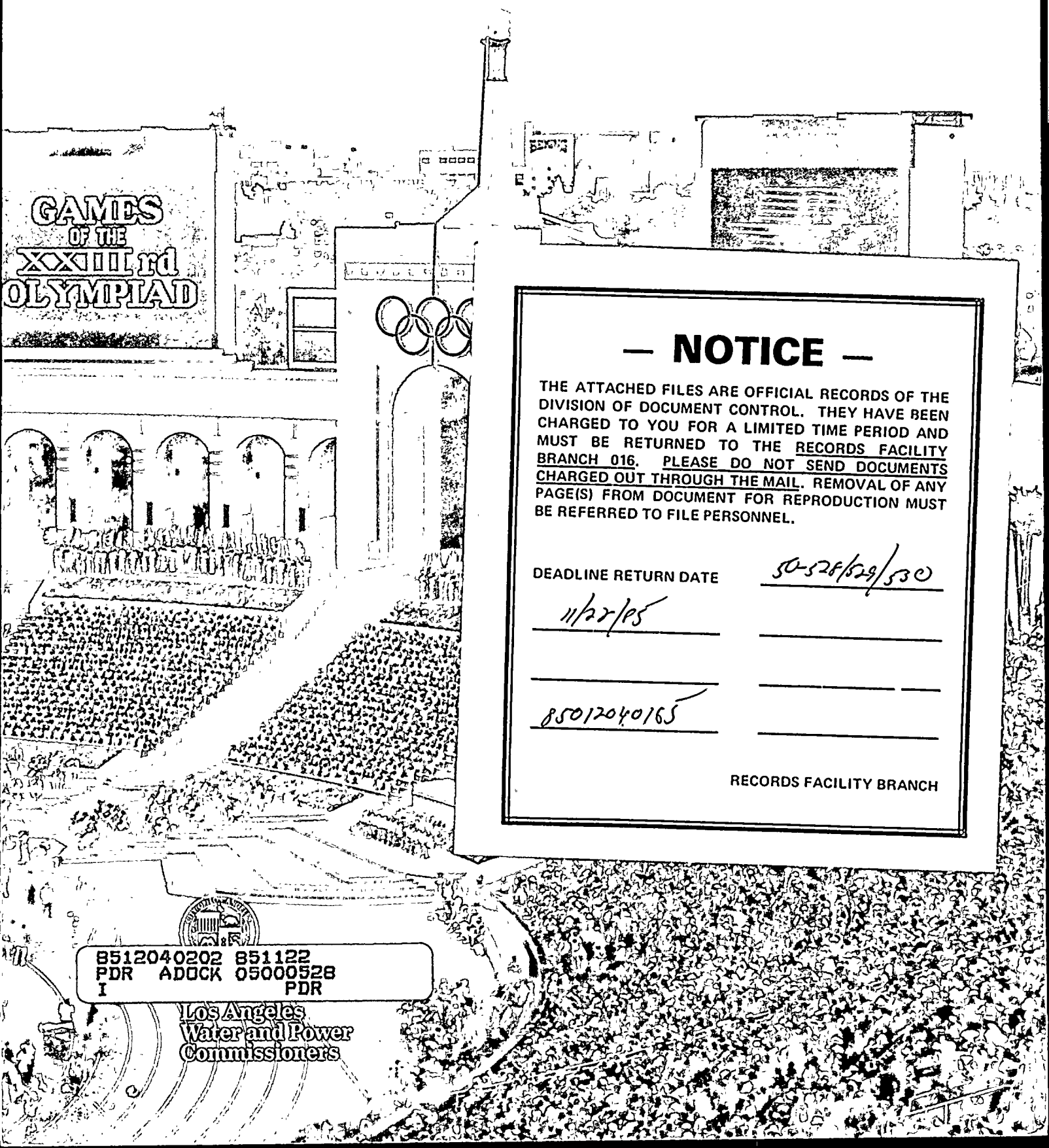
Water and Power
Eighty Third Annual Report 1983-1984



Los Angeles
Water and Power
Commissioners

Introduction

The Los Angeles Department of Water and Power, established in the beginning of the century, is the largest municipally-owned utility in the nation. It exists under and by virtue of the Charter of the City of Los Angeles enacted in 1925.

The Department provides water and electricity to residents within a 464-square-mile area of Los Angeles, host city for the 1984 Olympics. With a work force of more than 10,500, the DWP serves a city population of 3.1 million. Since the Department's operations are financed from revenue derived from the sale of water and power services, no tax burden is placed on the City.

A five-member Board of Water and Power Commissioners directs the Department's administration. Board members are appointed by the mayor for their business, professional or civic leadership and are confirmed by the City Council for terms of five years each.

Tom Bradley
Mayor of
Los Angeles

Los Angeles City Council

Pat Russell, Sixth District
President, City Council
Howard Finn, First District
Joel Wachs, Second District
Joy Picus, Third District
****John Ferraro,** Fourth District
Zev Yaroslavsky, Fifth District
Ernani Bernardi, Seventh District
Robert C. Farrell, Eighth District
Gilbert W. Lindsay, Ninth District
David S. Cunningham, Tenth District
***Marvin Braude,** Eleventh District
***Hal Bernson,** Twelfth District
Peggy Stevenson, Thirteenth District
Arthur K. Snyder, Fourteenth District
Joan Milke Flores, Fifteenth District

**Chairman/*Member,
City Council's Energy and
Natural Resources Committee

City Controller
James Kenneth Hahn
City Attorney
Ira Reiner

Cover: Los Angeles played host to the world during the 1984 Summer Olympic Games. The Olympic theme is pictorially depicted throughout the report.

Comparative Highlights

	Water		Power	
	Fiscal Year 1984	Fiscal Year 1983	Fiscal Year 1984	Fiscal Year 1983
SERVICE				
Sales	190.0 billion gallons	176.4 billion gallons	19.1 billion kilowatt hours	18.7 billion kilowatt hours
Customers (Average for the year)	631,439	631,969	1,243,092	1,231,929
FINANCIAL				
What We Received				
Revenues from water and electric sales, and other income—Net	$193,456,713	$159,495,845	$1,199,501,137	$1,126,740,113
How It Was Used				
Operation of water and electric systems	$110,149,578	$ 98,952,567	$ 837,552,764	$ 827,440,044
Interest and expenses on debt, charged to income	15,870,700	15,391,757	97,972,541	98,558,492
Provision for depreciation	20,955,815	19,851,123	98,521,416	91,673,061
Net income	58,442,620*	25,300,398	165,454,416	109,068,516
Transferred to City of Los Angeles reserve fund	7,796,000	6,966,000	55,320,000	59,696,000
Remainder available (together with provision for depreciation) for retirement of bonds and to pay part of cost of new facilities	$ 50,646,620	$ 18,334,398	$ 110,134,416	$ 49,372,516
How We Stand				
Total assets, less accumulated depreciation	$970,852,485	$846,524,948	$3,175,333,003	$3,110,162,949
Less debt in bonds or notes	321,424,702	284,504,336	1,555,263,707	1,626,701,464
Less miscellaneous liabilities	79,168,209	58,298,237	278,540,522	256,643,197
Remainder—Reinvested in the business	$570,259,574	$503,722,375	$1,341,528,774	$1,226,818,288
Construction				
Facilities constructed	$ 90,787,821	$ 56,147,441	$ 150,926,123	$ 144,579,001
Facilities constructed, ten years to end of fiscal years 1984 and 1983	$469,000,000	$406,000,000	$1,640,000,000	$1,681,000,000

*Includes a nonrecurring credit of $11,962,000 due to changes in accounting policy.

Board of Water and Power Commissioners

Department commissioners are (seated left to right) **Walter A. Zelman,** vice president, and **Jack W. Leeney,** president; (standing left to right) **Rick J. Caruso, Carol Wheeler** and **Angel M. Echevarria.**

The City of Los Angeles
Honorable Tom Bradley, Mayor
Honorable Members of the City Council

We are pleased to transmit this 83rd Annual Report, which reviews the accomplishments and progress of the Department of Water and Power during the 1983-84 fiscal year, in accordance with the provisions of the City Charter.

This year we are especially proud of the city we serve—the city that successfully played host to the world during the 1984 Olympic Games.

The Olympics always bring to mind the human drive for excellence and the satisfaction of fulfilled goals, and we salute the athletes for their performances and achievements. In the same spirit, we are proud of our own efforts and accomplishments in meeting the challenge of providing Los Angeles residents with reliable water and electric service at reasonable rates. We also take pride in our strides in investigating and utilizing the latest technologies and the finest skills to reach our goals.

Fifty-two years ago, when Los Angeles hosted the 1932 summer Olympic Games, the City's population was a little over 1.2 million. Despite being in the depths of the great depression, the Department was able to meet all of its operating expenses that year, and also contributed to the City's general fund. Today, serving a population that has nearly tripled since 1932, the DWP continues to carry that torch of self-sufficiency. During 1983-84, the Department met its financial obligations, maintained a sound financial program and contributed over $63 million to the general reserve fund of the City.

We are grateful for the support and cooperation received from you and the City Council. Our appreciation is also extended to other elected City officials and boards and managements of other City departments. We especially commend and thank the management and personnel of the Department for their gold medal service.

Jack W. Leeney
President, Board of Water and Power Commissioners

General Manager's Report

Paul H. Lane

Department of Water and Power

Paul H. Lane,
General Manager
and Chief Engineer
Duane L. Georgeson,
Assistant General
Manager—Water
Norman E. Nichols,
Assistant General
Manager—Power
Norman J. Powers,
Chief Financial Officer
Edward C. Farrell,
Chief Assistant
City Attorney for
Water and Power

The 1984 Olympic Games hosted by the City of Los Angeles were a tremendous success. The Department of Water and Power is proud to have been a part of the team providing essential services to the athletes and visitors from all over the world in addition to supplying the water and energy needs of our City's more than three million residents.

The Department continues to work on the development and protection of essential water and energy resources needed to adequately meet the City's future demands.

The Los Angeles Aqueduct Filtration Plant now under construction will provide the highest quality water to Department customers. In addition, the Department is implementing measures to protect the valuable San Fernando Valley Groundwater Basin supply from contamination.

An agreement was reached between Inyo County and Los Angeles which sets the framework for settling more than a decade of litigation over the City's groundwater pumping in the Owens Valley. This agreement also provides for the joint development of a long-term groundwater management plan.

For the second consecutive year, an exceptionally wet winter provided sufficient runoff from the Eastern Sierra for recharging groundwater basins in the Owens and San Fernando Valleys, and also for the release of substantial amounts of water into Mono Lake.

The heavy precipitation also provided a reliable source of low-cost hydroelectric generation, substantially reducing fuel oil and natural gas requirements at the Department's four in-basin steam generating stations.

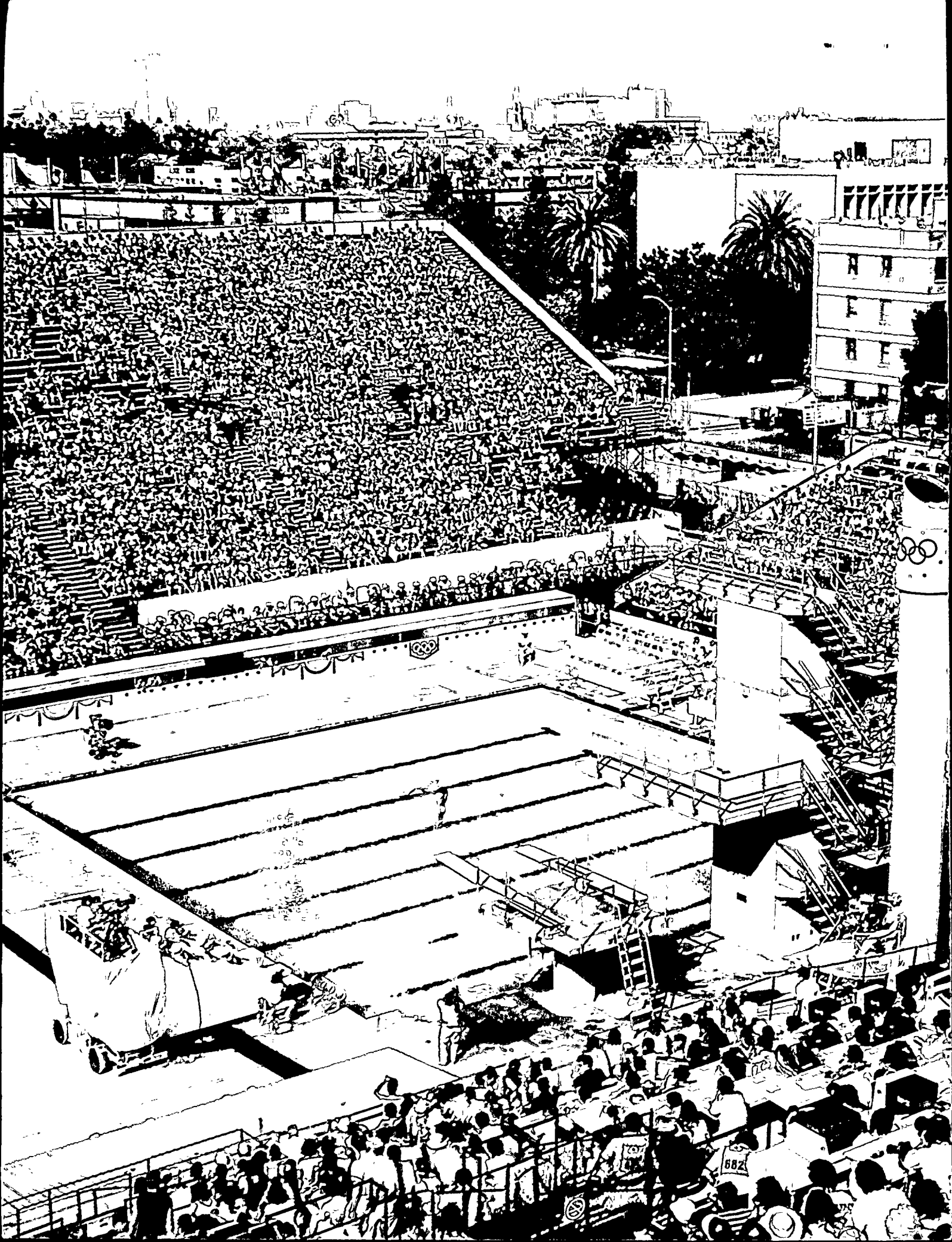
To increase the utilization of a reliable domestic fuel source, the coal-fueled Intermountain Power Project is under construction in Utah. The Department is also participating in a nuclear power project nearing completion in Arizona. The Department is actively pursuing alternative energy resources, including solar, geothermal and hydrogeneration and other environmentally acceptable energy alternatives. Additionally, efforts are continuing to upgrade the existing Pacific High Voltage Direct-Current Intertie.

