

N. UTILITIES AND SERVICES

1. ELECTRICITY

ENVIRONMENTAL SETTING

Project Site

Electricity is supplied to the project area by the City of Los Angeles Department of Water and Power (DWP) from one 4800-volt and one 34,500-volt subtransmission circuit located near the Site. According to the DWP, there are currently no service problems or deficiencies with electricity service in the project area.⁹¹

Based on the existing development at the Project Site, 4,162,625 kilowatt hours (kWh) of electricity are consumed annually, as shown in **Table 100: Existing Project Site Electricity Demand**.

TABLE 100
EXISTING PROJECT SITE ELECTRICITY DEMAND

Land Use	Consumption Rate	Unit	Annual Electricity Consumption (kWh)
Industrial	10.5 kWh/sf	12,450 sf	130,725
Office	12.95 kWh/sf	310,000 sf	4,014,500
Warehouse	4.35 kWh/sf	4,000 sf	17,400
Total			4,162,625
SOURCE: SCAQMD, CEQA Handbook, Table A9-11-A, Page A9-114			

Add Area

Electricity is supplied to the project area by the DWP from one 4800-volt and one 34,500-volt subtransmission circuit located near the Site. According to the DWP, there are currently no service problems or deficiencies with electricity service in the project area.⁹²

The current electricity demand of structures located within the Add Area is 2,230,803 kWh as shown in **Table 101: Existing Add Area Electricity Demand**.

⁹¹Letter from Charles Holloway, Supervisor of the Environmental Assessment Division, DWP, to Carrie Riordan of Planning Associates, Inc. June 11, 2002.

⁹²Letter from Charles Holloway, Supervisor of the Environmental Assessment Division, DWP, to Carrie Riordan of Planning Associates, Inc. June 11, 2002.

TABLE 101
EXISTING ADD AREA ELECTRICITY DEMAND

Land Use	Consumption Rate	Unit	Annual Electricity Consumption (kWh)
Industrial	10.5 kWh/sf	42,165 sf	442,733
Manufacturing	10.5 kWh/sf	83,050 sf	872,025
Office	12.95 kWh/sf	27,427 sf	355,180
Storage	4.35 kWh/sf	97,554 sf	424,360
Warehouse	4.35 kWh/sf	30,231 sf	131,505
Total			2,230,803
SOURCE: SCAQMD CEQA Handbook, Table A9-11-A, Page A9-114			

THRESHOLDS OF SIGNIFICANCE

According to the City of Los Angeles CEQA Thresholds Guide, the determination of significance shall be made on a case-by-case basis, considering the following factors:

- The extent to which the project would require new (off-site) energy supply facilities and distribution infrastructure, or capacity enhancing alterations to existing facilities;
- Whether and when the needed infrastructure is anticipated by adopted plans; and
- The degree to which the project design and/or operations incorporate energy conservation measures, particularly those that go beyond City requirements.

ENVIRONMENTAL IMPACTS

Project Site

As shown in **Table 102: Proposed Project Site Electricity Demand**, new development would result in a maximum annual electricity demand of 14,429,137 kWh at the Project Site. This constitutes an increase of 10,266,512 kWh of electricity annually at the Project Site. According to the DWP, an increase of this magnitude will not adversely affect the electricity distribution system. The DWP does not expect disruption of service to existing customers as a result of service to the Project Site.⁹³ The DWP has a number of programs and incentives for energy conservation to encourage a project to operate more efficiently and reduce operating expenses.

⁹³Letter from Charles Holloway, Supervisor of the Environmental Assessment Division, DWP, to Carrie Riordan of Planning Associates, Inc. June 11, 2002.

TABLE 102
PROPOSED PROJECT SITE ELECTRICITY DEMAND

Land Use	Consumption Rate	Unit	Annual Electricity Consumption (kWh)
Scenario 1			
Retail	13.55 kWh/sf	340,000 sf	4,607,000
Senior Housing Units	5,626.5 kWh/du	389 du	2,188,709
Assisted Living Units	5,626.5 kWh/unit	35 units	196,928
Total			6,992,637
Scenario 2			
Office	12.95 kWh/sf	930,000 sf	12,043,500
Senior Housing Units	5,626.5 kWh/du	389 du	2,188,709
Assisted Living Units	5,626.5 kWh/unit	35 units	196,928
Total			14,429,137
Scenario 3			
Retail	13.55 kWh/sf	250,000 sf	3,387,500
Condominiums	5,626.5 kWh/du	300 du	1,687,950
Senior Housing Units	5,626.5 kWh/unit	389 units	2,188,709
Assisted Living Units	5,626.5 kWh/unit	35 units	196,928
Total			7,461,087
Scenario 4			
Office	12.95 kWh/sf	690,000 sf	8,935,500
Condominiums	5,626.5 kWh/unit	300 units	1,687,950
Senior Housing Units	5,626.5 kWh/unit	389 units	2,188,709
Assisted Living Units	5,626.5 kWh/unit	35 units	196,928
Total			13,009,087
SOURCE: SCAQMD, CEQA Handbook, Table A9-11-A, Page A9-114			

