The WATER and POWER BUILDING

Water and Power for a Great City

Abundant water and electricity—instantly available when needed, and low in cost to users—provide a solid basis for Los Angeles' remarkable development. Water is the lifeblood, power the heart beat of the great and growing city. To serve the city's ever increasing needs for water and electricity is the responsibility of the Los Angeles Department of Water and Power. ■ The 17-story Water and Power building is a Civic Center landmark, headquarters of a utility system with hundreds of facilities throughout the city and with aqueducts and transmission lines delivering water and power from sources as far as 300 miles to the east and 850 miles to the north. Aqueducts and pipelines, reservoirs, pumping and chlorinating stations, power generating plants, transmission lines, power receiving and distributing stations, over 6,600 miles of water mains, over 17,000 miles of electric distribution circuits, and many other facilities make up this vast and complex system. It is the nation's largest municipal utility, a business with total assets of over 1½ billion dollars, owned by the citizen-customers it serves. In the past ten years alone, the DWP invested over $941 million in new water and power facilities. ■ The citizen-owned Department of Water and Power is administered by the Board of Water and Power Commissioners, appointed by the Mayor and confirmed by the City Council. It is managed and operated under the direction of its General Manager and Chief Engineer by a force of about 12,500 career employees. Water is provided to the people of Los Angeles at the lowest rates of California's three largest cities, and electricity at the lowest rates of the 16 largest U.S. cities.

The Water and Power General Office Building

The Water and Power Building at the westerly end of the Los Angeles Civic Center is located on a 12-acre site bounded by First, Temple, Hope and Figueroa Streets. It was dedicated on June 24, 1965. ■ The new headquarters building replaced the old DWP headquarters at 207 South Broadway, first occupied in 1921, and five other downtown buildings, plus space in other close-in DWP service buildings. At present, some 3,685 employees work in the new building. ■ Realizing the need for consolidating its scattered headquarters groups, the DWP over a quarter-century ago began planning a centralized office building. Initially a site was acquired in the area between First and Temple Streets, Hill Street and Grand Avenue. This land, however, was sold to Los Angeles County to become part of the site of the County's new Civic Center

Spiral stairway connects lower level floor with lobby of building

structures, and the DWP later purchased the present site. Meanwhile, the DWP system was growing rapidly to keep pace with Los Angeles' booming population, business and industry. Studies of then current and future space requirements confirmed the need, the advantages, and the economies of a large centralized office building. Architectural and space planning of the Water and Power Building began in 1958. Excavation and grading of the site was started in 1961. ■ The building, constructed at a cost of about $32 million, was financed entirely from revenues of the Department of Water and Power and represents no cost or burden to the taxpayers.

Engineering computer center

Portion of busy customer records office

The building's electrical and mechanical equipment is controlled here

Modern-Day Working Center

The attractive Water and Power Building, with its contemporary lines, is a modern-day administrative and working center, planned to facilitate efficiency and economy and provide more convenient service to the public. It is completely all-electric, using the newest integrated systems for provision of light, heat, air conditioning, heated and chilled water and the other services of a modern building, with efficient economical use of electricity throughout. The concept will assure long-term economies in operation for years to come. ■ Constructed of steel, glass and concrete, the 287 foot high building rises from a 625 by 350 foot reflecting pool that surrounds the structure. The main entrance to the building is at 111 North Hope Street across a streamlined black slate bridge spanning the reflecting pool. The combination of pool and fountains, floodlighting of the fountains and the building, and the architecture of the building itself symbolically represent the Department and its vital services to Los Angeles of "water" and "power." The pool and its eight fountains serve functionally as an integral part of the building's air conditioning system. ■ The structure's 15 floors above the Hope Street level, and two lower levels, contain a gross area of 880,000 square feet of space. Three levels of parking associated with the lower levels of the building total an additional 812,000 square feet, and can accommodate 2,300 automobiles. ■ In functional architecture, the new DWP administrative center is a dramatic study of contrasting, yet coordinated materials. The building has a fireproofed structural steel frame. Exterior columns are finished in opalescent, olive-black granite veneer. Cantilevered horizontal canopies, 12 feet, 7½ inches wide, of off-white quartz Mo-sai overhang the heat absorbing glass curtain wall facade. Minimizing the amount of direct sunlight on the windows considerably reduces the heat load on the air conditioning system. Mechanical equipment on the roof is shielded from view by a screen of anodized aluminum mullions. An upper screen conceals microwave antennas and other communications equipment. On the top level is an operational helistop. ■ The interior of the building is designed around a central core complex of elevators, restrooms, mechanical shaft, stairways, exit towers and auxiliary facilities. Twenty self-contained automatic control elevators are in the building. The office space surrounding the core is entirely flexible through the use of movable metal partitions, set into the modular floors and ceilings. There are more than 7½ miles of movable partitions in the building. ■ Fluorescent