Notable achievements in conservation included the completion of the City's Donald C. Tillman Water Reclamation Plant, which has a potential to reclaim 40 million gallons of water daily. Energy conservation programs enable the Department to save approximately 800,000 barrels of oil, equivalent to nearly $24 million in energy savings, from residential and commercial energy audits.

Progress is being made in our goal to achieve equal opportunity in the work force and increasing representation of minorities and women. We are expanding and reemphasizing the Department's safety program to ensure a safe working environment for our employees, who are the Department's most valuable asset. I am confident that through the cooperation and dedication of our employees the working environment will be enhanced.

I appreciate the vital support we continue to receive from Mayor Bradley, the City Council, and the Board of Water and Power Commissioners. Counting on this support, we at the Department look forward to meeting the challenges of the future and providing the reliable and quality service that has been our tradition.

Paul H. Lane
General Manager and Chief Engineer



Water System

Water System activities during the year were highlighted by above normal water use due to an unusually warm and dry year; sufficient precipitation in Los Angeles' Sierra Nevada watersheds which provided an adequate water supply; substantial progress in the construction of the Los Angeles Aqueduct Filtration Plant; continued threats to water rights; an agreement reached with Inyo County pertaining to the City's groundwater pumping in the Owens Valley; and the completed plan for protection of the San Fernando Valley groundwater from industrial contamination.

Water Use

The year's unusually warm and dry weather resulted in above normal water use. Total water delivered for the year was 212 billion gallons, or 185.5 gallons per person daily.

Water Supply

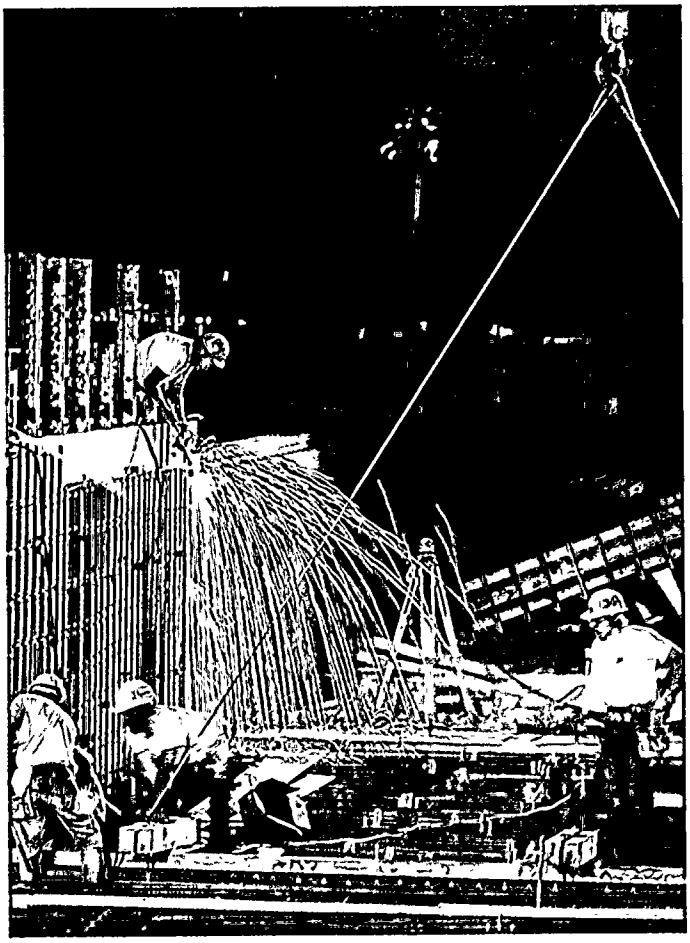
The Owens Valley-Mono Basin watersheds experienced approximately normal precipitation. This year's above normal runoff follows two years of very heavy runoff and resulted in continued high levels of storage in aqueduct reservoirs.

The City obtained 79 percent of its water supply from the Los Angeles Aqueduct, 17 percent from the Los Angeles River and other groundwater basins and 4 percent from the Metropolitan Water District of Southern California.

Water Rights

Inyo County and the City ratified a five-year agreement to develop a joint groundwater management plan to implement enhancement/mitigation projects in the Owens Valley.

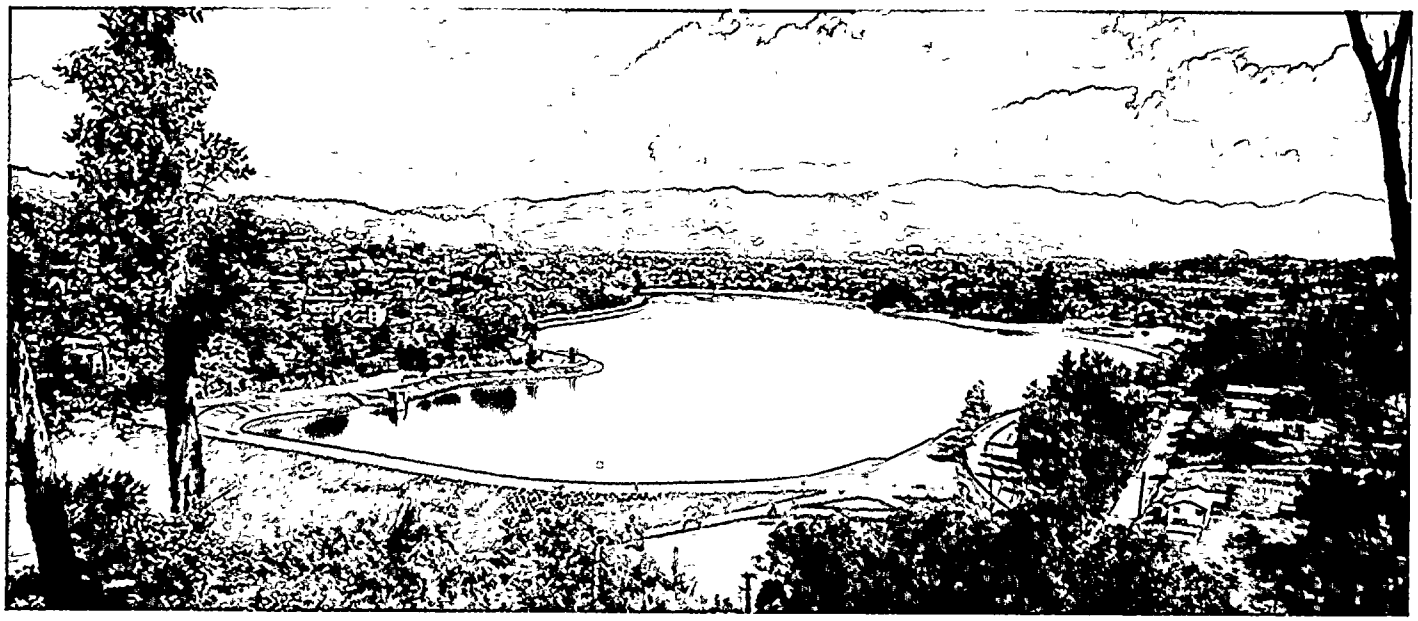
The California Supreme Court ruled that the City's water rights in the Mono Basin are subject to reevaluation and possible modification consistent with values protected by the Public Trust Doctrine. A decision on which body, a federal court, a state court, or the State Water Resources Control Board, will perform this reevaluation is still pending before the Federal District Court of Eastern California.



Crews worked through the night to complete the bypass channel for the Los Angeles Aqueduct Filtration Plant.

Legislation to create a "Mono Basin National Forest Scenic Area" was approved in the U.S. Senate and House of Representatives. This bill recognizes the importance of the Mono Basin water supply to Los Angeles and would offer additional protection to the City's water rights in this area.

Water System



Silverlake Reservoir is one of several key water storage facilities within the City of Los Angeles.

Environmental

Multi-year cooperative studies of the Owens Valley Groundwater Basin and its vegetation continued between the United States Geological Survey, Inyo County and the Department. The goal of these studies is to develop a groundwater management model that integrates water supply and environmental interests.

Extensive investigations of the effects that declining lake levels may have on the California Gull, migratory birds, brine shrimp and lake chemistry were continued. The Mono Lake level has risen to the 1975 level due to the previous two wet years and is leading to a better understanding of the lake's ecosystem. More than $250,000 was spent during the year on Mono Basin research, bringing the total expenditure to almost $1 million.

Air quality monitoring was begun and air quality studies are being developed in the Owens Valley and Mono Basin in compliance with recently enacted state law.

Conservation

Water conservation continued to be a high priority for the Department. Work was begun on preparation of an Urban Water Management Plan for the City. The plan is required by recent legislation designed to encourage California's urban water agencies to give careful consideration to alternative conservation and water supply measures as a means of reducing or delaying the need for additional conventional water supplies. Comments were gathered through a public workshop and media notices soliciting written input.

The Department completed its portions of a benchmark residential water conservation study being funded by the U.S. Department of Housing and Urban Development. Results of the study will allow for more accurate assessment of the potential for household water conservation.

Water System

Leak detection crews surveyed an additional 430 miles of mains this year, and approximately 30 million gallons of water were saved through repair of leaks in the distribution system. Additional water savings have resulted from notifying customers when leaks are found on their property.

The Department continued to promote water conservation through brochures, advertising, bill inserts, a speaker's bureau, school education programs, free household conservation kits, special programs for business and industry and a variety of other programs designed to encourage wise use of the City's water supplies. Almost 200,000 packets of low-water using seeds were distributed to customers upon request as part of a special program to "Beautify Los Angeles for the Olympic Year While Saving Water." Special information on efficient irrigation practices was included with the seed packets.

Work was begun on a Business and Industry Water Conservation Awards Program to be held in the fall of 1984. Preliminary design was completed on a pilot residential landscape water conservation program to be conducted by the Department. The Department continued its leadership role in the development of water conservation programs and participation in professional groups and committees.

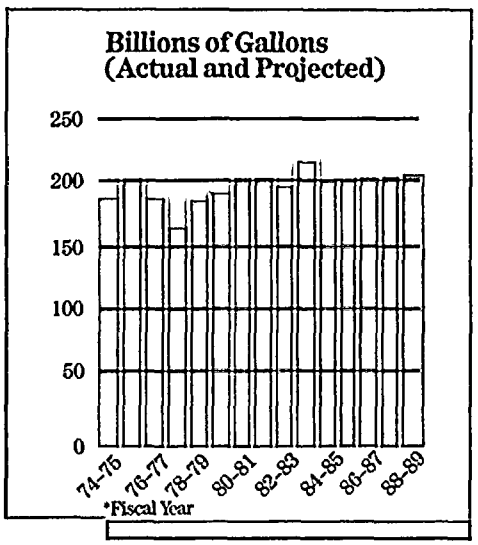
Construction

The Los Angeles Aqueduct Filtration Plant is in the first year of a three-year construction period. Work by the contractor is on schedule and about half the concrete is in place. The filtration plant will be completed by spring of 1986.

Contract construction was completed on the first phase of Van Norman Pumping Station No. 2, the cover for De Soto Reservoir, Lower Franklin Reservoir Chlorination Station and the site grading for Corbin Tank.

