

1. INTRODUCTION

This section of the Draft EIR discusses energy resources within the project area. This section also analyzes the ability of the Los Angeles Department of Water and Power (LADWP) and the Southern California Gas Company (The Gas Company) to meet the proposed project's energy demands. Sources of information used in the preparation of this section include communication with the LADWP and The Gas Company.

2. EXISTING CONDITIONS

a. Electricity

The proposed Herald Examiner project is within the City of Los Angeles, and as such, upon implementation of the project, electricity would be provided by the LADWP. LADWP currently serves 3.8 million residents with 1.4 million electric service connections in the greater Los Angeles area. In 2003, 57 percent of the electrical usage was used for commercial uses, while the remaining electrical usage was spread out with 31 percent used by residential uses, 11 percent used by industrial uses and 1 percent for other uses.¹ The power supply sources include 51 percent coal, 26 percent natural gas, 12 percent nuclear, 8 percent hydroelectric and 3 percent renewable.

The LADWP has indicated that there are no electric service problems or deficiencies in the project area.² In addition, the LAPWP is in the process of implementing four projects focused on re-powering 10 of its 18 Los Angeles Basin generating units over the next several years.

The closest underground lines that would serve the Hill Street and Broadway sites run along 12th Street and are 34.5 kilovolt (kV) lines. The closest underground lines that would serve the 12th Street site run along 12th Street and South Broadway adjacent to the site and are 34.5 kV lines. All three project sites have an underground 4.8 kV line adjacent to the sites.

LADWP has determined that the distribution system is adequate to supply the project's needs.³

¹ www.ladwp.com , October 25, 2005.

² Written response from Charles C. Holloway, Supervisor of Environmental Assessment, LADWP, November 9, 2005.

³ Ibid.

Electricity Conservation

Renewable Energy Policy

LADWP is developing a Renewable Portfolio Standard (RPS), designed to increase the amount of energy it generates from renewable power sources to 20 percent of its energy sales to retail customers by 2017, with an interim goal of 13 percent by 2010. The policy will provide a long-term framework to achieve the 20 percent goal without compromising power reliability or the financial stability of the Department and its customers.

Los Angeles Department of Water and Power Programs

LADWP provides several programs for residents and non-residents of Los Angeles to help conserve energy. Programs for residents of Los Angeles include Consumer Rebate Programs, a Refrigerator Turn-In and Recycling Program, Ultra-Low-Flush Toilet Programs, High-Efficiency Clothes Washer Rebate Program, Trees for a Green LA Program, Green Power Program, Project ANGEL, Outdoor Area Lighting Program, Solar Power Incentives, Power Quality Consulting Programs and Electric Vehicle Programs.

Programs for non-residents of Los Angeles include: Commercial Lighting Efficiency Offer (CLEO), Heating, Ventilation and Air Conditioning (HVAC) Rebate Program, Customer Generation Rebate, Technical Assistance Program, Ultra-Low-Flush Toilet Rebate for Commercial Customers, Premium Efficiency Motors (PEM) Program, Chiller Efficiency Program, Non-Residential Trees for a Green LA Program, Energy Load Monitoring (ELM) Program, Financing Programs, Outdoor area Lighting Programs, Power Quality Consulting Program, Green Power Program, Project ANGEL and Solar Power Incentives.

State Building Energy Efficiency Standards:

Energy consumption of new buildings in California is regulated by the State Building Energy Efficiency Standards, contained in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of both residential and non-residential buildings and regulate energy consumed for heating, cooling ventilation, water heating and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that these standards meet or exceed those provided in Title 24 of the state's Code of Regulations.

