

**Application for Certification
Pursuant to the 21-Day Emergency
Power Plant Permitting Process**

**Lancaster Energy Facility #1
Lancaster, California**

**ELECTRICITY PROVIDER, INC.
2882-C Walnut Avenue
Tustin, California 92780**

May 2001

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SECTION 1

PROJECT DESCRIPTION

The Applicant, Electricity Provider, Inc., proposes to construct a 240 megawatt (MW) simple cycle peaking electric generating facility, consisting of four General Electric (GE) Frame 7-B water injected gas turbine engines. The Project is called the Lancaster Energy Facility #1 and will be located at the northwest corner of the intersection of Division Street and Avenue H in the City of Lancaster, California (Figure 1-1). Natural gas will be supplied to the project site via a new 22.8-mile pipeline, which will interconnect to the Mohave-Kern River pipeline and be constructed from the City of Mojave to the project site (Figure 1-2). The CEC application checklist, air quality self-certification checklist, and air quality application for the proposed project are included in Attachments A, B, and C, respectively.

1.1 Project Owner/Operator (Name, Title, Address, Phone)

Electricity Provider, Inc. (a Delaware Corporation)
2882-C Walnut Avenue
Tustin, California 92780
(714) 505-0874

1.2 Overview of Power Plant and Linear Facilities

Lancaster Energy Facility #1 will be a 240 MW power plant that will utilize four natural gas-fired GE Frame-7B combustion turbine generators equipped with state of the art air pollution control features (Figure 1-3). The facility will be fired by pipeline natural gas and configured in a simple cycle mode that may eventually be converted to a combined cycle mode, if warranted. The combustion inlet air will be filtered and cooled via an inlet chiller system to increase efficiency and output. A fin fan cooler will cool the lube oil system. The generators will be air-cooled. The project will include a staging and maintenance area located on the project site.

To reduce nitrogen oxide (NO_x) emissions from the project, water injection and selective catalytic reduction (SCR) technology and a carbon monoxide (CO) catalyst will be used. The SCR and CO catalyst, considered the best available control technology (BACT), are reliable and proven technologies used to reduce NO_x and CO emissions. Injecting ammonia vapor (NH₃) into the flue gases, which then pass through a catalyst material, further reduces the NO_x emissions. The resulting chemical reaction reduces the NO_x to harmless nitrogen and water.

The aqueous ammonia used to reduce emissions will be transported monthly to the site via a tanker truck, regulated by the California Department of Transportation (Caltrans). The aqueous ammonia will be stored onsite in four 25,000-gallon storage tanks, one per unit. Secondary steel containment, designed to retain a minimum of 110 percent of the

figure 1-1

Figure 1-2

Figure 1-2a

Figure 1-2b

Figure 1-2c

Figure 1-2d

Figure 1-2e

Figure 1-2f

Figure 1-3

storage tank volume, also will be provided. Ammonia vaporization skids will be utilized to heat the ammonia and inject it into the SCR system.

Lancaster Energy Facility #1 will be compact and consist of modular components (Figures 1-4 and 1-5). With the exception of the four 70-foot gas turbine exhaust stacks, facility components will be less than 35-feet in height and will occupy approximately four acres.

Lancaster Energy Facility #1 will be located approximately just west of an existing 66-kV Southern California Edison (SCE) circuit that ties into the SCE Lancaster Substation approximately two miles south of the project site. Connection to the system will be accomplished via a ring buss into the 66-kV circuit. Up to 200 MW could be interconnected with the Lancaster Substation without having significant adverse impacts to the system. An evaluation of the impact of adding up to 400 MW to the system is currently being conducted.

Natural gas will be supplied to the project site via a new 22.8-mile, 24-inch diameter, 700- pounds per square inch gauge (psig) gas line (Figure 1-2). (Note: The gas turbines will only require 250 to 300 psig.) The gas line will interconnect to the Mohave-Kern River pipeline and be constructed from the City of Mojave to the project site. Kern River Gas Company will provide natural gas service through this new line. The new gas line will be located in the right-of-way along the eastside of Sierra Highway until it reaches the project site at the intersection of Sierra Highway and Avenue H. The gas line will then turn 90 degrees to the east and run along the City right-of-way along Avenue H to the project site. The project will utilize approximately (maximum at 20° F) 868,986 HHV kilo British thermal units per hour (kBtu/hr) of pipeline quality natural gas. No backup fuel supply will be used.