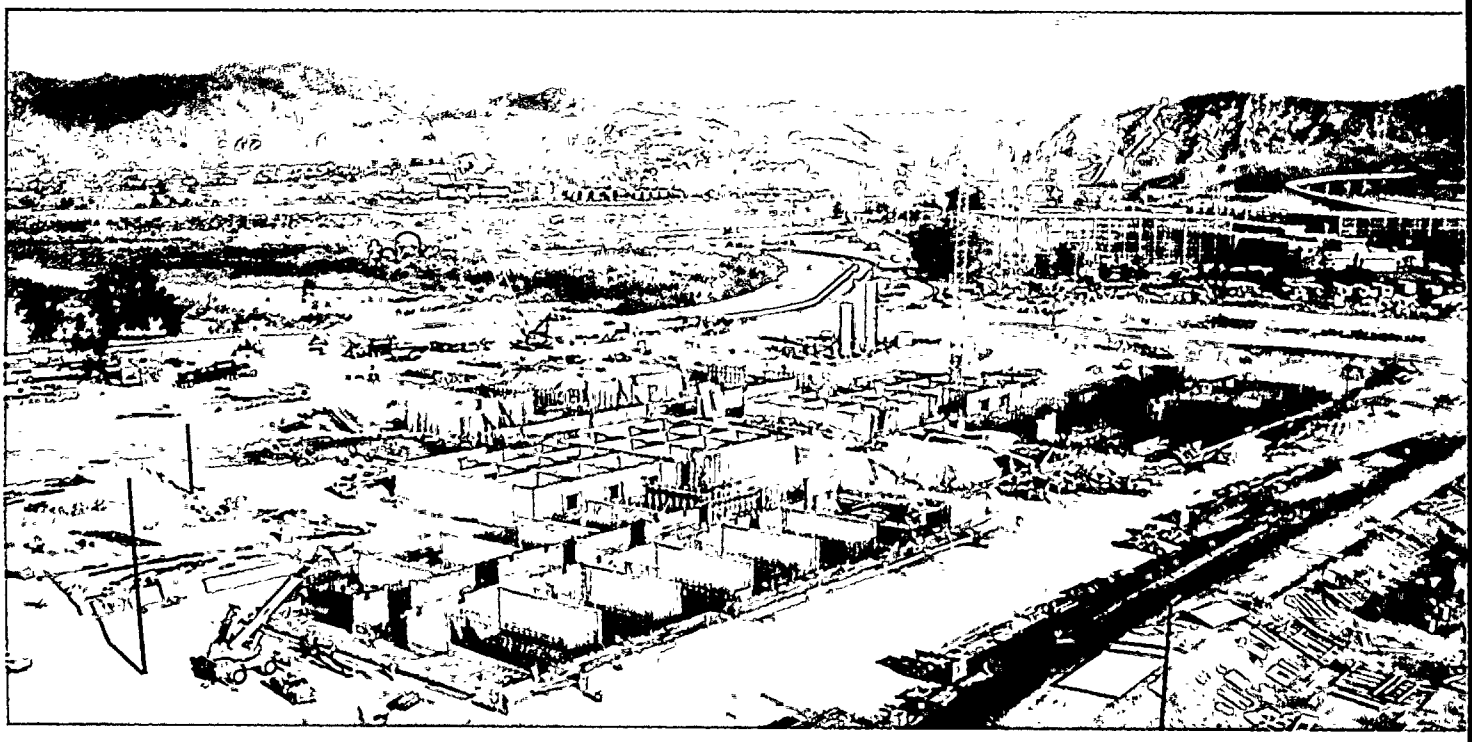
Shop personnel fabricate and repair equipment to keep the systems operating efficiently.

Water Use Deliveries*



Construction contracts were awarded for the second phase of Van Norman Pumping Station No. 2 and for the Foothill and Granada Surge tanks. Tract developers awarded contracts for Trailer Tank and Donick Pumping Station.

Water System



The Los Angeles Aqueduct Filtration Plant will be completed and operating in 1986.

Distribution

The Water System installed 494 fire hydrants, 2,434 services, 17,100 water meters and 32.8 miles of distribution mains in the last year.

A program to clean and cement mortar line existing trunk lines and distribution mains to increase their capacity and prolong their life was continued, with 9.43 miles of pipe lined last year.

Water Quality

The water supply delivered by the Los Angeles Aqueduct will be filtered by a 900 cubic-feet-per-second filtration plant which is under construction. Although the Department's treatment methods have been successful in providing a safe water supply, current federal and state drinking water regulations require filtration of the Los Angeles Aqueduct supply to reduce the amount of fine, suspended particles (turbidity). The filtration plant will be in operation by fall of 1986. The total cost of the project, including additional facilities such as pumping stations, will be approximately $140 million.

A program of chemical treatment continued on the Los Angeles Aqueduct to reduce turbidity until the filtration plant is completed. The Los Angeles water supply is constantly monitored by chemical, biological and radiological examinations and analyses.

The Department completed a two-year study and development of a plan to protect the quality of the groundwater in the San Fernando Valley. This study was initiated when trace levels of industrial solvents were found in a number of wells in the San Fernando Valley in 1980. The plan recommends a number of measures to be taken to clean up and protect the basin. Excellent

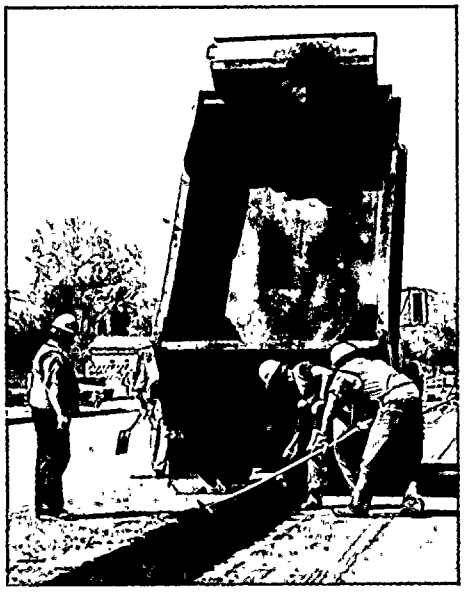
progress has been made working with City and regional regulatory agencies to achieve implementation of these measures. These measures include public education, monitoring of toxic chemical storage facilities for leakage, elimination of septic disposal systems in industrial areas of the Valley and increased enforcement of hazardous waste disposal laws. These, along with other measures being taken, will insure the protection of this important source of water for Los Angeles.

Water for the Future

Approximately $515 million will be invested in new facilities during the next five years to meet the City's water requirements. This includes construction of the filtration plant, installation of a data acquisition and control system, reconstruction of Water System facilities, and capital improvements to the Water System's supply and distribution system.

Development of water reuse projects within the City of Los Angeles is actively promoted by the Department. Work on the new 40-million-gallon-capacity Donald C. Tillman Water Reclamation Plant in the Sepulveda Basin was completed. Work is progressing on a project to distribute reclaimed water from the Tillman plant to two cemeteries, a golf course, and a planned commercial/ residential development.

The Department is working with the Department of Recreation and Parks on expanding their reclaimed water irrigation system at Griffith Park to include fire hydrants and additional landscaped areas. A research proposal was submitted to the State Department of Water Resources for experimental studies on groundwater recharge with reclaimed water, which would provide needed information to supplement the investigation carried out by the Orange and Los Angeles Counties Water Reuse Study.

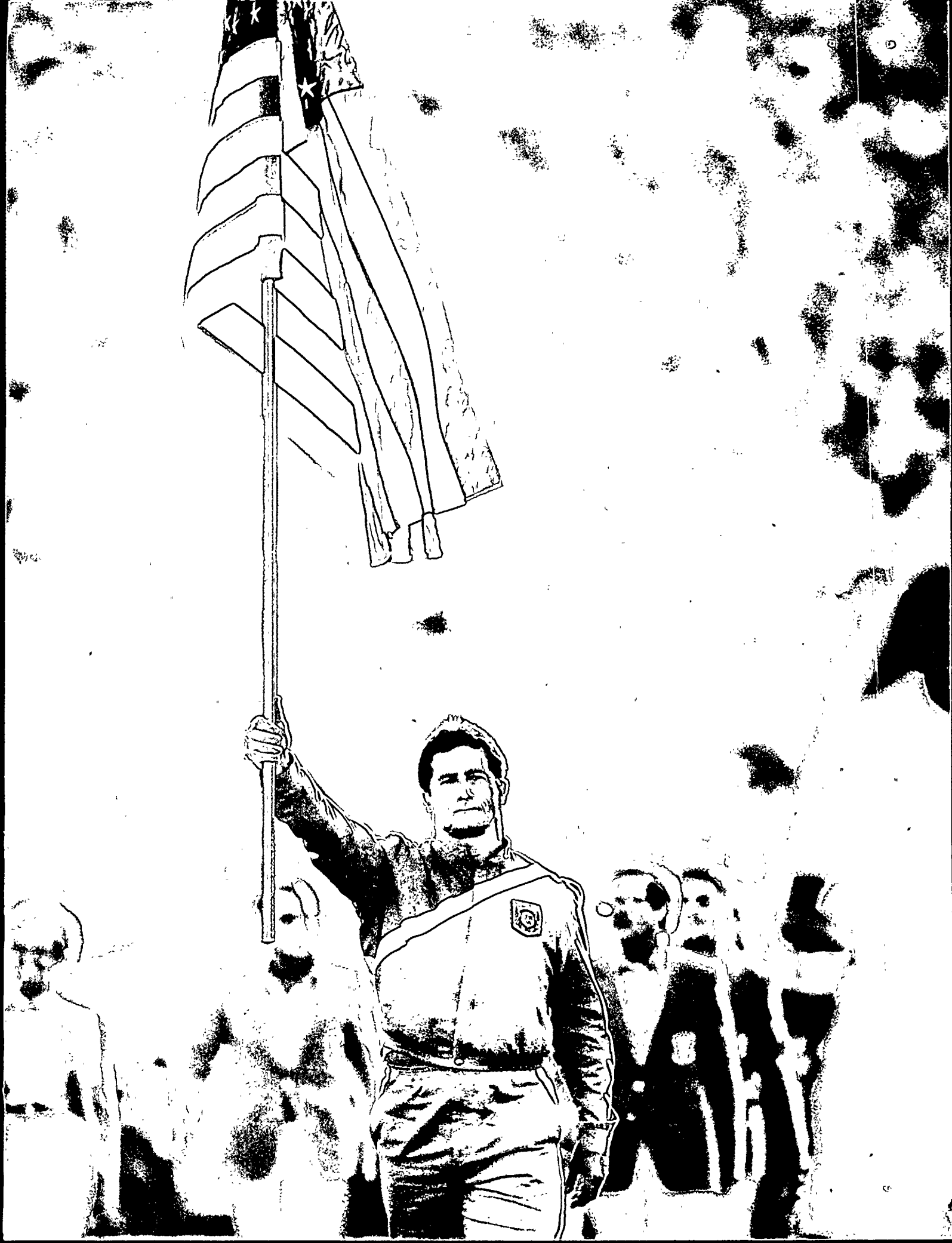


Crews are being trained to repave streets following major installation work.

Water System Facts In Brief

	1983-84	1982-83
Use of Water		
Average Los Angeles population served*	3,131,369	3,064,300
Average daily use per capita, gallons	185.5	173.2
Water sales for fiscal year, billion gallons	190.0	176.4
Maximum daily demand, million gallons	798.2	791.1
Water Supply to City Area		
From local supply, cu. ft. per second (c.f.s.)	159.5	120.0
From DWP Aqueduct, c.f.s.	732.5	706.5
From Metropolitan Water District, c.f.s. (California Aqueduct and Colorado River Aqueduct)	39.5	35.4
Gross supply, c.f.s.	931.5	861.9
Diversion from (to) local storage, c.f.s.	(33.0)	(40.9)
Net supply to distribution systems, c.f.s.	898.5	821.0

*Includes 25,000 people in certain areas, contiguous to Los Angeles which are served by the Water System. Excludes 2,000 residents of the City not served by the Water System.



Power System

During the year Power System activities were highlighted by a rise in electric energy consumption and kilowatt-hour sales; continued power resource planning and development; actions to improve air quality in the Los Angeles Basin and a continuation of innovative conservation programs.

Due to great availability of low-cost hydroelectric energy, fuel oil and natural gas requirements were 30 percent less than the previous year. Natural gas purchases provided 88 percent of the oil and gas requirement for the year. A $21 million oil inventory cost reduction was made possible as a result of improved reliability of hydroelectric and natural gas resources.

The Department is a major participant and manager of two large coal-fueled power projects. One is under construction in Utah and the other is being studied for feasibility at a site in Nevada. These facilities will help reduce the need to burn fuel oil in the Los Angeles Basin and also will help meet the electrical growth requirements for Los Angeles.

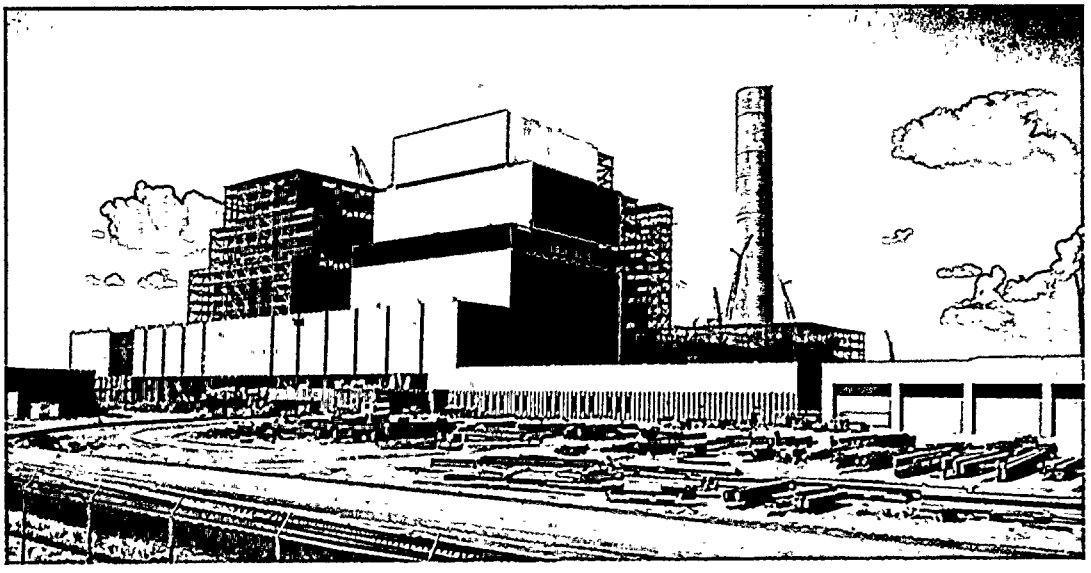
Also, the Department is a joint participant in a nuclear project nearing completion in Arizona; a large demonstration solar project in the Mojave Desert; the Pacific High Voltage Direct-Current Intertie upgrade; and several major transmission facilities.

In addition, efforts are continuing to expand and improve existing hydro facilities, negotiate additional energy exchange agreements with cogeneration projects and develop geothermal and other alternate energy resources.