b. Gas

Natural gas in the project area is provided by The Gas Company. The Gas Company's service area that serves the proposed project encompasses 23,000 square miles throughout most of Central and Southern California, from Visalia to the Mexican border. The natural gas supply in the project area originates from an underground storage field located in Playa del Rey, within the City of Los Angeles. The streets adjacent to the project sites have steel gas mains ranging from 2- to 6-inch-diameter pipes. Placement of the Meter Set Assembly would most likely dictate which gas main would be tapped for service.⁴ The Gas Company has indicated that there are no known system deficiencies or problems with gas supply in the project area and, currently, there are no plans for system expansion. In addition, The Gas Company will make improvements to the system to meet customer obligations, if needed.⁵

The demand for natural gas is dependent upon the physical growth rate and temperature changes within a geographic area. According to The Gas Company, the system is flexible and can be modified to meet future growth and demand in the project area. The availability of natural gas is based upon present conditions of gas supply and regulatory policies. As a public utility company, The Gas Company is under the jurisdiction of the California Public Utilities Commission but can also be affected by actions of federal regulatory agencies including the Federal Energy Regulatory Commission. The conditions and availability of gas supply and services are, therefore, dependent on the regulatory actions of these agencies.

Gas Conservation

Los Angeles General Plan⁶

The L.A. General Plan has three policies for the conservation of gas. One policy is relevant to the Herald Examiner project and is described below along with its programs to help implement the policy.

Policy 1 – Continue to encourage energy conservation and petroleum product reuse.

- Program 1 – Public information and energy conservation incentives programs.
- Program 2 – Petroleum products recycling.
- Program 3 – Alternative fuel and energy sources research and use.

⁴ Written response from David Avalos, Technical Services Supervisor, Southern California Gas Company, November 11, 2005.

⁵ Written response from David Avalos, Technical Services Supervisor, Southern California Gas Company, November 11, 2005.

⁶ Los Angeles General Plan, Conservation Element, p. II-64, August 8, 2001.

The Gas Company Programs

The Gas Company provides several programs and information on conservation for both residential and commercial. Residential programs include the Home Energy Efficiency Rebate Program and the Home Energy Upgrade Financing Program, The Gas Company website, www.socalgas.com, lists other energy efficiency links, including the California Energy Efficiency, Flex Your Power Energy Efficiency, Energy Star and the California Energy Commission.

Commercial energy efficiency programs include Express Rebates, Food Service Rebates, Commercial/Industrial Incentives, Gas Engine Programs, Self Generation Programs, Savings by Design Program. The Gas Company's website also lists Energy Conservation Tips, the Cal Energy Efficiency Web Site and the Flex Your Power Web Site.

State Building Energy Efficiency Standards

Natural gas conservation in new buildings is regulated by the State Building Energy Efficiency Standards (Title 24 of the California Code of Regulations). The efficiency standards apply to new construction of both residential and non-residential buildings and regulate energy consumed for heating, cooling ventilation, water heating and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that these standards meet or exceed those provided in Title 24 of the state's Code of Regulations.

3. REGULATORY FRAMEWORK

a. Electricity

Title 24 of the California Code of Regulations, which is known as the energy efficiency standards, regulates energy consumption in new construction. The standards regulate energy consumed in buildings for heating, cooling, ventilation, water heating and lighting. Title 24 is implemented through the local plan check and permit process.

In addition, the City of Los Angeles General Plan Framework Element is a plan for long-term growth that establishes a Citywide context to guide the update of the community plan and Citywide elements. The Framework discusses that the phenomena of the "urban heat island effect" is largely caused by the concentration of buildings and paved surfaces in urban areas. The "urban heat island effect" is the increase in temperatures in urban areas that result in a greater number of days when air quality is unhealthy or worse. This "unhealthy" term is a rating in a system. The City's approach to addressing the

“urban heat island effect” has been to focus on better management of the urban forest to offset its effects. These better management practices include using trees to reduce the demand for air conditioning and cooling in buildings and on paved surfaces.

b. Natural Gas

As a public utility, The Gas Company is under the jurisdiction of the California Public Utilities Commission. The Gas Company provides service in accordance with their policies and extensions rules on file with the Commission.