Development at the Project Site will not result in the need for new or major modifications to generation or distribution systems and is not expected to use electricity wastefully or in excessive amounts. Additionally, the estimated electricity demand will be accommodated by the DWP. Therefore, development at the Project Site would result in a less than significant impact to the electrical utility in the project area.

Add Area

As shown in **Table 103: Proposed Add Area Electricity Demand**, development of the Add Area would result in a maximum annual electricity demand of 7,588,700 kWh. This constitutes an increase of 5,357,897 kWh of electricity annually at the Add Area. According to the DWP, demand will not adversely affect the electricity distribution system. The DWP does not expect disruption of service to existing customers as a result of service to the Add Area.⁹⁴ The DWP has a number of programs and incentives for energy conservation to encourage a project to operate more efficiently and reduce operating expenses.

**TABLE 103
 PROPOSED ADD AREA ELECTRICITY DEMAND**

Land Use	Consumption Rate	Unit	Annual Electricity Consumption (kWh)
Scenario 1			
Retail	13.55 kWh/sf	200,000 sf	2,710,000
Total			2,710,000
Scenario 2			
Office	12.95 kWh/sf	586,000 sf	7,588,700
Total			7,588,700
Scenario 3			
Retail	13.55 kWh/sf	150,000 sf	2,032,500
Condominiums	5,626.5 kWh/du	300	1,687,950
Total			3,720,450
Scenario 4			
Office	13.55 kWh/sf	435,000 sf	5,633,250
Condominiums	5,626.5 kWh/du	300	1,687,950
Total			7,321,200

Development at the Add Area will not result in the need for new or major modifications to generation or distribution systems and is not expected to use electricity wastefully or in excessive amounts. Additionally, the estimated electricity demand will be accommodated by the DWP. Therefore, development scenarios analyzed for the Add Area would result in a less than significant impact to the electrical utility in the project area.

⁹⁴Letter from Charles Holloway, Supervisor of the Environmental Assessment Division, DWP, to Carrie Riordan of Planning Associates, Inc. June 11, 2002.

MITIGATION MEASURES

Although a significant impact to electricity was not identified at the Project Site or Add Area, the following mitigation measures will help further reduce any potential impacts on electricity provision in the area and may encourage electricity conservation.

69. Prior to the issuance of a building permit, the applicant shall consult with the DWP regarding such energy saving programs as *Green Power for a Green L.A. Program, Trees for a Green LA, Efficiency Solutions, Solar Energy, Electric Transportation, Commercial Energy Efficiency Measures*. (R, O, C)
70. The applicant shall incorporate measures to meet or, if possible, exceed minimum efficiency standards for Title XXIV of the California Code of Regulations. In addition to energy efficiency technical assistance, the Department may offer financial incentives for energy designs that exceed requirements of Title XXIV for energy efficiency.
 - Built-in appliances, refrigerators, and space-conditioning equipment should exceed the minimum efficiency levels mandated in the California Code of Regulations. (O, C, R)
 - Install high-efficiency air conditioning controlled by a computerized energy-management system in the office and retail spaces which provides the following: (O, C)
 - A variable air-volume systems which results in minimum energy consumption and avoids hot water energy consumption for terminal reheat;
 - A 100-percent outdoor air-economizer cycle to obtain free cooling in appropriate climate zones during dry climatic periods;
 - Sequentially staged operation of air conditioning equipment in accordance with building demands; and
 - The isolation of air conditioning to any selected floor or floors.
 - Consider the applicability of the used of thermal energy storage to handle cooling loads.
71. Cascade ventilation air from high-priority areas before being exhausted, thereby decreasing the volume of ventilation air required. For example, air could be cascaded from occupied space to corridors and then to mechanical spaces before being exhausted. (O, C)
72. Recycle lighting system heat for space heating during cool weather. Exhaust lighting system heat from the buildings, via ceiling plenums, to reduce cooling loads in warm weather. (O, C)