Intermountain Power Project

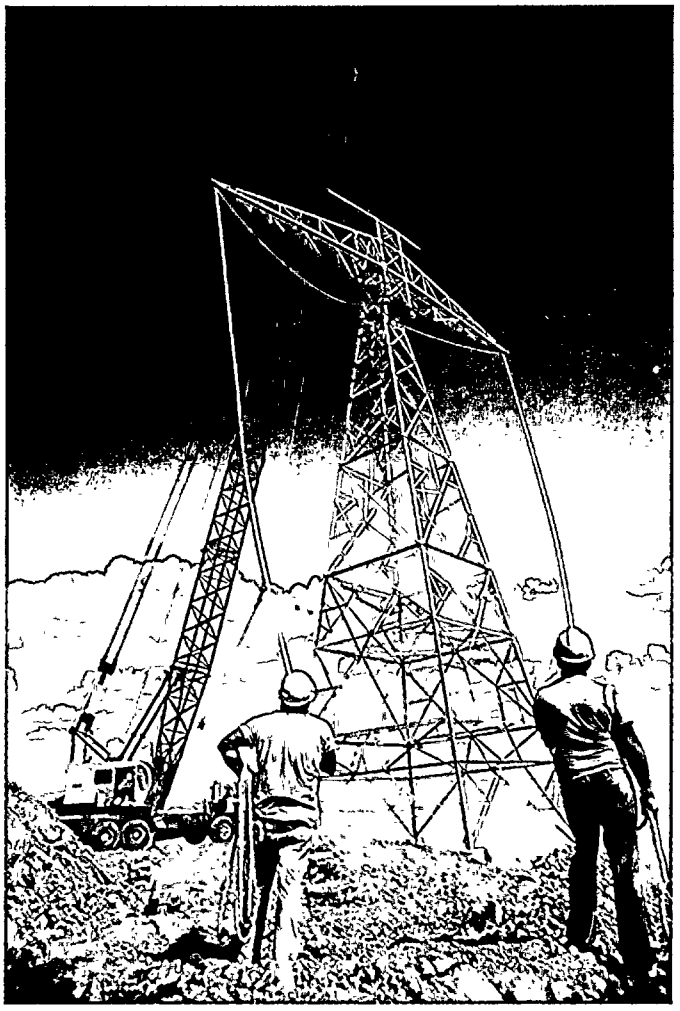
As manager of the Intermountain Power Project (IPP), the Department is overseeing the construction of the 1522 megawatt coal-fueled generating station in Millard County, Utah. Transmission facilities are being erected to carry the power to utilities in Southern California, Nevada and Utah.

All project facilities, with the exception of the Southern Transmission System, are being funded from the sale of bonds and short-term commercial paper issued by the owner of the project, the Intermountain Power Agency. The Southern Transmission System, which will be used to deliver the power produced at the generating station in Utah to the Southern California participants, is being funded from the sale of bonds issued by the Southern California Public Power



The Intermountain Power Project will begin providing power to Los Angeles in 1986.

Power System



A transmission system is being constructed to bring power from the Intermountain Generating Station in Utah to Southern California.

Authority. Sales of bonds and commercial paper totaled $2.65 billion during the fiscal year, bringing the total sales to date for the project to $5.05 billion.

The Department's entitlement from the project is 44.6 percent, or about 678 megawatts. Initial construction activities for the generating station began in September 1981, and the project is proceeding on schedule for initial commercial operation in July 1986.

Future Resources

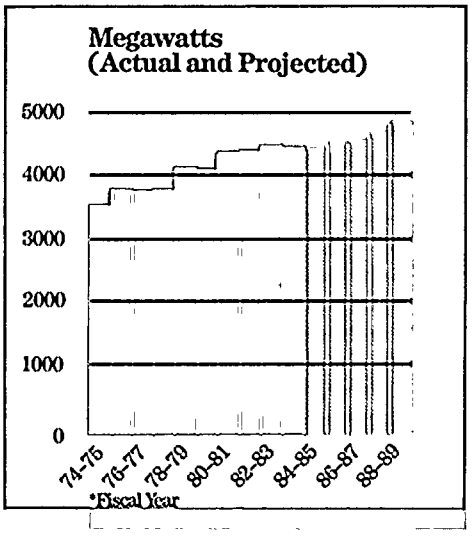
The Department is proceeding with plans to start exploratory drilling in early 1985 on 6,825 acres of the Coso Known Geothermal Resource Area in the China Lake region of Inyo County, California.

The White Pine Power Project to be located near Ely, Nevada, is a proposed 1500 megawatt, coal-fueled generating station. The Department's entitlement as a 39.1 percent participant would be 587 megawatts. The project is scheduled to begin commercial operation in June 1991.

Rights of first refusal for up to 450 megawatts from a geothermal field north of Brawley, California are available to the Department and others. As part of the development, the Department obtained a 44.2 percent interest in a 10-megawatt demonstration unit which began commercial operation in 1980.

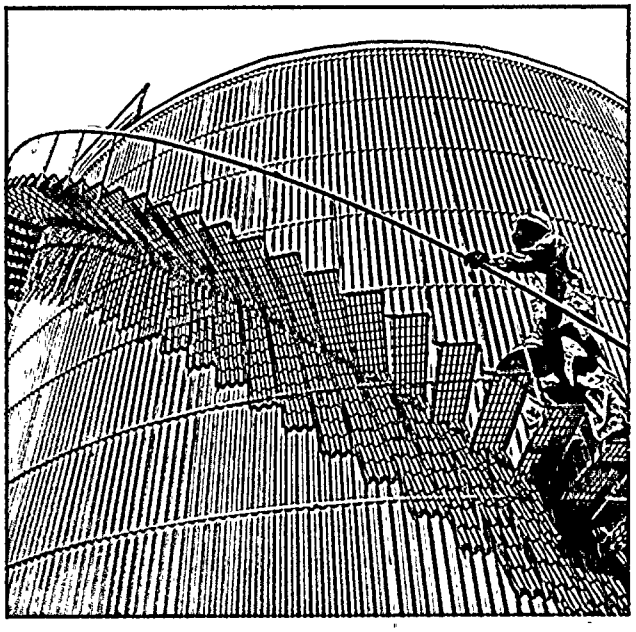
The testing phase of Solar One Demonstration Unit, a 10 megawatt solar-thermal pilot plant, has been successfully completed. The Department has a 20 percent interest in the project. The power production phase of the demonstration unit, located near Barstow, California, was scheduled to begin in July 1984.

Power System Peak Demand Forecasts*



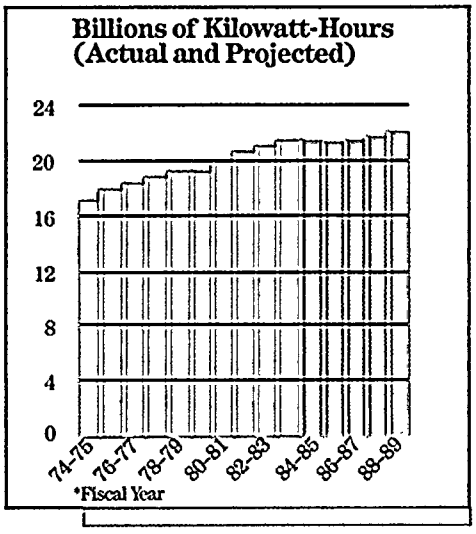
Photovoltaic technology is being demonstrated at the Department's Optimum Energy House, located in downtown Los Angeles. This 2 kilowatt project augments other energy-saving technologies in a typical residential setting.

The Palo Verde Nuclear Generating Station is under construction 50 miles west of Phoenix, Arizona. The first 1270 megawatt unit will begin operating in 1986. The second and third units are scheduled for operation in 1987 and 1988, respectively. The Department will exchange its 210 megawatt ownership in the coal-fueled Coronado Generating Station for the same amount in Palo Verde. In addition, the Department has acquired the right to 151 megawatts, equal to 3.96 percent of the nuclear project, from the Southern California Public Power Authority.



Fuel oil is stored in tanks until needed at Los Angeles Basin generating stations.

Electrical Energy Requirements*



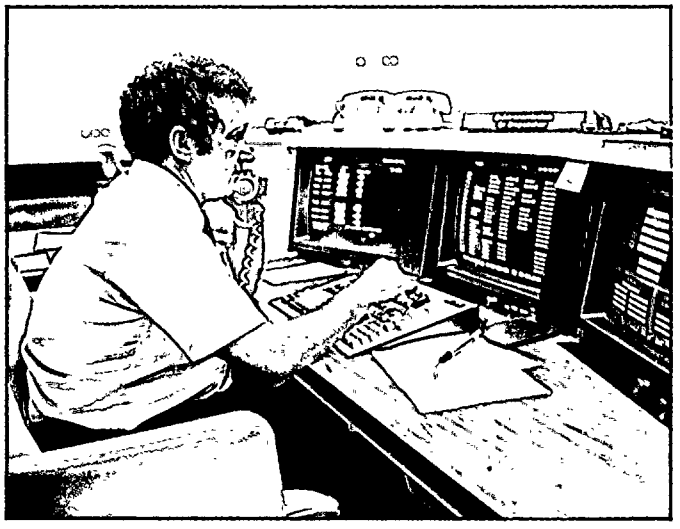
By 1986 the efficiency and energy production of San Francisquito Power Plant 1 will have been upgraded. In addition, the Department is working with large industrial customers to have approximately 168 megawatts of cogeneration installed by 1986.

Energy Conservation

Energy conservation remained a high priority during the year. Savings of 500,000 megawatt-hours resulted from Department programs. This is a savings of 800,000 barrels of oil which would have cost almost $24 million.

In-depth audits, on-site visits and awards for major conservation achievements were key elements of the Conservation Program for Business and Industry. City government buildings were audited and areas for potential energy savings of $3 million were identified. A similar program, developed for schools in cooperation with the Los Angeles Unified School District, resulted in a savings of $600,000 the first year.

Power System



Computers aid load dispatchers at the Energy Control Center.

Since the inception of the Conservation Loan Program, residential customers have borrowed $3.3 million from the Department, $1.3 million in the past year. The funds have been used for installation of cost-effective retrofits, such as solar water heating systems.

The Environment

Environmental concerns are of prime consideration in the Department's selection and siting of new facilities and its operation of existing ones.

Impacts on the environment are considered in siting new power generation, transmission and distribution facilities, with public participation encouraged in the environmental evaluation process.

The Department has an on-going commitment to mitigate air emissions. Research activities with respect to innovative nitrogen oxide control systems are continuing. Computerization of air quality information is under way which will lead to improved management of Department emission sources, and programs are being evaluated which will further aid in the assessment and control of the Department's air emissions.

Generation Capability

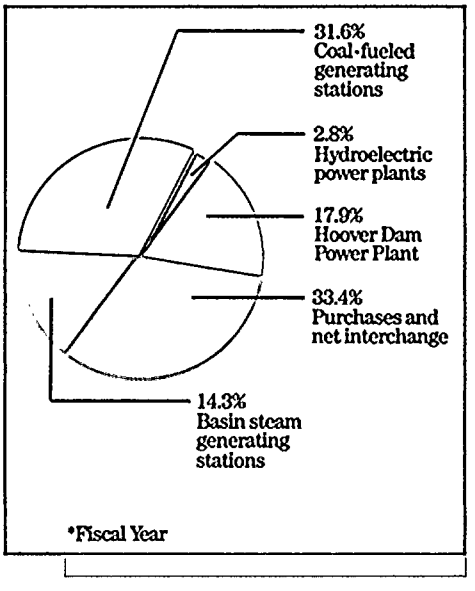
More than 21.8 billion kilowatt-hours (kwh) were needed to serve Department customer load. Integrated peak demand occurred August 16, 1983, at 4,444 megawatts, down 12 megawatts from the previous year's instantaneous peak. System net capability was 6,703 megawatts. The Power System load factor, based on net energy for load, was 56.1 percent.

Purchased Power

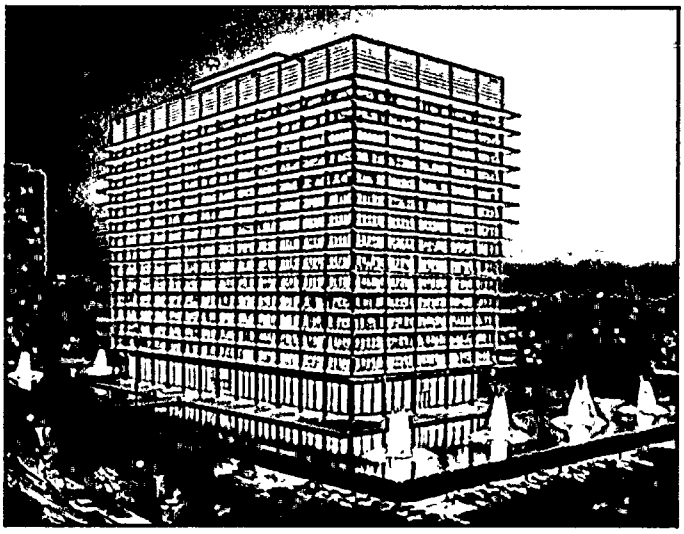
Just over 6 billion kwh of energy was purchased by the Department to meet load requirements and decrease the cost of operation.

More than 3.5 billion kwh of surplus energy was purchased from the Bonneville Power Administration during the year. This surplus and an additional 135.5 million kwh of energy (including 102.8 million kwh from British Columbia Hydro) purchased from other Pacific Northwest utilities was transmitted over the Pacific High Voltage-Direct Current Intertie.

Electric Energy Sources*



Power System



The DWP general office building was lit at night during the Olympic festivities as a gift to the City.

Transmission and Distribution

Construction was initiated for the Intermountain Transmission System in May 1984. These transmission lines will carry electrical power from the Intermountain Generating Station site in Utah to 36 project participants in three states.

More than 900 plans and designs for overhead and underground facilities at voltages of 34.5 kilovolts and below were prepared. The estimated value of these facilities is more than $56 million.