4. ENVIRONMENTAL IMPACT ANALYSIS

a. Significance Criteria

According to the *L.A. California Environmental Quality Act (CEQA) Thresholds Guide*, the determination of significance for energy use shall be made on a case-by-case basis, considering the following factors:⁷

- 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 was anticipated by adopted plans.
- The degree to which the project design and/or operations incorporate energy conservation measures, particularly, those that go beyond City requirements.

b. Project Impacts

Energy

Table IV.J.4-1, Projected Electricity Consumption for the Proposed Project, below, indicates the projected annual electricity demand and consumption from the proposed project. The calculations shown in the table are based on the assumption that all 575 units, as well as the anticipated retail and office spaces, are occupied and in operation. The estimated total electricity consumption from the proposed project is approximately 4,286,392 kilowatt hours (kwh) per year.

⁷ L.A. *CEQA Thresholds Guide*, City of Los Angeles, Environmental Affairs Department, May 14, 1998, p. K.4-3.

**Table IV.J.4-1
Projected Electricity Consumption for the Proposed Project**

Proposed Use	Size	Consumption Factors	Total Consumption per Year
Residences	575 dwelling units	5,626.50 kwh/unit/year	3,235,237.5 kwh
Office	39,725 square feet	12.95 kwh/sq. ft./year	514,438.75 kwh
Retail	39,610 square feet	13.55 kwh/sq. ft./year	536,715.5 kwh
Total	-	-	4,286,392 kwh/year

Source: CEQA Air Quality Handbook, November 1993, Table A9-12-A, Natural Gas Usage Rate.
sq. ft. = square feet

Generally, LADWP power service systems are flexible and can be readily altered to meet demand requirements. Electrical service to the project sites would be provided in accordance with LADWP rules and regulations, and initial installation is not anticipated to disrupt supply to existing uses in the project area. However, new customer transformer facilities on the project sites would be required by the LADWP, the cost of which would be borne by the project applicant. Project design would be required to comply with sections of the State Building Energy Efficiency Standards, contained in Title 24 of the California Code of Regulations. As stated above, LADWP has determined that the distribution system is adequate to supply the project's needs.⁸ Therefore, the proposed project would result in less than significant impacts on power consumption.

Gas

Table IV.J.4-2, Projected Natural Gas Consumption for the Proposed Project, indicates the anticipated monthly natural gas demand and consumption from the proposed uses on the project sites. The calculations shown in the table are based on the assumption that all 575 units, as well as the anticipated retail and office spaces, are occupied and in operation, under the following conditions, and that the primary uses of gas will be for indoor space heating, food preparation and water heaters.

⁸ Written response from Charles C. Holloway, Supervisor of Environmental Assessment, LADWP, November 9, 2005.

**Table IV.J.4-2
Projected Natural Gas Consumption for the Proposed Project**

Proposed Use	Size	Consumption Factor	Total Consumption per Month
Residential (Multi-Family Units)	575 d.u.	6,665.0 cubic feet/unit/month	3,832,375 cubic feet
Office	39,725 sq. ft.	2.0 cubic feet/sq. ft./month	79,450 cubic feet
Retail	39,610 sq. ft.	2.9 cubic feet/sq. ft./month	114,869 cubic feet
Total	Per Year	12x Monthly Total	48,320,328 cubic feet/year

Source: CEQA Air Quality Handbook, November 1993, Table A9-11-A, Natural Gas Usage Rate.

The estimated total natural gas consumption for the proposed project is anticipated to be approximately 48,320,328 cubic feet per year. According to The Gas Company, the existing system will be able to meet the proposed project's load based on the above assumptions.⁹ The system can also be modified to meet loads that are much larger than the projected gas consumption by the proposed project, as the gas company will make improvements to their system to meet customer obligations if needed. Natural gas service to the project sites would be in accordance with The Gas Company's policies and extension rules on file with the California Public Utilities Commission.

