repairing the apparatus that came thru the fire (Barrett, page 248).

These remarks cry for amplification. Can anyone now recover the lost stories of the CELC's workers who devised "ways and means" to repair equipment?

We find a clue in the Chronicle's initial use of electrical power. Steam drove its then-advanced presses; the same engine also fed steam to the Gramme generator/dynamo, which in turn powered two Jablochkoff "candles" (arc lights). We ask: Who "hooked up" boiler, engine, printing press, generator, and arc lights? What group of craftsmen held jurisdiction over installing and maintaining steam-operated printing presses? How did the electrical trade separate itself from that of boilermaker, steamfitter, millwright, machinist, typographer, or pressman?

Before electrical power could be used for carbon arc lighting, gas-lit street lamps had been perfected. The lamplighter made his rounds in every major urban center. Distilling gas from coal, storing gas, laying street pipes, and installing meters in customer's firms became one "school" in the development of a distinct trade for electricians. San Francisco's first gas works dates to 1854 with the opening of a plant at First and Howard Streets (soon named "Tar Flats" after the dumping of sludge waste in the adjacent Bay waters).

The electro-magnetic telegraph industry served as a similar training ground for electrical workers. We recognize Samuel F.B. Morse, and the eventual spanning of the continent with "lightning lines"; we allow other pioneers to slip into obscurity.

In 1853, telegrapher James Gamble with five men constructed a wondrous line from San Francisco to Marysville via San Jose, Stockton, and Sacramento. He used a wagon drawn by a team of "well broken mustangs" to transport galvanized iron wire and glass insulators shipped around the Horn and timber poles cut locally. His crew introduced the lineman's trade to California; Gamble's "wire-rope express" preceded the Pony Express, the transcontinental railway, and all means of subsequent communication.

Many streams contributed to the river of electric power in the second half of the nineteenth century: telegraphy, gas lighting, steam-driven dynamos, and central power stations. Even before Roe's station began service, several small firms had imported needed apparatus. In June, 1877, Monroe Greenwood consolidated these units into the California Electrical Works (35 Market Street), undertaking to manufacture goods locally. The equipment he offered included telegraph instruments, electric-light generators, telephones, burglar alarms, submarine cables, insulators, and copper battery plates integral to gold ore quartz mills.

Did the California Electrical Works actually employ any electricians? How did this firm classify its work force? Did it supply gear to the California Electric Light Company? We comprehend progression from the CELC's backlot shanty to today's gleaming stations, but we brand its first set of workers as strangers.

To demystify the rise of a skilled electrical craft, we turn to labor history. In the 1870s, operators and linemen together formed the Brotherhood of Telegraphers, District Assembly 45 of the Knights of Labor. After a lost strike in 1883 against Jay Gould's monopolistic Western Union, veteran linemen, together with building-trades wiremen, regrouped in 1891 in the National Brotherhood of Electrical Workers.

As the NBEW reached into Canada in 1899, it transformed itself into the International Brotherhood of Electrical Workers. The NBEW chartered San Francisco Local 6 on February 21, 1895. For more than a century, Local 6 has championed advance trade union and community programs. Local 1245, facing the PG&E corporate giant, was born out of struggle for industrial unionism by the CIO in the mid-1930s. However, some of the linemen for the California Electric Light Company and other PG&E predecessors were members of the IBEW. Perhaps we can yet recover their story. Regardless of our success, these forgotten electricians played a much larger symbolic role than that only of pioneer mechanics.

Let us imagine the Fourth Street power-station crew at the head of a dramatic labor procession. Tools in hand, they strut in a parade from their primitive work site to today's communication centers and science-fiction laboratories. Not only do these ancestors march but, in spirit, they still inhabit a corner lot in San Francisco. They live in every utility station, transmission line, electrical outlet, computer complex, and, beyond, wherever power flows.

With our brief account of the 1879 primitive CELC power plant and the 1979 bronze plaque marking its location, as well as the rise of an electrical work force, we turn to a report of the physical site at Fourth and Market Streets.

James Lick, an early San Francisco philanthropist, had owned a Fourth Street lot (below Market) and had willed it to the Society of California Pioneers. After Lick's death, the Society erected its grand headquarters on the site in 1886. The new building resembled a decorated wedding cake; its exterior displayed superb work done by stone and marble masons, bricklayers, tilesetters, plasterers, and other "mud" (mortar) tradesmen. The hall's architects identified it as a Venetian-Gothic manse.

When the 1906 earthquake/fire leveled Pioneer Hall, a nine-story, reinforced-concrete structure took its place. Building tradesmen clad the then-new Pacific Building at 821 Market Street in green Italian tile; much of its interior of veined marble and hand-carved wooden panels had been lost through many years of use and change. Currently, this venerable structure houses the Gap's Old Navy store.

In 1979, developer Joe Chen and Cahill Contractors added an 18-story annex (intended as an Apparel Mart) to the Pacific Building. By 1988 the new venture had proved unsuccessful. After bankruptcy and some years of vacancy, entrepreneur Steven Pan of Taiwan bought the derelict building-annex and began extensive planning for a trendy retail store, a hotel, and office space. Gensler Architecture handled design and Plant Brothers competed the remodeling for the newly named Pacific Place in 1999.

Early in 2004, the Jamestown Corporation of Atlanta bought the Pacific Place complex on behalf of a group of German investors. Thus, we recall that our CELC original power-plant lot had become the home of the Society of California Pioneers, and, most recently, its ownership has moved from Asia to Europe. We speculate whether the current proprietors know their site's fascinating history.

Among the countless meetings held in Pioneer Hall during its two decades, one stands out for its particular significance to trade unionism. On January 10, 1980, the California Labor Federation dedicated a bronze plaque to mark the site of its predecessor body's 1901 charter convention at Pioneer Hall.