lighting throughout the building incorporates many advances in illuminating engineering technology. The floodlighting of the exterior and illumination of the reflecting pool and fountains enhances the beauty of the building at night.

The Building's Many Facilities

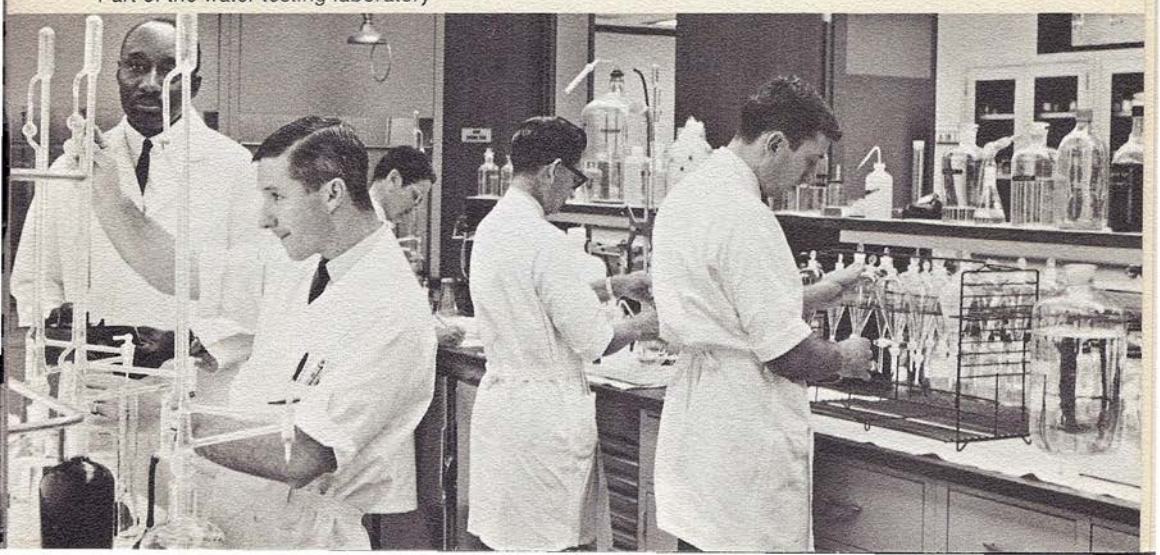
The 15 floors rising from the Hope Street level each contain 42,500 gross square feet. The two lower floor levels each contain 118,000 square feet, excluding parking areas. These levels are used for electrical, mechanical and other operating and service facilities, including an 800-seat cafeteria, a 100-seat outdoor eating patio, and a 475-seat auditorium. The water laboratory located in the building is one of the

Pool and canopies add beauty; serve air conditioning system

nation's largest and most modern. It is part of the DWP's vigilant and continuing programs of protecting the purity and quality of the Los Angeles water supply. ■ Offices of the Board of Water and Power Commissioners, the Board meeting room, offices of the General Manager, and other groups occupy the 15th floor. The other floors contain the various administrative, engineering and operational offices of the Department. The second floor is specially designed to accommodate today's sophisticated computers and their related electronic equipment used in machine accounting, financial reporting, commercial billing, and engineering studies associated with system design and operation. ■ On the lobby floor are the main office for customer service, credit and collection, and exhibit, reception and public information areas.