Lancaster Energy Facility #1 will obtain potable water from the Los Angeles County Waterworks District No. 40, Region 4 system via the City of Lancaster's two 12-inch diameter water lines, located along Avenue H. To establish water service for the project, the City of Lancaster will extend the north line across Avenue H for about 30 feet to the property to provide service water and fire protection. The Lancaster Energy Facility #1 will consume approximately 400 gallons per minute (gpm) of water at peak use. Prior to use by the facility, potable water will be stored in a raw water tank, sent to a mobile reverse osmosis system, and finally to a demineralization system with a storage tank.

The facility will discharge sanitary and process wastewaters and water from the oil/water separator system to the Los Angeles County Sanitation District 14 sewer system. To establish sewer service for the project, the City of Lancaster will extend a new sewer line about 700 feet across Avenue H onto the project site. Plant drains will be routed to a separation sump, with provisions for oil collection by an oil/water separator system. Any oil sludge will be properly disposed at an appropriate waste disposal or recycling facility.

Figure 1-4

Figure 1-5

The project will include a construction staging and maintenance area located just north of the project site. The construction staging area will be used during the construction phase of the project for parking vehicles and the storage of materials and equipment.

1.3 Structure Dimensions (Size and Height), Plan and Profile

The power plant will be compact and consist of modular components. With the exception of the 70-foot gas turbine exhaust stack, facility components will be less than 35-feet in height and will occupy approximately 4 acres. Refer to Figure 1-3, Site Plan; Figure 1-4, Elevations; and Figure 1-5, Frame 7 Exhaust system.

1.4 Full Size Color Photo of the Site and Rendering of Proposed Facility, If Available

Photo simulations of the site are currently being prepared. Full size color photos of the project site options are provided in Attachment D.

1.5 Maximum Foundation Depth, Cut and Fill Quantities

Foundation depth is estimated at 30 inches. Cut and fill quantities will be approximately 700 cubic yards cut and 700 cubic yards fill. Foundations will be designed to support the weight of the equipment, plus operating loads, in addition to the imposed loads due to wind or seismic conditions.

1.6 Conformance with California Building Code

Lancaster Energy Facility #1 will be designed and constructed in accordance with all applicable local, state, and federal design standards commonly used in the design of peaking generation facilities. These standards will include specific criteria as they apply to the State of California and the City of Lancaster and will encompass seismic design standards as they pertain to the project site.

1.7 Proposed Operation (Hours Per Year)

Lancaster Energy Facility #1 will be designed as a peaking plant; however, it will be permitted for up to 24 hours per day and 8,500 hours per year.

1.8 Expected On-Line Date

Lancaster Energy Facility #1 is expected to be on-line by September 30, 2001.

1.9 Proposed Duration of Operation (Years)

It is anticipated that the project life for the Lancaster Energy Facility #1 will be 30 years.

1.10 Identify Transmission Interconnection Facilities

The project site is located west of an existing 66-kV Southern California Edison (SCE) circuit which ties into the SCE Lancaster Substation approximately two miles south of the project site. The connection to the system will be accomplished via a ring buss into the 66-kV circuit. Up to 200 MW could be interconnected with the Lancaster Substation without having significant adverse impacts to the system. An evaluation of the impact of adding up to 400 MW to the system is currently being conducted.

1.11 Transmission Interconnection Application

The Transmission Interconnection Application is provided in Attachment E.

1.12 Down-Stream Transmission Facilities, If Known

SCE's Lancaster Substation is interconnected with the Antelope Substation via the 66-kV network in the area. The Antelope Substation is located near the intersection of West 90th Street and Avenue J in Lancaster, approximately 10 miles west of the project site. The Antelope Substation is interconnected with the Edison 230-kV system via:

- Two 230-kV lines to the Magunden Substation near Bakersfield,
- One 230-kV line to the Vincent Substation approximately 15 miles south of Lancaster, and
- One 230-kV line to the Mesa Substation in Monterey Park.

1.13 Fuel Interconnection Facilities

Natural gas will be supplied to the project site via a new 22.8-mile, 24-inch-diameter, 700-psig gas line (Figure 1-2). The gas line will interconnect to the Mohave-Kern River pipeline and be constructed from the City of Mojave to the project site. Kern River Gas Company will provide natural gas service through this new line. The new gas line will be located in the right-of-way along the eastside of Sierra Highway until it reaches the project site at the intersection of Sierra Highway and Avenue H. The gas line will then turn 90 degrees to the east and run along the City right-of-way along Avenue H to the project site. The project will utilize approximately (maximum at 20° F) 868,986 HHV kBtu/hr of pipeline quality natural gas.

1.14 Fuel Interconnection Application

The Fuel Interconnection Application is provided in Attachment F.