- *Impacts related to energy are considered significant if the proposed project would require new (off-site) energy supply facilities and distribution infrastructure, or capacity-enhancing alterations to existing facilities.*

Electricity Impacts

LADWP has determined that the distribution system is adequate to supply the project's needs.¹⁰ However, new customer transformer facilities on the project sites would be required by the LADWP, the cost of which would be born by the project applicant. Therefore, no additional off-site energy facilities or infrastructure improvements would be required as a result of project implementation, and there is no potential for significant impacts on energy supply facilities.

Gas Impacts

According to The Gas Company, the existing system will be able to meet the proposed project's load based on the above assumptions.¹¹ Therefore, no additional natural facilities or infrastructure

⁹ Written response from David Avalos, Technical Services Supervisor, Southern California Gas Company, November 11, 2005.

¹⁰ Written response from Charles C. Holloway, Supervisor of Environmental Assessment, LADWP, November 9, 2005.

¹¹ Written response from David Avalos, Technical Services Supervisor, Southern California Gas Company, November 11, 2005.

improvements would be required as a result of project implementation, and no potential for significant energy supply facilities exists.

- *Impacts related to the gas system are determined by considering whether and when the needed infrastructure was anticipated by adopted plans.*

Energy and gas infrastructure currently exists throughout the project area. The proposed project is consistent with planning and growth projections for both the South Park sub-area and the greater Downtown Los Angeles area. Additionally, implementation of the proposed project would not result in the need for additional off-site infrastructure in order to provide needed energy and natural gas supplies. As such, no infrastructure, beyond that already in place and/or planned for by LADWP and The Gas Company, is required to accommodate the proposed project. Therefore, no potential for significant impacts exists relative to energy infrastructure.

- *Impacts related to energy are considered significant based on the degree to which the project design and/or operations incorporate energy conservation measures, particularly, those that go beyond City requirements.*

Prior to issuance of each building permit, the project applicant would submit plans to the City's Building and Safety Department demonstrating that each of the project's buildings complies with the State Energy Conservation Standards for New Residential Buildings (Title 24, part 6, Article 2, California Administrative Code). By submitting the plans the project applicant would obtain energy conservation measures.

Based on the above, project impacts relating to natural electricity and gas consumption are considered to be potentially significant impacts that can be mitigated to a less than significant level.

c. Cumulative Impacts

Energy

As discussed above, construction and operation of the proposed project would not result in significant impacts to the energy supply, as LADWP has adequate power supplies to meet the anticipated energy demand for the proposed project. However, in combination with the proposed development throughout the South Park area of Downtown Los Angeles, the proposed project could potentially result in a cumulative contribution to a significant impact to energy supplies.

Construction of the proposed project along with the list of related projects identified in **Section III, General Description of Environmental Setting**, would increase the demand for electrical power. **Table IV.J.4-3, Projected Electricity Consumption for Cumulative Projects**, provides an estimate of the increased demand.

**Table IV.J.4-3
Projected Electricity Consumption for Cumulative Projects**

Proposed Use	Size	Consumption Factor	Total Consumption per Year
Residential	6,537 d.u.	5,626.50 kwh/unit/year	36,780,430.5 kwh/year
Office	1,517,950 sq. ft.	12.95 kwh/sq. ft./year	19,657,452.5 kwh/year
Retail	522,643 sq. ft.	13.55 kwh/sq. ft./year	7,081,812.65 kwh/year
Restaurant	291,008 sq. ft.	47.45 kwh/sq. ft./year	13,808,329.6 kwh/year
Hotel	684,000sq. ft.	9.95 kwh/sq. ft./year	6,805,800 kwh/year
High School	240,482 sq. ft.	10.50 kwh/sq. ft./year	2,525,061 kwh/year
Miscellaneous	498,827 sq. ft.	10.50 kwh/sq. ft./year	5,237,683.5 kwh/year
Total	-	-	9,181,217 kwh/year

Source: CEQA Air Quality Handbook, November 1993, Table A9-12-A, Natural Gas Usage Rate.