Emergency repair efforts for the restoration of interrupted service to residential, commercial and industrial facilities were enhanced during the year by increased tree trimming programs and the activation of a computerized system to assist trouble dispatchers in locating trouble on the distribution lines.

Research and Development

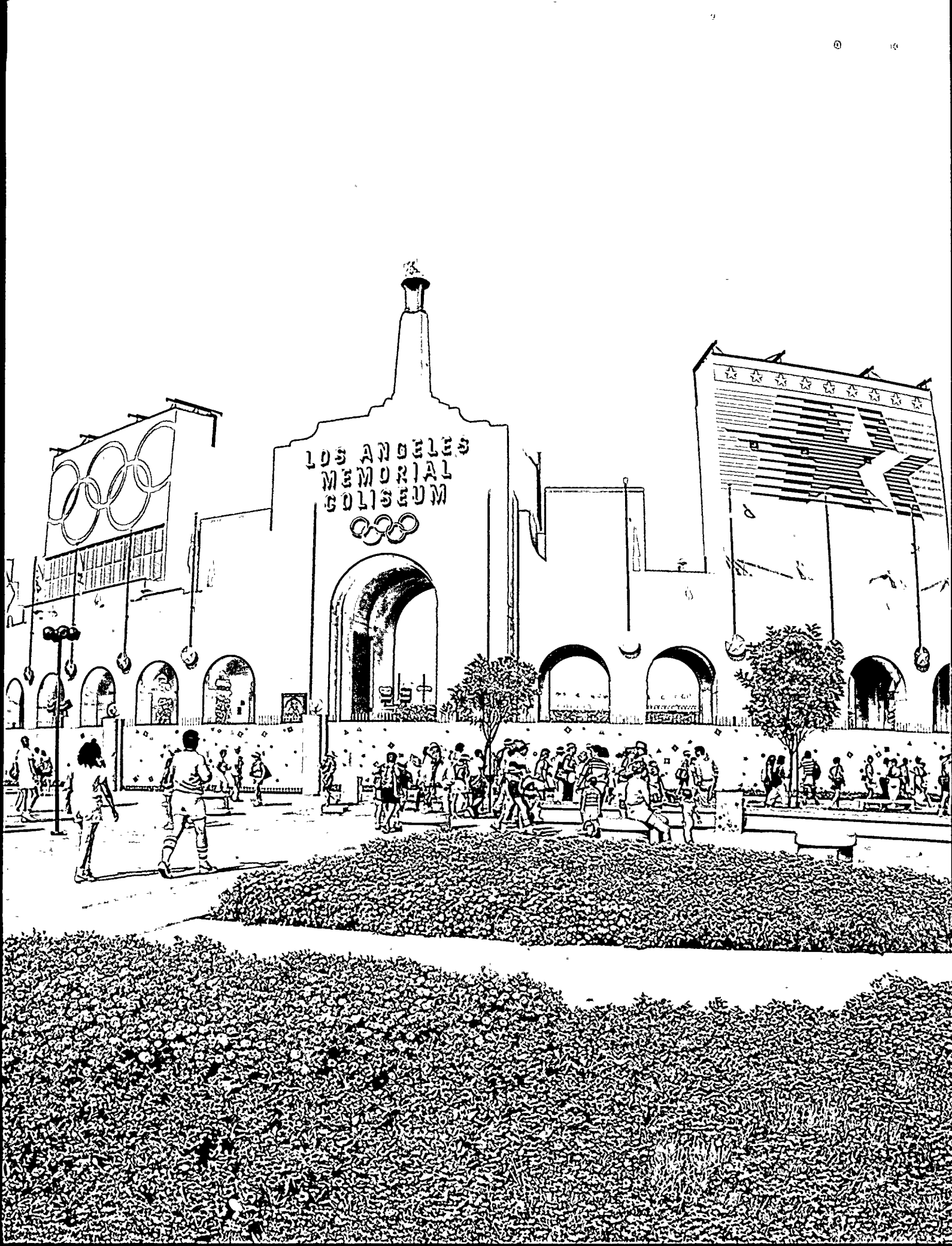
Approximately $8 million was invested by the Power System in research and development activities during the year. It was used to support Electric Power Research Institute programs, for demonstration projects to develop solar and geothermal energy and for testing of a prototype system for reduction of nitrogen oxides emissions.

Power System Facts In Brief

Power production in kilowatt-hours (including all generation of Hoover units connected to DWP system)

	1983-84	1982-83
Power Use		
Domestic Users	1,060,963	1,051,587
Commercial Users	155,310	153,349
Industrial Users	20,903	21,007
Total Customers —All Classes	1,243,092	1,231,929
Sales to Ultimate Consumers— Kilowatt-hours	18,903,086,635	18,178,676,889
Sales to Other Utilities —Kilowatt-hours	224,201,555	484,437,598
Average Annual Kilowatt-hours per Domestic Customer	4,906	4,725
Growth of System		
Utility Plant (Less Accumulated Provision for Depreciation)	$2,591,711,244	$2,545,616,760
Generating Stations— Net Dependable Capability, Kilowatts	6,703,000*	6,805,000*

* Includes purchased capacity; does not deduct short-term sales of excess capacity.


LOS ANGELES
MEMORIAL
COLISEUM

DWP People

The DWP is totally committed to providing quality water and electric services to the citizens of Los Angeles. Whether operating from a desk, field position, or under emergency conditions, more than 10,500 employees in hundreds of job classifications carry out the DWP's mandate to bring a reliable supply of water and electricity to Los Angeles.

New employees are important to the Department's continued dedication to service. An orientation program is provided to all new employees and welcomes them to the DWP family. Vigorous efforts continue to be made to employ the best qualified engineering, technical, professional and clerical personnel. DWP representatives interviewed 1,044 candidates throughout 18 states to fill 100 new engineer positions during the year. In addition, about 500 other new employees in 300 job categories were hired.

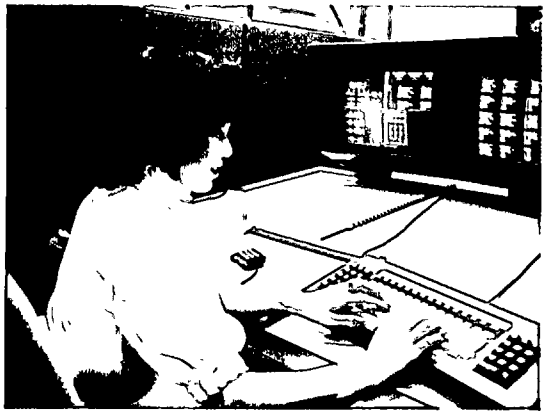
Los Angeles is a multi-ethnic community with representatives from almost every country and racial group. The Department continues its commitment to Affirmative Action. Hiring and advancement opportunities to all are provided through recruitment, promotional and career advancement activities.

As a result of special efforts made in the recruitment of employees during the year, a significant number of those hired were minorities and women. Special outreach efforts were also made to recruit minority and female candidates for examinations in trainee level technical classes and entry level administrative positions.

The Department continued to provide extensive counseling classes aimed at career advancement and advanced education.

Personal and professional growth is encouraged through educational incentives, in-service training, and apprenticeship courses.

Employees of the nation's largest municipal utility take pride in their work. A few of the many who make the Department operate efficiently are shown throughout this section.

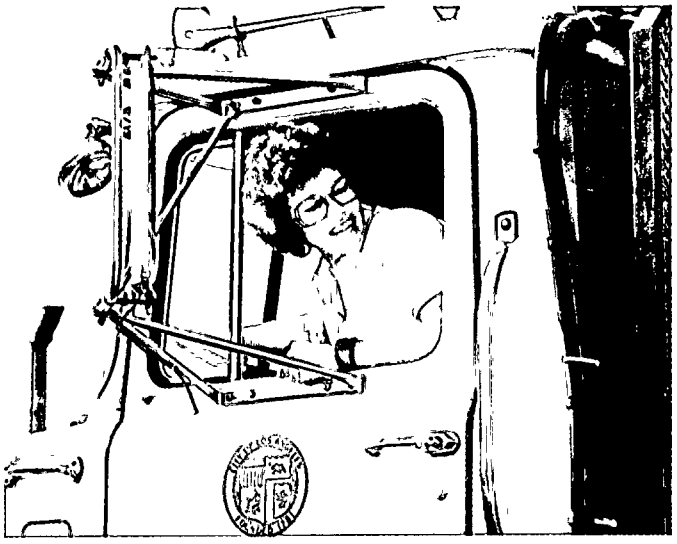


The use of the DWP's Tuition Reimbursement Program continues to grow throughout all job classifications. During the year, about one out of five employees participated in training classes designed to develop their skills, improve their efficiency and effectiveness or increase their knowledge and awareness of job related practices and procedures. Other training was provided to employees to keep them current with the latest developments in their fields.

Home study courses were administered by the Department to more than 600 employees in technical positions. The DWP has the largest government apprenticeship program in California, and a three-to-four year apprenticeship program is available in 11 skilled craft classes.

During the year the Department continued its emphasis on employee safety programs. A management level Safety Steering Committee was established to provide executive safety planning and direction to the Department. Also, an ongoing Joint Safety Committee of management and employee union representatives continues to review safety procedures and training methods.

DWP People



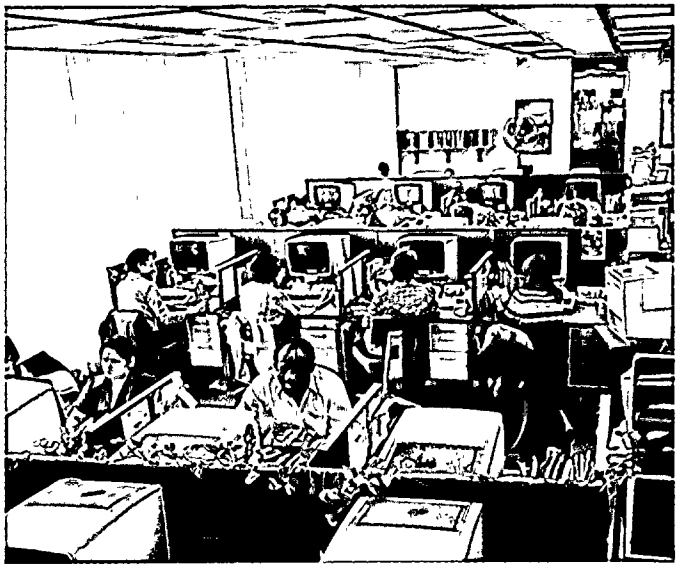
A 24-hour Safety Hot Line was established to report problems or receive safety information. Additionally, a quarterly newsletter devoted to safety information was developed.

The DWP also remains committed to assisting its employees with troubles on or off the job. An Employee Assistance Program is available to help those with difficulties affecting their work, including drug and alcohol use, emotional, financial or legal problems.

As a result of recommendations submitted to the Suggestion Plan, employees were able to net the Department an estimated first-year dollar savings of $204,000 in improved efficiency and reduced operating costs.

The Department takes pride in the outstanding accomplishments of its employees in providing continual high quality, reliable service to the nation's second largest city.

Finances



Thousands of customer service requests are handled daily by the Commercial Division.

Operations for the fiscal year 1983-84 resulted in a record increase of 7.7 percent in water sales and a 2.5 percent increase in the sales of electric energy.

Total operating revenues for the Department's Water and Power Systems were more than $1.36 billion, an increase of $101 million over the last fiscal year. The Water System accounted for $30 million of the increase, due primarily to the rate increases of October 1, 1982 and 1983, combined with the increase in consumption. The Power System added $71 million to the total which came mainly from a rate increase in 1983 and increased energy sales. The increase in energy sales was partially offset by a decrease in the energy costs billed to customers. A change in accounting methods which provided for the accrual of estimated unbilled revenues at the end of the fiscal period also contributed to the increased revenues.

Higher Water System operating revenues, partially offset by an increase in operating and maintenance expenses, and a non-recurring credit from the change in accounting methods resulted in a record-high net income of $58.4 million or 131 percent over the previous fiscal year.

A total of $90.8 million was spent by the Water System on capital construction, most of which went towards the improvement of the water distribution system. Expenditures on the Los Angeles Aqueduct Filtration Plant project for the current fiscal year amounted to $36.4 million, bringing the total spent on the project to date to $46.9 million out of a total estimated cost of $134.8 million.

Operating revenue of the Power System increased by 6.4 percent from last year to a total of $1.18 billion. Higher electric consumption, the October 1, 1983 rate increase and accrued estimated unbilled revenue contributed to the increase. This increased revenue, accompanied by a small increase in operating expenses, brought about a net income of $165.5 million or an increase of 51.7 percent over the previous year.

The Power System invested a total of $150.9 million in capital construction for the year 1983-84. Major expenditures were for improvements to the generation, distribution and transmission systems.

In 1983-84, the Water System sold $50 million in revenue bonds at an interest cost of 9.38 percent, while the Power System did no additional external financing. Outstanding bonds, notes and revenue certificates on June 30, 1984, totaled $1.65 billion for the Power System and $321.4 million for the Water System. Maturing payments on bonds and notes were met by both systems.

Finances

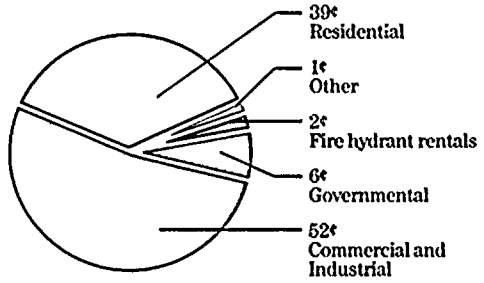
Total assets of the Department on June 30, 1984 were approximately $4.2 billion. Of this amount, $3.2 billion was in the Power System and the remainder in the Water System.