73. Install low and medium static-pressure terminal units and ductwork to reduce energy consumption by air distribution systems. (O, C)
74. Ensure that buildings are well sealed to prevent outside air from infiltrating and increasing interior space conditioning loads. Where applicable, design building entrances with vestibules to restrict infiltration of unconditioned air and exhausting conditioned air. (O, C, R)
75. A performance check of the installed space conditioning system should be completed by the developer/installer prior to issuance of the certificate of occupancy to ensure that energy efficiency measures incorporated into the project operate as designed. (O, C, R)
76. Finish exterior walls with light-colored materials and high-emissivity characteristics to reduce cooling loads. Finish interior walls with light-colored materials to reflect more light and, thus, increase lighting efficiency. (O, C)
77. Install thermal insulation in walls and ceilings which exceeds requirements established by the California Code of Regulations. (O, C, R)
78. Design window systems to reduce thermal gain and loss, thus reducing cooling loads during warm weather and heating loads during cool weather. (O, C, R)
79. Install heat-rejecting window treatments, such as films, blinds, draperies, or other on appropriate exposures. (O, C, R)
80. Install fluorescent and high-intensity-discharge (HID) lamps, which give the highest light output per Watt of electricity consumed, wherever possible, including all street and parking lot lighting, to reduce electricity consumption. Use reflectors to direct maximum levels of light to work surfaces. (O, C)
81. Install photosensitive controls and dimmable electronic ballasts to maximize the use of natural daylight available and reduce artificial lighting load. (O, C)
82. Install occupant-controlled light switches and thermostats to permit individual adjustment of lighting, heating, and cooling to avoid unnecessary energy consumption. (O, C)
83. Install time-controlled interior and exterior public area lighting limited to that necessary for safety and security. (O, C, R)

84. Control mechanical systems (HVAC and lighting) in the building with timing systems to prevent accidental or inappropriate conditioning or lighting of unoccupied space. (O, C)

LEVEL OF IMPACT AFTER MITIGATION

Less than significant.

CUMULATIVE IMPACTS

Related Projects

As shown in **Table 104: Proposed Related Project Electricity Demand**, related projects in the area will increase electricity consumption by approximately 71,863,953 kWh annually. However, the DWP has indicated that the Department will be able to accommodate the increased demand. Therefore, related projects in the project area would result in a less than significant impact on electricity provision in the project area.

Proposed Project, Add Area, and Related Projects

As a result of the proposed Project at the Project Site and development scenarios analyzed for the Add Area, in combination with related projects in the area, consumption of electricity in the area is expected to increase by a maximum of approximately 87,488,362 kWh annually. The DWP has indicated that there is adequate supply of electricity to meet this increased demand. Therefore, a significant cumulative impact to electricity provision services in the area is not anticipated.

TABLE 104
RELATED PROJECT ELECTRICITY DEMAND

Project No.	Land Use	Consumption Rate	Unit	Annual Electricity Consumption (kWh)
1	Retail	13.55 kWh / sf	28,404 sf	384,874
2	Retail	13.55 kWh / sf	16,580 sf	224,659
3	Church	6.0 kWh / sf	100,000 sf	600,000
	Senior Housing Units	5,626.5 kWh / du	58 du	326,337
	Pre School	4.27 cf / sf	9,000 sf ¹	38,430
4	Office	17.1 kWh / sf	560,000 sf	9,576,000
	Medical Office	25.5 kWh / sf	80,000 sf	2,040,000
	Hotel	13.1 kWh / sf	225,000 sf ²	2,947,500
	Retail	13.55 kWh / sf	2,275,000 sf	30,826,250
	Restaurant	47.45 kWh / sf	45,000 sf	2,135,250
	Residential	5,626.5 kWh/unit	2,518 units	14,167,527
5	Residential	5,626.5 kWh/unit	484 units	2,723,226
6	High School	5.5 kWh / sf	177,600 sf ³	976,800
7	Office/Classroom	17.1 kWh / sf	171,000 sf	2,924,100
9	Office	17.1 kWh / sf	80,000 sf	1,368,000
10	High School	5.5 kWh / sf	110,000 sf ³	605,000
Total				71,863,953
¹ Assumes 150 square feet per student. ² Assumes 750 square feet per hotel room ³ Assumes 200 square feet per student.				
SOURCE: SCAQMD, CEQA handbook, Table A9-11-A, Page A9-114.				