1.15 Water Requirements and Treatment

The Lancaster Energy Facility #1 will consume approximately 400 gallons per minute (gpm) of water at peak use. Prior to use by the facility, potable water will be stored in a raw water tank, sent to a mobile reverse osmosis system, and finally to a demineralization system with a storage tank.

1.16 Water Interconnection Facilities (Supply/Discharge)

Lancaster Energy Facility #1 will obtain potable water from the Los Angeles County Waterworks District No. 40, Region 4 system via the City of Lancaster's two 12-inch diameter water lines, located along Avenue H. To establish water service for the project, the City of Lancaster will extend the north line across Avenue H for about 30 feet to the property to provide service water and fire protection. Interconnection to the existing water line is within 30 feet of the project boundary.

Lancaster Energy Facility #1 will discharge its sanitary and process wastewaters and water from the oil/water separator system to the Los Angeles County Sanitation District 14 sewer system. To establish sewer service for the project, the City of Lancaster will extend its 8-inch sewer line main about 700 feet across Avenue H onto the project site.

1.17 Source and Quality of Water Supply

Lancaster Energy Facility #1 will obtain potable water from the Los Angeles County Waterworks District No. 40, Region 4 system via the City of Lancaster's 12-inch diameter water line located along Avenue H. The Lancaster facility will consume approximately 400 gallons per minute (gpm) of water at peak use. Prior to use by the facility, potable water will be treated by offsite regenerated portable trailer-mounted demineralizers.

Los Angeles County obtains 60 percent of its water from the California Aqueduct and 40 percent from groundwater. Refer to Attachment G for the water quality information

1.18 Water Supply Agreement/Proof of Water Supply

The Water Supply Agreement/Proof of Water Supply is provided in Attachment G.

SECTION 2

SITE DESCRIPTION

2.1 Site Address (Street, City, County)

Lancaster Energy Facility #1 will be located at 46025 Division Street (northwest corner of the intersection of Division Street and H Avenue) in the City of Lancaster, Los Angeles County, California 93534.

2.2 Assessor's Parcel Number

The assessor's parcel number is 3137-008-133. The property is currently being subdivided with Tentative Parcel Map No. 26339. Lancaster Facility #1 will be located on Parcel No. 4 on this map, and the laydown area will be located on Parcel #3 (Figure 2-1).

2.3 Names and Addresses of All Property Owners Within 500 Feet of the Project Site or Related Facilities in Both Hard Copy and Electronic Mail Merge Format

A list of all property owners within a 500-foot radius of the project site and the proposed gas pipeline route is provided in Attachment H. Magnetic files containing the same information are stored on a diskette attached in a pocket to the front cover of this report.

2.4 Existing Site Use

The project site is presently vacant. The site is a green field site. No construction or building permit has ever been issued for the site.

2.5 Existing Site Characteristics (Paved, Graded, etc.)

The project site is a flat field, which is currently undeveloped. The site is characterized by desert scrub dominated by shadscale (*Atriplex confertifolia*). Joshua tree (*Yucca brevifolia*), bud sagebrush (*Artemisia spinescens*), and rabbitbrush (*Chrysothamnus nauseosus*) are also found scattered throughout the site.

2.6 Layout of Site (Include Plot Plan)

Lancaster Energy Facility #1 will be constructed within a 306 feet by 537 feet site that includes the main power generation turbines, the SCR modules, exhaust stacks, the control enclosures, etc. (Figure 1-3). This does not include a new access road to the north of the facility.

Figure 2-1

2.7 Zoning and General Plan Designations of Site and Linear Facilities

The General Plan and use/zoning designation for the project site and linear facilities next to the project site is HI, suitable for heavy industrial use. Long-term use of the project site for power production is consistent with the City's general plan for the immediate area, and will not conflict with land uses over the City's planning horizon. Refer to Attachment I for the zoning designations around the project site. The General Plan and use/zoning designation for the gas pipeline is also provided in Attachment I.

2.8 Ownership of Site (Name, Address, Phone)

City of Lancaster
44933 Fern Avenue
Lancaster, CA 93534-2461
(661) 723-6150

2.9 Status of Site Control

Once the project is permitted, the City of Lancaster can sell the property with minimal administrative accommodations.

2.10 Equipment Laydown Area – Size and Location

The equipment laydown area will be located within the property fence line just north of the general plot plan. The size of this area will be 308 feet by 571 feet.