Water and Power Commissioners' Board Room

Part of the water testing laboratory



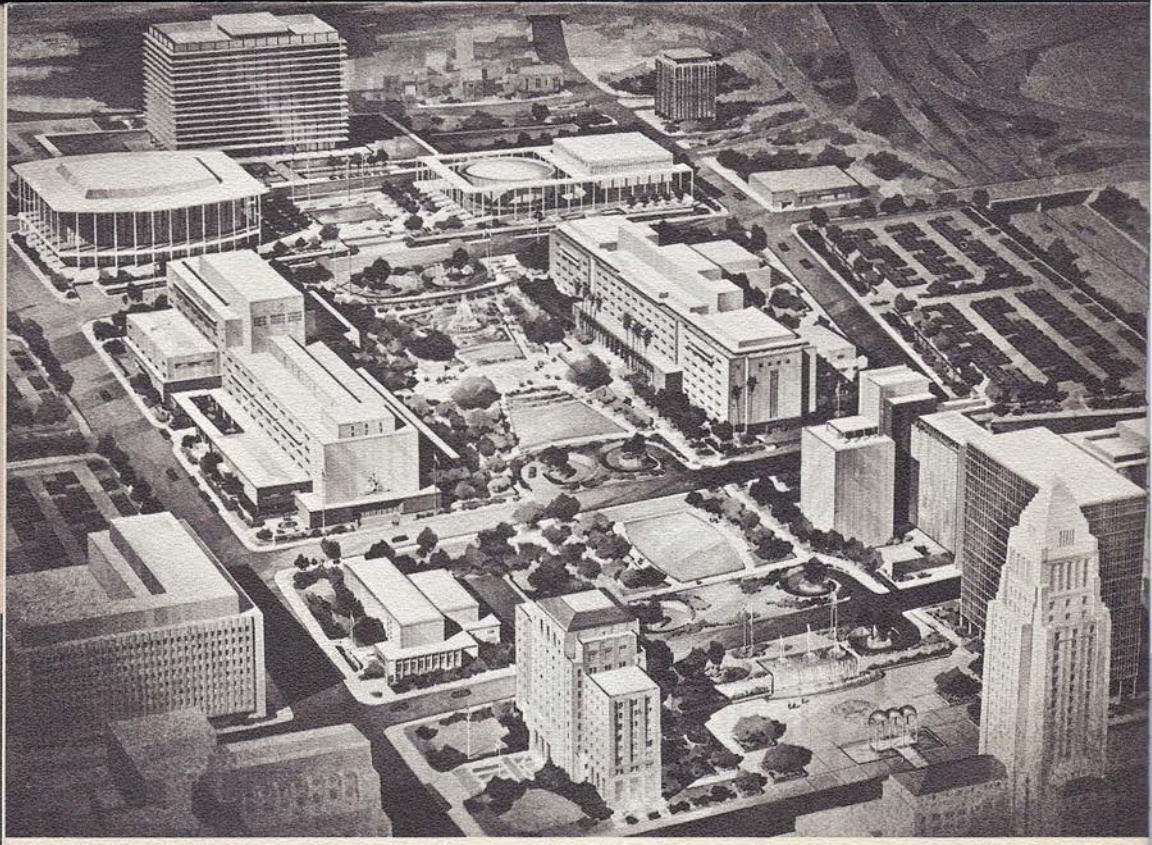
Environmental Control

The advanced acoustical and illumination system in the building's ceilings integrates light, air temperature, circulation of filtered air, and sound control for maximum comfort, efficiency and economy. Architectural, engineering and planning staffs for the building combined their efforts to develop the unusual ceiling design in which an attractive and functional checkerboard arrangement of rectangular sound-absorbing panels alternate with fluorescent lighting fixtures. The fixtures act as diffusers for the incoming air supply. They also function as air exhaust channels. ■ Room air, removed through a slot at one end of each fixture, extracts heat as it passes through each lamp chamber. A portion of this air is drawn into a mixing box above the ceiling where it is combined with fresh cold air in proportions automatically determined by zone thermostats. Conditioned air enters the room through slots located along the length of the fixtures. ■ Ceiling slots permit office walls and room partitions to be locked into place with minimum time and labor; removed with corresponding ease. ■ The electrical and mechanical systems of the building—air conditioning, heating, lighting, water, elevators, and instrumentation for their operation—are supervised by technicians in a central glass-walled control center on one of the lower levels of the structure.