In accordance with its basic fiscal policy, the Department pays all costs of operation, debt service and part of the cost of capital improvements from current revenues. The remainder of the cost of capital improvements is met through sales of revenue bonds or notes and from contributions in aid of construction.

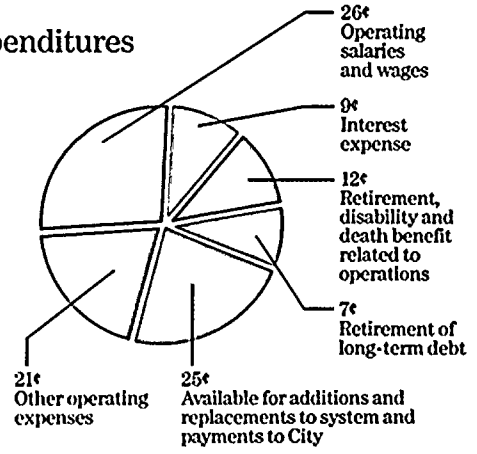
In addition to meeting all costs of operation from current revenues, the Department paid more than $66 million into the Reserve Fund of the City in support of general City government, almost 90 percent of which was from the Power Revenue Fund. Operations of the two systems are entirely self-supporting and no financial obligation or tax burden is placed on the citizens of Los Angeles.

The 1983-84 Water Dollar

Revenues

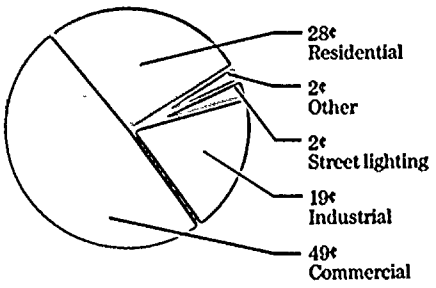


Expenditures

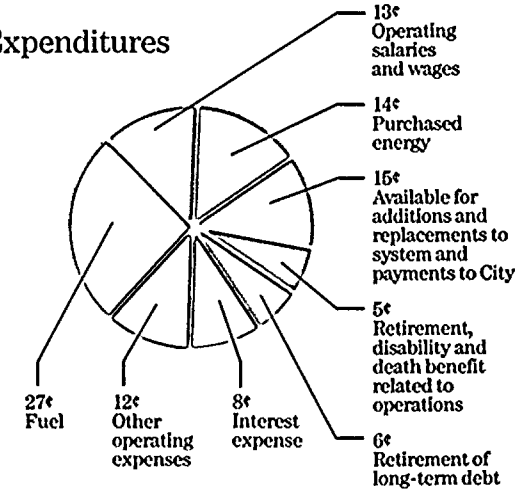


The 1983-84 Power Dollar

Revenues



Expenditures



Water System
Statement of Income

	Year ended June 30	
	1984	1983
Operating revenues:		
Sales of water	$180,851,416	$151,296,849
Fire hydrant rentals	3,925,800	3,784,628
Other operating revenues	964,491	842,003
Total operating revenues	185,741,707	155,923,480
Operating expenses:		
Purchased water	6,775,097	2,934,685
Other operation	75,113,367	69,321,139
Maintenance	25,919,460	24,583,827
Provision for depreciation	20,955,815	19,851,123
Taxes on property outside the City	2,341,654	2,112,916
Total operating expenses	131,105,393	118,803,690
Operating income	54,636,314	37,119,790
Other income—net	7,715,006	3,572,365
Income before debt expenses	62,351,320	40,692,155
Debt expenses:		
Interest on debt	18,263,048	15,910,072
Allowance for borrowed funds used during construction	(2,392,348)	(518,315)
Net debt expenses	15,870,700	15,391,757
Income before nonrecurring credit	46,480,620	25,300,398
Nonrecurring credit related to accounting changes	11,962,000	—
Net income	$ 58,442,620	$ 25,300,398

Statement of Retained Income Reinvested in the Business

Balance at beginning of year	$253,673,111	$235,338,713
Net income for the year	58,442,620	25,300,398
	312,115,731	260,639,111
Less—Payments to the reserve fund of the City	7,796,000	6,966,000
Balance at end of year	$304,319,731	$253,673,111

See accompanying Notes to Financial Statements.

Water System
Balance Sheet

	June 30	
	1984	1983
Assets		
Utility plant, at original cost:		
Source of water supply	$ 217,667,680	$ 215,068,143
Pumping	21,917,235	21,591,114
Purification	8,672,545	8,248,817
Distribution	828,283,890	790,244,854
General	77,016,493	73,977,510
Construction work in progress	78,717,681	34,309,485
	1,232,275,524	1,143,439,923
Less—Accumulated provision for depreciation	405,716,889	382,399,593
	826,558,635	761,040,330
Long-term receivables	2,041,145	2,483,156
Current assets:		
Deposits with City Treasurer—		
Revenue fund	83,802,536	43,128,842
Bond redemption and interest funds	1,617,995	2,115,011
Cash on hand and revolving funds	227,671	386,413
Customer and other accounts receivable, less $600,000 and $500,000 allowance for losses	27,378,093	22,714,491
Accrued unbilled revenue	15,170,000	—
Materials and supplies, at average cost	10,953,913	10,149,270
Deferred purchased water costs	—	2,024,000
Prepayments and other current assets	2,441,846	1,849,583
	141,592,054	82,367,610
Unamortized debt expenses	660,651	633,852
	$ 970,852,485	$ 846,524,948
Liabilities and Equity		
Equity:		
Retained income reinvested in the business, per accompanying statement	$ 304,319,731	$ 253,673,111
Contributions in aid of construction	265,939,843	250,049,264
	570,259,574	503,722,375
Long-term debt, excluding advance refunding bonds:		
Revenue bonds	321,424,702	284,504,336
Less—Long-term debt due within one year (see below)	12,375,000	12,625,000
	309,049,702	271,879,336
Current liabilities:		
Long-term debt due within one year (see above)	12,375,000	12,625,000
Accrued interest	6,081,636	6,083,779
Accounts payable and accrued expenses	51,171,080	34,444,351
Customer deposits	21,915,493	17,770,107
	91,543,209	70,923,237
	$ 970,852,485	$ 846,524,948

See accompanying Notes to Financial Statements.

Water System
Statement of Changes in Financial Position

	Year ended June 30	
	1984	1983
Financial resources provided by:		
Operations—		
Net income	$58,442,620	$25,300,398
Charges and credits to income not affecting working capital—		
Provision for depreciation	25,269,516	22,836,535
Other, net	561,390	526,459
Resources provided by operations	84,273,526	48,663,392
Sale of revenue bonds	49,471,156	39,488,647
Contributions in aid of construction	15,890,579	11,061,979
	149,635,261	99,214,018
Financial resources used for:		
Expenditures for plant and equipment	90,787,821	56,147,441
Reduction of long-term debt	12,375,000	12,625,000
Payments to the reserve fund of the City	7,796,000	6,966,000
Expense of issuing bonds	71,968	82,496
	111,030,789	75,820,937
Increase in working capital	$ 38,604,472	$23,393,081
Increase (decrease) in components of working capital:		
Deposits with City Treasurer—		
Revenue fund	$ 40,673,694	$41,152,099
Construction fund	—	(9,055,243)
Bond redemption and interest funds	(497,016)	871,084
Cash on hand and revolving funds	(158,742)	138,607
Customer and other accounts receivable	4,663,602	(546,592)
Accrued unbilled revenue	15,170,000	—
Materials and supplies	804,643	(288,151)
Deferred purchased water costs	(2,024,000)	(18,013)
Prepayments and other current assets	592,263	63,547
Net change in current assets	59,224,444	32,317,338
Long-term debt due within one year	(250,000)	(65,000)
Accrued interest	(2,143)	1,436,752
Accounts payable and accrued expenses	16,726,729	5,199,404
Customer deposits	4,145,386	2,353,101
Net change in current liabilities	20,619,972	8,924,257
Increase in working capital	$ 38,604,472	$23,393,081

See accompanying Notes to Financial Statements.

Water System
Notes to Financial Statements

NOTE A–Summary of significant accounting policies:

The financial statements of the Water System are presented in conformity with generally accepted accounting principles, and substantially in conformity with accounting principles and methods prescribed by the California Public Utilities Commission except for the method of accounting for contributions in aid of construction described below. The Department is not subject to regulations of such commission.

Utility plant and depreciation–The costs of additions to utility plant and replacements of retirement units of property are capitalized. Costs include labor, materials and allocated indirect charges such as engineering, supervision, construction and transportation equipment, retirement plan contributions and other fringe benefits, and certain administrative and general expenses. The Department also capitalizes, for projects over a specified dollar amount, an allowance for funds used during construction equivalent to the cost of long-term debt incurred to finance plant under construction. Research and development costs directly related to current and future construction projects are capitalized and all other such costs are charged to income as incurred. The cost of relatively minor replacements is included in maintenance expense. The original cost of property retired, together with removal cost, less salvage, is charged to accumulated depreciation at such time as property is removed from service.

Depreciation of utility plant is provided by the straight-line method based on the estimated service lives of the properties.

Deposits with City Treasurer–Deposits with the City Treasurer are invested in short-term investments under the City Treasurer's pooled investment program, whereby available funds of the City of Los Angeles and its independent operating departments are invested on a combined basis. Short-term investments are valued at cost which approximates market. At June 30, 1984 and June 30, 1983, $81,870,934 and $41,367,564, respectively, of the revenue fund were invested in short-term investments.

Contributions in aid of construction–Under the provisions of the Charter of the City of Los Angeles, amounts received from customers and others for construction of utility plant are combined with retained income reinvested in the business to represent equity for purposes of computing the Water System's borrowing limitations. Accordingly, contributions in aid of construction are shown in the accompanying balance sheet as an equity account and are not offset against utility plant; depreciation provided for the related utility plant is charged against income.

Accounting changes–Under the rate ordinance approved August 30, 1983, the Water System was required to change its method of recognizing purchased water costs to expense and bill to customers such costs in the period incurred. Previously, billable purchased water costs were deferred until they were actually billed to customers through the cost of purchased water adjustment formula. Also, to provide a better matching of costs and revenues, effective June 30, 1984, the Water System changed its accounting policy of recognizing revenue to a method which provides for the accrual of estimated unbilled revenues ($15,170,000 at June 30, 1984) for water sold but not billed at the end of a fiscal period. Revenues were previously recognized when billed to customers. As required by the rate ordinance, deferred purchased water costs of $3,208,000 were charged to expense. The net effect of the two changes was to increase net income for the year ended June 30, 1984 by approximately $11,962,000.

Shared operating expenses–The Water System shares certain administrative functions with the Power System of the Department. Generally, the cost of these functions is allocated on the basis of benefits provided to the Systems (Note E).

Water System
Notes to Financial Statements

Debt expenses—Debt premium, discount and issue expenses are deferred and amortized to income over the lives of the related issues.

Payments to the reserve fund of the City—Under the provisions of the Charter of the City of Los Angeles, the Water System transfers funds at its discretion to the reserve fund of the City. Such payments are not in lieu of taxes and are recorded as distributions of retained income.

NOTE B—Depreciation:

Provision for depreciation for the years ended June 30, 1984 and June 30, 1983 was $25,269,516 and $22,836,535, respectively, of which $20,955,815 and $19,851,123 was charged directly to depreciation expense and the balance was charged to other operating expense accounts or capital projects. These aggregate provisions approximated 2.36% and 2.23%, respectively, of average depreciable plant for such fiscal years.

NOTE C—Long-term debt:

Long-term debt outstanding at June 30, 1984 comprised thirty-four issues of revenue bonds due serially in varying annual amounts through 2024. Interest rates, which vary among individual maturities, average approximately 7.74% (7.12% at June 30, 1983). The revenue bonds are callable generally ten years after the date of issue. Scheduled principal maturities during the five years succeeding June 30, 1984 are $12,375,000, $12,450,000, $12,370,000, $12,560,000 and $13,270,000, respectively.

In 1977 the Water System sold advance refunding bonds totaling $33,625,000. Until the bonds to be refunded are called, interest on the advance refunding bonds is payable from interest earned on securities of the United States government purchased out of the proceeds of the sales and held in an escrow account with Citibank, N.A., New York; $33,625,000 of said escrow account has been offset against the advance refunding bonds in the accompanying balance sheet at June 30, 1984 and 1983. After the monies in the escrow account are applied to redeem the bonds to be called ($32,650,000 face value to be redeemed in 1985), the outstanding advance refunding bonds will be payable from Water System revenues.

NOTE D—Sales of water:

Effective October 1, 1982 and October 1, 1983, under the provisions of water rate ordinances approved August 18, 1982 and August 30, 1983, respectively, rates were adjusted to provide additional revenues of approximately 16.5% and 5.4%, respectively. One of the provisions of the rate ordinance approved August 30, 1983 provides for the expensing and billing of purchased water costs in the period incurred.

The Water System sells water to other departments of the City of Los Angeles at regular rates provided in the rate ordinance.

NOTE E-Shared operating expenses:

Operating expenses shared with the Power System were $165,089,353 and $151,186,471 for the years ended June 30, 1984 and June 30, 1983, respectively, of which $51,033,303 and $48,585,075 were allocated to the Water System. Amounts due from the Power System for materials and supplies purchased and shared operating expenses were $5,883,454 and $7,051,515 at June 30, 1984 and June 30, 1983, respectively.

NOTE F—Employees' retirement plan:

The Department has a funded contributory retirement, disability and death benefit insurance plan covering substantially all of its employees. Costs of the plan to the Water System for the years ended June 30, 1984 and June 30, 1983 amounted to $30,618,107 and $26,214,494, respectively, which includes amortization of prior service costs generally over a 30-year period ending June 30, 2003. The Department's policy is to fund retirement plan costs in accordance with the recommendations of the plan's independent actuary. During 1983, additional cost of living benefits were provided to retired employees. During 1984, the plan was amended to permit employees age 55 or older with at least thirty years of service to retire with full benefits.