The labor plaque included an insert photo of the ornate Pioneer Hall building. Jack Henning, executive officer, and Albin Gruhn, president, of the State Federation, presided at the ceremony along with other civic leaders. Mayor Dianne Feinstein (now Senator) hailed the event as reflecting the vitality of the local union movement. To my knowledge, no one present at the dedication commented on the ironic circumstance of complementary historical markers– one placed by a major corporation; the other, by a state labor body– embedded side-by-side in the same entry.

Some time in 1999, during the remodeling of Pacific Place, both bronze plaques vanished. Laborers or cement workers jackhammered them out of their concrete resting place. Someone set each aside for safekeeping or, sadly, hauled them away to a scrap-metal yard for a few dollars profit. To date, I have not found either plaque nor learned of their disposition. In pointing to their disappearance, we glimpse the ambiguous response by trade unionists to their past.

Two influential unions in the International Brotherhood of Electrical Workers, Local 6 (construction and related trades in San Francisco) and Local 1245 (Northern California utility-production workers) owe their distant origin to the crew employed by the CELC in 1879 to generate electricity. Although the Apparel Mart annex to the Pacific Building was under construction in 1979, with a seasoned crew of IBEW Local 6 mechanics on the job and Local 1245 members ready to supply power to the new structure, I have found no record of participation in either celebration by the two unions.

Such oversight occurs when work is a neglected component within the history of our communities. Our tale of missing plaques conveys intertwined messages. Unless the "owners" of a plaque revisit their site and reflect on its message, no one can guarantee longevity. Who holds title to a historical marker? How long does such ownership last? Who guards the bronze from junkers or vandals?

Who takes responsibility for our lost plaques: the PG&E; the California Labor Federation; Steven Pan's Pacific Place; the Plant Brothers construction crew members who last "improved" the entry to 22 Fourth Street? All these individuals and institutions ought to honor the long-neglected mechanics who first brought light to their community.

International Brotherhood of Electrical Workers Local 6 and Local 1245 in recognition of the role of their pioneer members now join together in 2005 to install a new plaque. It marks a particular site and, more importantly, symbolizes respect for those who established our trade. As electricity continues to transform our lives, we pause to note the contributions of those who "hooked up" steam boiler, Brush dynamo, and arc lights in San Francisco so long ago.

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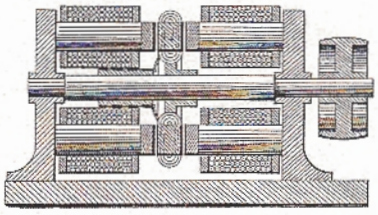

C. F. BRUSH MAGNETO ELECTRIC MACHINE No. 189,997 PATENTED APRIL 24, 1877

OUR NATION'S FIRST COMMERCIAL CENTRAL ELECTRIC POWER STATION

AT THIS SITE IN SEPTEMBER, 1879, THE CALIFORNIA ELECTRIC LIGHT COMPANY BUILT A WOODEN SHANTY, HOLDING A COAL-FIRED BOILER, A STEAM ENGINE, AND TWO SMALL CHARLES BRUSH DYNAMOS. THE PRIMITIVE CENTRAL POWER STATION SUPPLIED ELECTRICITY TO TWENTY-ONE PRIVATE OR COMPANY-OWNED ARC LAMPS IN SAN FRANCISCO. THE C.E.L.C. PLANT -- THE FIRST COMMERCIAL ELECTRIC POWER STATION IN THE WORLD -- BURNED DOWN IN APRIL, 1880, BUT RESUMED OPERATIONS AT 117 O'FARRELL AND EVENTUALLY AT 220 JESSIE STREET. THE C.E.L.C., BY MERGERS WITH OTHER FIRMS, GREW INTO THE PACIFIC GAS AND ELECTRIC COMPANY.

IN 1886, THE SOCIETY OF CALIFORNIA PIONEERS ERECTED PIONEER HALL ON THIS ORIGINAL POWER-PLANT LOT. THE EARTHQUAKE AND FIRE LEVELED THE ORNATE BUILDING IN 1906. THE CALIFORNIA LABOR FEDERATION'S PREDECESSOR STATE BODY HELD IT'S CHARTER CONVENTION IN THE HALL IN 1901.

ALTHOUGH THE POWER PLANT AND PIONEER HALL ARE LONG GONE, THE UNKNOWN ELECTRICIANS WHO BROUGHT LIGHT TO THEIR FELLOW CITIZENS MORE THAN A CENTURY AGO LIVE IN SPIRIT WHEREVER GENERATORS TURN, CURRENT FLOWS, AND IBEW MEMBERS SERVE THEIR COMMUNITIES.

ERECTED BY:
THE INTERNATIONAL BROTHERHOOD OF ELECTRICAL WORKERS LOCAL UNIONS 6 AND 1245
AND THE FUND FOR LABOR CULTURE & HISTORY

LABOR LAND MARK


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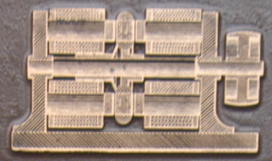

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Photo Captions for Power House Booklet 001:

Photo 1:

International Brotherhood of Electrical Workers Offices are pictured left to right at the plaque dedication ceremony at Pacific Place, 22 Fourth Street, San Francisco, California, June 15, 2005.

International 9th District Vice President Michael Mowrey, International Secretary-Treasurer Jon Walters, IBEW Local 6 Business Manager John O'Rourke, International President Ed Hill, and IBEW Local 1245 Business Manager Perry Zimmerman.

Photo 2:

Entry plaza at Pacific Place, 22 Fourth Street, San Francisco, California.

Photo 3:

Close-up picture of Bronze Plaque.