Ceilings integrate light, temperature and air control

Keeping Pace With the City's Growth

In 1902 the City of Los Angeles took over by purchase the old Los Angeles City Water Company and inherited the company's offices in what had been a furniture factory at Alameda and Marchessault streets (now Sunset Boulevard) across from the Plaza. Soon the municipal Water Department outgrew the little brick building, and the search began for larger quarters. The Department relocated in 1904 at 440 South Hill Street. ■ The Department moved in 1910 to 420-422 South Hill Street, a small one-story building on land now occupied by the Clark Hotel. However, these quarters were so crowded that less than a year later, in 1911, it was necessary to move again to a building at 636 South Hill Street, a remodeled furniture store. Here the Department functioned under its new name of Department of Public Service, comprising the Bureau of Water Works and Supply, and the Bureau of Power and Light. ■ By 1914, growth was once again a problem, and the Department leased a part of the newly completed Knickerbocker Building at 643-645 South Olive Street. ■ In 1921, the Department purchased the seven-story Merchants Trust Building at 207 South Broadway, which was to remain its main headquarters building for forty-four years. ■ Re-named the Department of Water and Power under the new City Charter of 1925, the Department completed construction in that year of the 13-story building at 316 West Second Street, and in 1926 completed the eight-story Hill Street building at 222 South Hill Street. These two buildings were joined with the 207 South Broadway facility to make one central headquarters complex. ■ Continued growth of the City and the water and power services required more office space. The Washington Building at Third and Spring Streets was purchased in 1945, and the Wright and Callender Building at the southwest corner of Fourth and Hill Streets was acquired in 1946. ■ Additional space was leased in the Subway Terminal Building from 1953 to 1958, and ten floors of the Black Building on the northwest corner of Fourth and Hill in 1958. ■ Some central administrative offices also had to be housed in DWP buildings on the fringe of the downtown district, on Ducommun, North Main and Boylston Streets. ■ The new General Office Building at 111 North Hope Street brought 3,500 employees of the Department under one roof when it opened in June, 1965. Ultimately some 4,300 employees are expected to occupy the structure, as the Department of Water and Power expands its facilities and services to keep pace with Los Angeles' remarkable growth.



Artist's concept of Civic Center Mall

RENDERING BY ADRIAN WILSON ASSOCIATES

THEN AND NOW / 1921 - 1968

WATER SYSTEM 1921-1968

	1921	As of June 30, 1968
Area of City	366 sq. mi.	464 sq. mi.
Population	750,000	2,905,000
Pumping Stations	14	89
Reservoirs	28	100
Reservoir Capacity	30 billion gals.	135.3 billion gals.
Miles of Aqueduct	234	338
Miles of Mains	1,821	6,642
Fire Hydrants	6,412	44,993
Number of Services	137,094	618,486
Monthly Collections	$330,000	$5,000,000
Revenues	$3,900,000	$60,000,000
Assets (undepreciated)	$50,000,000	$618,000,000