The actuarially computed present value of accumulated plan benefits attributable to the Water System aggregated $406,000,000 and $375,000,000 at June 30, 1984 and June 30, 1983, respectively, of which $404,000,000 and $373,000,000, respectively, was vested. Assets at market value available for plan benefits were $837,000,000 and $804,000,000 at June 30, 1984 and June 30, 1983, respectively, of which $239,000,000 and $230,000,000 were allocated to the Water System at such dates. An assumed rate of return of 8% was used in determining these actuarially computed values.

Water System
Notes to Financial Statements

NOTE G—Commitments and contingencies:
The Department has budgeted payments totaling $9,885,000 for the fiscal year 1984-1985 from the revenue fund of the Water System to the reserve fund of the City. Also, the Department's budget for the fiscal year 1984-1985 provides for capital expenditures of approximately $144,400,000 in the Water System and substantial commitments have been made in connection therewith.

A number of claims and suits are pending against the Department for alleged damages to persons and property and for other alleged liabilities arising out of matters usually incident to the operations of a utility business such as that of the Department. In the opinion of management, the uninsured liability under these claims and suits would not materially affect the financial position of the Water System as of June 30, 1984.

Report of Independent Accountants
To the Board of Water and Power Commissioners
Department of Water and Power
City of Los Angeles

We have examined the balance sheet of the Water System of the Department of Water and Power of the City of Los Angeles as of June 30, 1984 and 1983, and the related statements of income, retained income reinvested in the business and of changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As more fully described in Note A to the financial statements, effective June 30, 1984, the Water System of the Department changed its method of accounting for unbilled revenues and the method of recognizing purchased water costs.

In our opinion, the financial statements examined by us present fairly the financial position of the Water System of the Department of Water and Power of the City of Los Angeles at June 30, 1984 and 1983, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied during the period except for the changes, with which we concur, referred to in the preceding paragraph.

Price Waterhouse

Los Angeles, California
September 17, 1984

Power System
Statement of Income

	Year ended June 30	
	1984	1983
Operating revenues:		
Sales of electric energy	$1,170,952,861	$1,100,484,430
Other operating revenues	6,516,161	5,923,406
Total operating revenues	1,177,469,022	1,106,407,836
Operating expenses:		
Fuel for generation	313,849,389	328,999,250
Purchased power	169,615,372	176,115,465
Energy costs	483,464,761	505,114,715
Other operation	232,525,223	210,657,757
Maintenance	110,597,763	102,409,853
Provision for depreciation	98,521,416	91,673,061
Taxes on property outside the City	10,965,017	9,257,719
Total operating expenses	936,074,180	919,113,105
Operating income	241,394,842	187,294,731
Other income—net	22,032,115	20,332,277
Income before debt expenses	263,426,957	207,627,008
Debt expenses:		
Interest on debt	98,547,788	100,420,204
Allowance for borrowed funds used during construction	(575,247)	(1,861,712)
Net debt expenses	97,972,541	98,558,492
Net income	$ 165,454,416	$ 109,068,516

Statement of Retained Income Reinvested in the Business

Balance at beginning of year	$1,167,258,624	$1,117,886,108
Net income for the year	165,454,416	109,068,516
	1,332,713,040	1,226,954,624
Less—Payments to the reserve fund of the City	55,320,000	59,696,000
Balance at end of year	$1,277,393,040	$1,167,258,624

See accompanying Notes to Financial Statements.

Power System Balance Sheet

	June 30	
	1984	1983
Assets		
Utility plant, at original cost:		
Production	$1,458,920,767	$1,441,016,471
Transmission	472,573,565	464,044,093
Distribution	1,354,677,991	1,267,078,286
General	219,902,610	180,018,152
Construction work in progress	97,759,185	118,860,051
	3,603,834,118	3,471,017,053
Less—Accumulated provision for depreciation	1,012,122,874	925,400,293
	2,591,711,244	2,545,616,760
Current assets:		
Deposits with City Treasurer—		
Revenue fund	212,117,850	177,079,864
Bond redemption and interest funds	8,337,534	15,610,676
Cash on hand and revolving funds	1,227,063	909,556
Customer and other accounts receivable, less $2,900,000 and $2,700,000 allowance for losses	104,013,988	102,959,274
Accrued unbilled revenue	61,880,000	—
Materials and supplies	55,229,784	53,714,898
Fuel for generation	77,677,261	91,918,943
Deferred energy costs	51,018,000	110,231,000
Prepayments and other current assets	9,094,168	8,887,377
	580,595,648	561,311,588
Unamortized debt expenses	3,026,111	3,234,601
	$3,175,333,003	$3,110,162,949
Liabilities and Equity		
Equity:		
Retained income reinvested in the business, per accompanying statement	$1,277,393,040	$1,167,258,624
Contributions in aid of construction	64,135,734	59,559,664
	1,341,528,774	1,226,818,288
Long-term debt, excluding advance refunding bonds:		
Revenue bonds	1,465,372,195	1,512,029,249
Revenue notes	89,891,512	114,672,215
	1,555,263,707	1,626,701,464
Less—Long-term debt due within one year (see below)	79,126,000	71,811,000
	1,476,137,707	1,554,890,464
Current liabilities:		
Long-term debt due within one year (see above)	79,126,000	71,811,000
Revenue certificates	90,000,000	90,000,000
Accrued interest	23,577,417	31,976,029
Accounts payable and accrued expenses	160,581,952	131,673,283
Extension and other deposits	4,381,153	2,993,885
	357,666,522	328,454,197
	$3,175,333,003	$3,110,162,949

See accompanying Notes to Financial Statements.

Power System
Statement of Changes in Financial Position

	Year ended June 30	
	1984	1983
Financial resources provided by:		
Operations–		
Net income	$165,454,416	$ 109,068,516
Charges and credits to income not affecting working capital–		
Provision for depreciation	104,831,639	97,793,313
Amortization of nuclear project costs	–	4,538,328
Other, net	581,733	618,099
Resources provided by operations	270,867,788	212,018,256
Sale of revenue notes	–	24,803,750
Contributions in aid of construction	4,576,070	4,808,354
	275,443,858	241,630,360
Financial resources used for:		
Expenditures for plant and equipment	150,926,123	144,579,001
Reduction of long-term debt	79,126,000	71,811,000
Payments to the reserve fund of the City	55,320,000	59,696,000
Expense of issuing notes	–	47,160
	285,372,123	276,133,161
Decrease in working capital	$ (9,928,265)	$ (34,502,801)
Increase (decrease) in components of working capital:		
Deposits with City Treasurer–		
Revenue fund	$ 35,037,986	$ 84,640,356
Bond redemption and interest funds	(7,273,142)	6,205,081
Cash on hand and revolving funds	317,507	123,780
Customer and other accounts receivable	1,054,714	6,283,228
Accrued unbilled revenue	61,880,000	–
Materials and supplies	1,514,886	1,780,143
Fuel for generation	(14,241,682)	(64,572,613)
Deferred energy costs	(59,213,000)	(8,650,000)
Prepayments and other current assets	206,791	(82,600)
Net change in current assets	19,284,060	25,727,375
Long-term debt due within one year	7,315,000	1,700,000
Revenue certificates	–	30,000,000
Accrued interest	(8,398,612)	6,167,745
Accounts payable and accrued expenses	28,908,669	22,728,793
Extension and other deposits	1,387,268	(366,362)
Net change in current liabilities	29,212,325	60,230,176
Decrease in working capital	$ (9,928,265)	$ (34,502,801)

See accompanying Notes to Financial Statements.

Power System
Notes to Financial Statements

NOTE A—Summary of significant accounting policies:

The financial statements of the Power System are presented in conformity with generally accepted accounting principles, and substantially in conformity with accounting principles and methods prescribed by the Federal Energy Regulatory Commission and the California Public Utilities Commission except for the method of accounting for contributions in aid of construction described below. The Department is not subject to regulations of such commissions.

Utility plant and depreciation—The costs of additions to utility plant and replacements of retirement units of property are capitalized. Costs include labor, materials and allocated indirect charges such as engineering, supervision, construction and transportation equipment, retirement plan contributions and other fringe benefits, and certain administrative and general expenses. The Department also capitalizes, for projects over a specified dollar amount, an allowance for funds used during construction equivalent to the cost of long-term debt incurred to finance plant under construction. Research and development costs directly related to current and future construction projects are capitalized and all other such costs are charged to income as incurred. The cost of relatively minor replacements is included in maintenance expense. The original cost of property retired, together with removal cost, less salvage, is charged to accumulated depreciation at such time as property is removed from service.

The Department has an undivided interest in several generating stations and transmission systems which are jointly-owned with several utilities. Each participant provides its own construction financing. The Department's proportionate share of construction and improvement costs is included in the appropriate categories of utility plant. The Department will incur certain minimum operating costs on jointly-owned facilities, whether or not it is able to take delivery of its proportionate share of energy generated. The proportionate share of these expenses incurred is included in the appropriate categories of operating expenses.

Depreciation of utility plant is provided for a substantial portion of the facilities by the 5% sinking fund method based on the estimated service lives. The straight-line method is used for major projects completed subsequent to July 1, 1973 and for office and shop structures, related furniture and equipment and transportation and construction equipment.

Deposits with City Treasurer—Deposits with the City Treasurer are invested in short-term investments under the City Treasurer's pooled investment program, whereby available funds of the City of Los Angeles and its independent operating departments are invested on a combined basis. Short-term investments are valued at cost which approximates market. At June 30, 1984 and June 30, 1983, $206,438,978 and $172,644,059, respectively, of the revenue fund were invested in short-term investments.

Materials and supplies and fuel for generation—Materials and supplies and coal inventories are stated at average cost. Fuel oil inventories are stated at last-in, first-out cost.

Contributions in aid of construction—Under the provisions of the Charter of the City of Los Angeles, amounts received from customers and others for construction of utility plant are combined with retained income reinvested in the business to represent equity for purposes of computing the Power System's borrowing limitations. Accordingly, contributions in aid of construction are shown in the accompanying balance sheet as an equity account and are not offset against utility plant; depreciation provided for the related utility plant is charged against income.

Accounting changes—Under the rate ordinance approved August 30, 1983, the Power System was required to change its method of recognizing energy costs to expense and bill to customers such costs in the period incurred. Previously, billable energy costs were deferred until they were actually billed to customers through the energy cost adjustment formula. Also, to provide a better matching of costs and revenues, effective June 30, 1984, the Power System changed its accounting policy of recognizing revenue to a method which provides for the accrual of estimated unbilled revenues ($61,880,000 at June 30, 1984) for energy sold but not billed at the end of a fiscal period. Revenues were previously recognized when billed to customers. At June 30, 1984, the Power System accrued estimated unbilled revenues of $61,880,000 and, as required by the rate ordinance, charged a corresponding amount of deferred energy costs to expense. As required by the ordinance, the remaining deferred energy costs at June 30, 1984 of $51,018,000 will be billed to customers through the energy cost adjustment formula over a period not to exceed 60 months. Adoption of these new accounting methods had no effect on net income for 1984 or 1983.

Shared operating expenses—The Power System shares certain administrative functions with the Water System of the Department. Generally, the cost of these functions is allocated on the basis of benefits provided to the Systems (Note F).

Power System
Notes to Financial Statements

Debt expenses—Debt premium, discount and issue expenses are deferred and amortized to income over the lives of the related issues.

Payments to the reserve fund of the City—Under the provisions of the Charter of the City of Los Angeles, the Power System transfers funds at its discretion to the reserve fund of the City. Such payments are not in lieu of taxes and are recorded as distributions of retained income.

NOTE B—Depreciation:

Provision for depreciation for the years ended June 30, 1984 and June 30, 1983 was $104,831,639 and $97,793,313, respectively, of which $98,521,416 and $91,673,061 was charged directly to depreciation expense and the balance was charged to other operating expense accounts or capital projects. These aggregate provisions approximated 3.13% and 3.06%, respectively, of average depreciable plant for such fiscal years.

NOTE C—Revenue Certificates:

At June 30, 1984 and June 30, 1983, the average interest rate of revenue certificates outstanding was 5.72% and 5.05%, respectively, with maturities ranging from 1 to 116 days and 1 to 118 days, respectively. The Department has a standby line of credit which can be used in the event that the certificates cannot be refinanced as they mature.

NOTE D—Long-term debt:

Long-term debt outstanding at June 30, 1984 comprised sixty-four issues of revenue bonds and notes due serially in varying annual amounts through 2021. Interest rates, which vary among individual maturities, average approximately 6.04% (6.02% at June 30, 1983). The revenue bonds are callable generally ten years after the date of issue. Scheduled principal maturities during the five years succeeding June 30, 1984 are $79,126,000, $84,996,000, $61,526,000, $67,916,000 and $53,545,000, respectively.

In 1977 the Power System sold advance refunding bonds totaling $161,700,000. Until the bonds to be refunded are called, interest on the advance refunding bonds is payable from interest earned on securities of the United States government purchased out of the proceeds of the sales and held in escrow accounts with Citibank, N.A., New York; $161,700,000 of said escrow accounts has been offset against the advance refunding bonds in the accompanying balance sheet at June 30, 1984 and 1983. After the monies in the escrow accounts are applied to redeem the bonds to be called ($157,000,000 face value to be redeemed in 1984 through 1986), the outstanding advance refunding bonds will be payable from Power System revenues.

NOTE E—Sales of electric energy:

Effective October 1, 1983, under the provisions of an electric rate ordinance approved August 30, 1983, rates were adjusted to provide additional revenues of approximately 5.8%. One of the provisions of this ordinance allows the recovery of all deferred energy costs at June 30, 1984 through the energy cost adjustment formula over a period not to exceed 60 months. The ordinance also requires the Power System to expense and bill fuel costs incurred in the generation of electric energy and all purchased power costs subsequent to June 30, 1984 in the period incurred.