As shown, the proposed project in combination with the related projects would cause an additional electricity demand estimated at 9,181,217 kwh/year. Thus, the LADWP has indicated that the cumulative effects of the project and other added loads would require near term and/or future additions to distribution system capacity. Therefore, a potentially significant cumulative impact associated with electrical infrastructure could result from implementation of the proposed project. However, through the provision of on-site transformer facilities, this potentially significant cumulative impact can be reduced to a less than significant level.¹²

Gas

As discussed above, construction and operation of the proposed project would not result in significant impacts to the natural supply, as The Gas Company has adequate natural gas supplies to meet the anticipated demand for the proposed project as The Gas Company will make improvements to their system to meet customer obligations, if needed. However, in combination with the proposed development throughout the South Park area of Downtown Los Angeles, the proposed project could potentially result in a cumulative contribution to a significant impact to natural gas supplies.

The proposed project, along with the list of related projects identified in **Section III** would generate an increased monthly demand for natural gas consumption. **Table IV.J.4-4, Projected Natural Gas Consumption for Cumulative Projects**, estimates natural gas consumption with buildout of both the proposed and related projects.

¹² Written response from Charles C. Holloway, Supervisor of Environmental Assessment, LADWP, November 9, 2005.

**Table IV.J.4-4
Projected Natural Gas Consumption for Cumulative Projects**

Proposed Use	Size	Consumption Factor	Total Consumption per Month
Residential (Multi-Family Units)	6,537 d.u.	6,665.0 cubic feet/unit/month	43,569,105 cubic feet
Office	1,517,950 sq.ft.	2.0 cubic feet/sq.ft./month	3,035,900 cubic feet
Retail/Shopping Centers	522,643 sq.ft.	2.9 cubic feet/sq.ft./month	1,515,664.7 cubic feet
Hotel/Motel	684,000 sq.ft.	4.8 cubic feet/sq.ft./month	3,283,200 cubic feet
Total	Per Year	12x Monthly Total	571,950,996 cubic feet/year

Source: CEQA Air Quality Handbook, November 1993, Table A9-11-A, Natural Gas Usage Rate.

As previously indicated, the distribution system in the project area is flexible and can be modified to provide adequate supply to meet increased demand as a result of cumulative projects. Each project would also be required to incorporate applicable energy conservation features into its design. As such, the proposed project would neither cumulatively contribute to a significant impact relative to natural gas service, nor would the proposed project, in combination with the list of related projects in the South Park area of Downtown Los Angeles result in a cumulatively considerable impact to natural gas supplies.

d. Mitigation Measures

Energy

The following mitigation measures are recommended to ensure that the project minimizes power resource impacts to the maximum extent feasible.

MM-ENG-1. Prior to issuance of each building permit, the project applicant shall submit plans to the City's Building and Safety Department demonstrating that each of the project's buildings complies with the State Energy Conservation Standards for New Residential Buildings (Title 24, part 6, Article 2, California Administrative Code).

MM-ENG-2. The cumulative effect of the proposed project and other new and added loads resulting from related projects will require near term and/or future additions to distribution system capacity. The project shall require on-site transformer facilities.

Gas

The following mitigation measures are recommended to reduce demand on natural gas supplies to the maximum extent feasible.

MM-ENG-3. The project applicant shall consult with The Gas Company regarding the incorporation of feasible energy conservation measures into the project design and construction.

MM-ENG-4. Prior to recordation of final maps, the applicant shall provide to the Los Angeles Planning Department, a letter from The Gas Company which states that natural gas will be provided for the proposed project, and that all applicable energy conservation features have been incorporated into the project design.

e. Adverse Effects

Implementation of the proposed project would increase the demand for energy and gas consumption in the project area; however, through implementation of the mitigation measures identified above, the project would not result in a significant impact on energy and/or natural gas supplies. Implementation of the above-listed mitigation measures would reduce impacts to less than significant levels. No adverse effects are anticipated as a result of the proposed project.