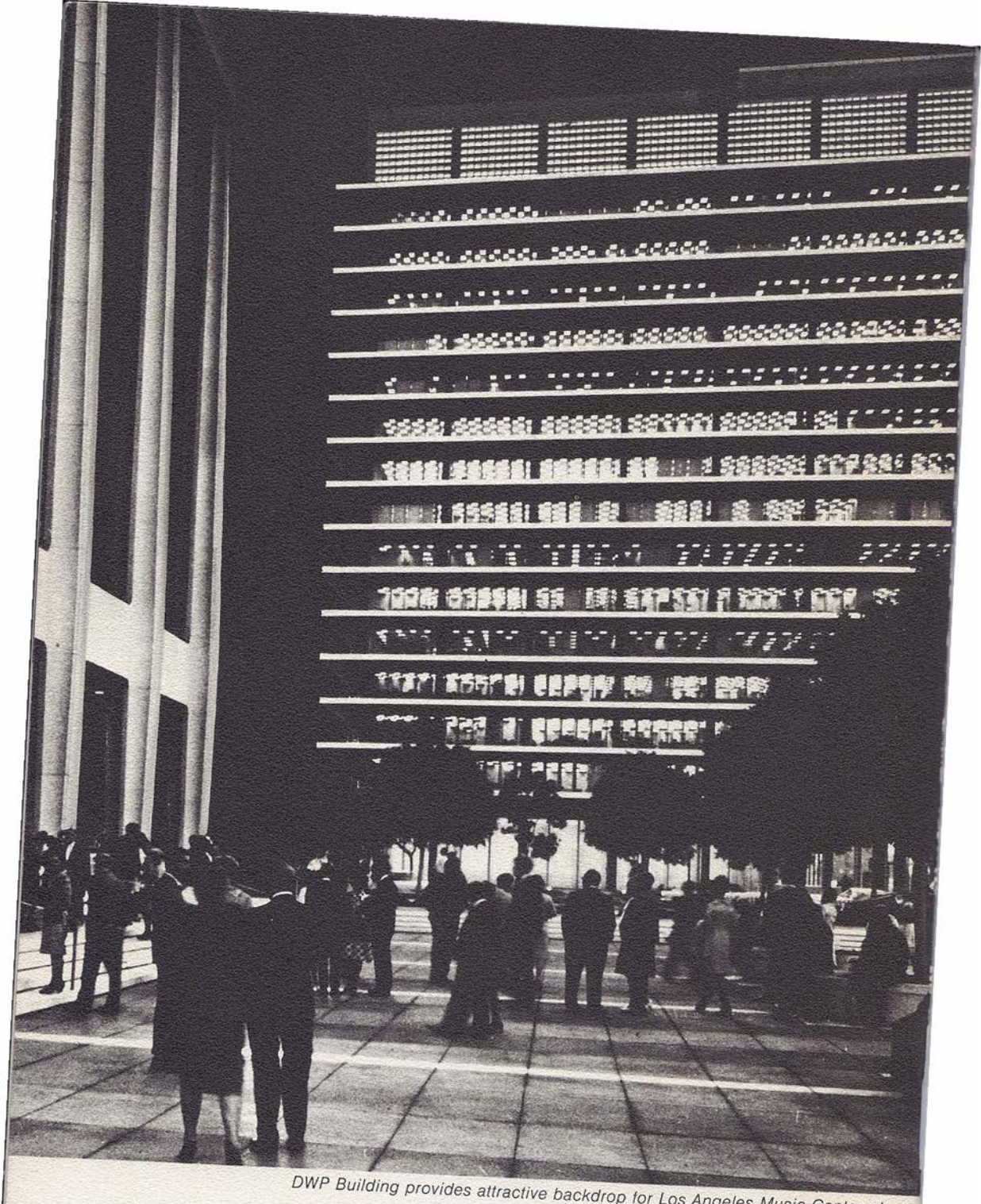
Night view of L.A. Civic Center area; DWP Building at right

Almost half a century of growth from 1921, when the previous Water and Power headquarters opened at 207 South Broadway, to June 30, 1968, are reflected in the comparisons listed below.

POWER SYSTEM 1921-1968

	1921	As of June 30, 1968
Power Plants	4	17
Capacity	53,700 kw	3,486,000 kw
Distributing Stations	5	142
Transformer Stations (13.8 kv and above)	19	1,845
Miles of Power Lines	477	17,082*
Street Lights	3,463	157,430
Number of Service Meters	15,575	1,133,238
Monthly Collections	$200,000	$15,350,000
Revenues, Sale of Electricity	$2,400,000	$184,200,000
Assets (undepreciated)	$11,650,000	$1,343,000,000

**Circuit miles at 4.8 kv and below*



DWP Building provides attractive backdrop for Los Angeles Music Center plaza

CITY OF LOS ANGELES DWP DEPARTMENT OF WATER AND POWER

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