The Power System sells electric energy to other departments of the City of Los Angeles at regular rates provided in the rate ordinance.

NOTE F—Shared operating expenses:

Operating expenses shared with the Water System were $165,089,353 and $151,186,471 for the years ended June 30, 1984 and June 30, 1983, respectively, of which $144,056,050 and $102,601,396 were allocated to the Power System. Amounts due the Water System for materials and supplies purchased and shared operating expenses were $5,883,454 and $7,051,515 at June 30, 1984 and June 30, 1983, respectively.

NOTE G—Employees' retirement plan:

The Department has a funded contributory retirement, disability and death benefit insurance plan covering substantially all of its employees. Costs of the plan to the Power System for the years ended June 30, 1984 and June 30, 1983, amounted to $86,743,655 and $73,594,566, respectively, which includes amortization of prior service costs generally over a 30-year period ending June 30, 2003. The Department's policy is to fund retirement plan costs in accordance with the recommendations of the plan's independent actuary. During 1983, additional cost of living benefits were provided to retired employees. During 1984, the plan was amended to permit employees age 55 or older and with at least thirty years of service to retire with full benefits.

The actuarially computed present value of accumulated plan benefits attributable to the Power System aggregated $1,014,000,000 and $935,000,000 at June 30, 1984 and June 30, 1983, respectively, of which $1,010,000,000 and $931,000,000, respectively, was vested. Assets at market value available for plan benefits were $837,000,000 and $804,000,000 at June 30, 1984 and June 30, 1983, respectively, of which $598,000,000 and $574,000,000 were allocated to the Power System at such dates. An assumed rate of return of 8% was used in determining these actuarially computed values.

Power System
Notes to Financial Statements

NOTE H—Commitments and contingencies:
The Department has budgeted payments totaling $58,867,000 for the fiscal year 1984-1985 from the revenue fund of the Power System to the reserve fund of the City. Also, the Department's budget for the fiscal year 1984-1985 provides for capital expenditures of approximately $351,400,000 in the Power System and substantial commitments have been made in connection therewith.

The Department has entered into a number of energy and capacity contracts which involve substantial commitments including an agreement with the Intermountain Power Agency (IPA), a political subdivision of the State of Utah, and two agreements with the Southern California Public Power Authority (SCPPA), a public entity organized under the laws of the State of California. Under the IPA agreement, as amended, the Power System is to purchase 44.6% of the energy generated by the Intermountain Power Project, a coal-fueled generating station scheduled to become operational in 1986. At June 30, 1984, the Intermountain Power Agency had issued $3,750,000,000 of Power Supply Revenue Bonds and had made expenditures of approximately $1,180,000,000.

Under the first SCPPA agreement, the Power System is to purchase 67% of the energy generated by SCPPA's 5.91% ownership in the Palo Verde Nuclear Project, a nuclear-fueled generating station scheduled to become operational in 1986. In May 1983 the Department entered into a second agreement with SCPPA to purchase 59.5% of the capacity of the Southern Transmission System, a 500kV DC transmission line, which will provide for the transmission of energy from the Intermountain Power Project to southern California. At June 30, 1984, SCPPA had $1,762,875,000 of Bond Anticipation Notes and Revenue Bonds outstanding and had made expenditures of approximately $618,000,000.

All of these agreements require the Power System to make certain minimum payments whether or not power is produced or it is able to take delivery of such power. These payments will begin upon completion of the projects, but no later than July 1989 for IPA and July 1987 and July 1989 for the SCPPA agreements, respectively. These payments will continue through 2023 for IPA and for the second SCPPA agreement and through 2017 for the first SCPPA agreement. Minimum payments are based upon debt service requirements plus production costs and, therefore, cannot be determined at June 30, 1984.

A number of claims and suits are pending against the Department for alleged damages to persons and property and for other alleged liabilities arising out of matters usually incident to the operation of a utility business such as that of the Department. In the opinion of management, the uninsured liability under these claims and suits would not materially affect the financial position of the Power System as of June 30, 1984.

Report of Independent Accountants
To the Board of Water and Power Commissioners
Department of Water and Power
City of Los Angeles

We have examined the balance sheet of the Power System of the Department of Water and Power of the City of Los Angeles as of June 30, 1984 and 1983, and the related statements of income, retained income reinvested in the business and of changes in financial position for the years then ended. Our examinations were made in accordance with generally accepted auditing standards and accordingly included such tests of the accounting records and such other auditing procedures as we considered necessary in the circumstances.

As more fully described in Note A to the financial statements, effective June 30, 1984, the Power System of the Department changed its method of accounting for unbilled revenues and the method of recognizing energy costs. Adoption of these new accounting policies, with which we concur, had no effect on net income for 1984 or 1983.

In our opinion, the financial statements examined by us present fairly the financial position of the Power System of the Department of Water and Power of the City of Los Angeles at June 30, 1984 and 1983, and the results of its operations and the changes in its financial position for the years then ended, in conformity with generally accepted accounting principles consistently applied.

Price Waterhouse

Los Angeles, California
September 17, 1984

Water Sales*

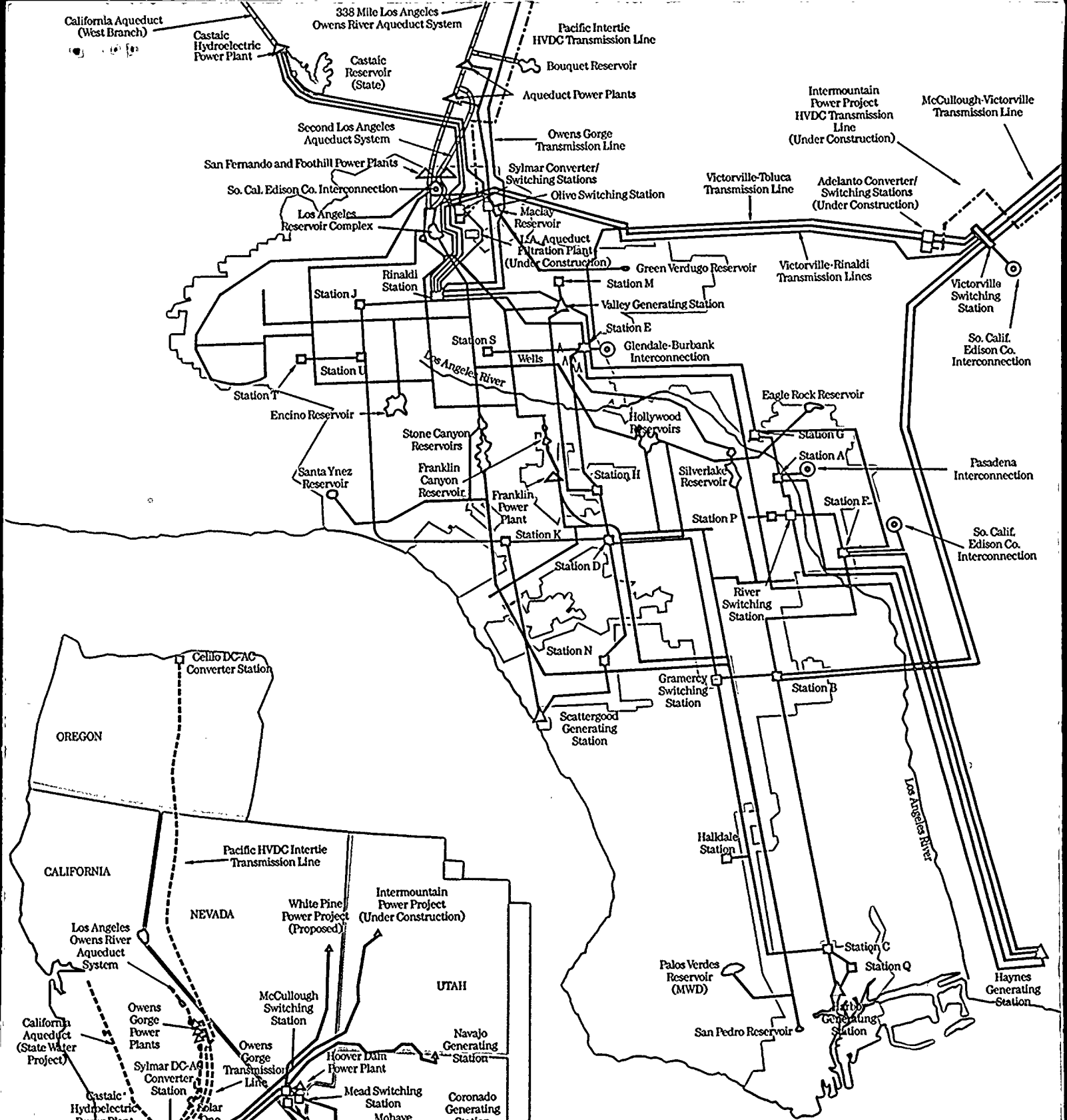
	Residential	Commercial and Industrial	Irrigation	Power System	City Governmental	Other Governmental	All Classes Combined
Revenue from sales of water:							
Year ended June 30—							
1984	$71,399,134	$95,097,004	$303,877	$545,865	$5,247,106	$5,050,430	$177,643,416
1983	60,588,233	81,548,775	221,670	402,933	4,465,884	4,069,354	151,296,849
Increase	10,810,901	13,548,229	82,207	142,932	781,222	981,076	26,346,567
percent increase	17.84	16.61	37.09	35.47	17.49	24.11	17.41
Unit of 100 cubic feet sold:							
Year ended June 30—							
1984	101,108,685	133,793,733	921,595	781,592	9,487,605	7,861,060	253,954,270
1983	93,984,047	125,295,134	646,730	596,008	8,419,836	6,953,129	235,894,884
Increase	7,124,638	8,498,599	274,865	185,584	1,067,769	907,931	18,059,386
percent increase	7.58	6.78	42.50	31.14	12.68	13.06	7.66
Average billing price per 100 cubic feet:							
Year ended June 30—							
1984	0.7062	0.7108	0.3297	0.6984	0.5530	0.6425	0.6995
1983	0.6447	0.6509	0.3428	0.6761	0.5304	0.5853	0.6414
Increase (decrease)	0.0615	0.0599	(0.0131)	0.0223	0.0226	0.0572	0.0581
percent increase (decrease)	9.54	9.20	(3.82)	3.30	4.26	9.77	9.06
Average number of customers (calculated on no. of billings):							
Year ended June 30—							
1984	477,850	147,971	31	403	3,907	1,277	631,439
1983	484,548	141,763	28	404	3,910	1,316	631,969
Increase (decrease)	(6,698)	6,208	3	(1)	(3)	(39)	(530)
percent increase (decrease)	(1.38)	4.38	10.71	(0.25)	(0.08)	(2.96)	(0.08)
Average annual consumption per customer (in units of 100 cubic feet):							
Year ending June 30—							
1984	212	904	29,729				
1983	193	884	23,098				
Increase	19	20	6,631				
percent increase	9.84	2.26	28.71				

*Water sales as billed to customers.

Power Sales*

	Residential	Commercial	Industrial	Public Street and Highway Lighting	Water System	Other Electric Utilities	All Classes Combined
Revenue from sales of electric energy:							
Year ended June 30—							
1984	$314,116,029	$546,306,389	$209,267,190	$21,087,400	$6,006,194	$12,289,659	$1,109,072,861
1983	306,572,562	532,696,583	225,032,237	21,815,336	5,793,382	8,574,330	1,100,484,430
Increase (decrease)	7,543,467	13,609,806	(15,765,047)	(727,936)	212,812	3,715,329	8,588,431
percent increase (decrease)	2.46	2.55	(7.01)	(3.34)	3.67	43.33	0.78
Kilowatt hours sold (in thousands):							
Year ended June 30—							
1984	5,205,487	9,375,473	3,873,991	336,890	111,245	224,202	19,127,288
1983	4,969,167	8,789,136	3,977,741	342,974	99,659	484,437	18,663,114
Increase (decrease)	236,320	586,337	(103,750)	(6,084)	11,586	(260,235)	464,174
percent increase (decrease)	4.76	6.67	(2.61)	(1.77)	11.63	(53.72)	2.49
Average billing price per kilowatt hour:							
Year ended June 30—							
1984	0.0603	0.0583	0.0540	0.0626	0.0540	0.0548	0.0580
1983	0.0617	0.0606	0.0566	0.0636	0.0581	0.0177	0.0590
Increase (decrease)	(0.0014)	(0.0023)	(0.0026)	(0.0010)	(0.0041)	0.0371	(0.0010)
percent increase (decrease)	(2.27)	(3.80)	(4.59)	(1.57)	(7.06)	209.60	(1.69)
Average number of customers (calculated on no. of billings):							
Year ended June 30—							
1984	1,060,963	155,310	20,903	5,515	394	7	1,243,092
1983	1,051,587	153,349	21,007	5,568	413	5	1,231,929
Increase (decrease)	9,376	1,961	(104)	(53)	(19)	2	11,163
percent increase (decrease)	0.89	1.28	(0.50)	(0.95)	(4.60)	40.00	0.91
Average annual consumption per customers (in kilowatt hours):							
Year ending June 30—							
1984	4,906	60,366	185,332				
1983	4,725	57,315	189,353				
Increase (decrease)	181	3,051	(4,021)				
percent increase (decrease)	3.83	5.32	(2.12)				

*Power sales as billed to customers.



The City of Los Angeles encompasses 464 square miles and has a population of 3.1 million. A vast network of facilities is in place to serve customers with a reliable supply of water and electricity. Water is imported from hundreds of miles away and brought to Los Angeles through aqueducts. Generating facilities in other western states are playing a larger role in the city's power supply picture.

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