SECTION 3

CONSTRUCTION DESCRIPTION

3.1 Construction Schedule

It is anticipated that construction will require approximately five months, provided that there are no delays in the gas and electric interconnection process. Lancaster Energy Facility #1 is expected to be on-line and ready for commercial operation by September 30, 2001

Below is the proposed schedule for the Lancaster Energy Facility #1. The significant milestone dates for the project are as follows:

May 22, 2001	Pre-Authority to Construct Tasks (Equipment Data Analysis, Conceptual Design Engineering, Electrical Interconnection Application, Permitting/Licensing)
June 5, 2001	Receive CEC Approval and Authority to Construct
July 1, 2001	Excavation and Foundations Completed
July 2, 2001	Offload and Stage Equipment
August 15, 2001	Complete Interconnection to Gas Line
August 20, 2001	Complete Raw Water System
September 1, 2001	Complete Demineralized Water System
September 10, 2001	Complete Stack Erection
September 15, 2001	Complete Installation of Turbine Generator Sets
September 20, 2001	Complete Instrumentation and Control Systems
September 25, 2001	Complete Electrical Interconnection
September 27, 2001	Complete Operational Testing and Startup
September 30, 2001	Commercial Operation

3.2 Workforce Requirements (Peak, Average)

At the beginning of the project, the construction team will consist of approximately 30 workers. The team will grow to be 200 workers over the first four weeks of the construction schedule. During the following three months, the construction team will remain approximately 200 workers. During the last six weeks of construction the team will be reduced to 35 workers. It is expected that most of the construction workers will not relocate. During plant operations, the plant site will be dispatched from a remote location. A crew of up to five employees will be dispatched to the site periodically

during times of "peak" energy needs and maintenance activities. Construction activities will not contribute to a significant increase in the population of the project area.

SECTION 4

POWER PURCHASE CONTRACT (DWR, ISO, Other)

4.1 Status of Negotiations and Expected Signing Date

The power purchase contract is in the process of being negotiated.

SECTION 5

AIR EMISSIONS

5.1 Nearest Monitoring Station (Location, Distance)

The Antelope Valley Air Pollution Control District (AVAPCD) operates a monitoring station at 315 West Pondera Street, near Avenue J. The monitoring station is located approximately two miles south of the proposed facility. Monitoring data from the Pondera station were used to determine air quality impacts of the proposed project.

5.2 Provide Complete Self Certification Air Permit Checklist

Attachment B contains a complete self-certification checklist for the proposed project. The checklist includes a summary of proposed equipment, anticipated controlled emissions, and stack parameters.

5.3 Provide Complete Air Permit Application

Attachment C includes the CEC air quality application for a simple-cycle gas turbine generation unit. At this time, EPI requests that alternative emission limit #8 be extended to the project in case SCR and CO oxidation units cannot be installed on all four turbines by September 2001. However, EPI is taking steps to ensure delivery of complete emission control systems on all four turbines prior to start-up in September 2001. EPI anticipates having confirmed delivery schedules soon and will advise CEC and AVAPCD accordingly.

5.4 Status of Air Permit Application with Air District

EPI submitted an application with AVAPCD for authority to construct the project. AVAPCD is currently reviewing the application. Attachment J includes a copy of the AVAPCD permit application report. The AVAPCD application includes equipment descriptions and specifications; a proposed operating schedule; anticipated hourly, daily and annual emissions; stack parameters; and a complete AVAPCD regulatory analysis.

The AVAPCD regulatory analysis includes a determination of Best Available Control Technology (BACT), an evaluation of emission offset requirements, an air quality impact analysis, a health risk analysis, and a Prevention of Significant Deterioration (PSD) analysis for the proposed project. The regulatory analysis is based upon a proposed permitted operating schedule of up to 24 hours per day and 8,500 hours per year.

5.5 Status of Offsets and/or Mitigation Fees, as Required

EPI is coordinating with AVAPCD to determine all available options for securing emission offsets for the project. These options include, but are not limited to,

interpollutant and interdistrict transactions for NO_x and VOC emissions, and road paving projects for PM₁₀ emissions. EPI is also coordinating with emission offset brokers to determine options for securing offsets.

AVAPCD has agreed to proceed to process the application for authority to construct the project, under the assumption that EPI will be able to adequately demonstrate its ability to secure emission offsets by the time authority to construct will be issued. If such a demonstration cannot be made by the time the authority to construct is issued, EPI has committed to AVAPCD that it will accept operating limits in order to reduce or eliminate emission offset requirements for the project.

SECTION 6

NOISE

6.1 Local Noise Requirements

The City of Lancaster's General Plan (Objective 4, Table III-1) establishes a maximum exterior CNEL of 70 decibels (dBA) in commercial and industrial areas. The City's Zoning Ordinance requires that industrial uses located on property that abuts a residential or commercial zone or use demonstrate that noise levels at the abutting property line will not exceed 65 dBA (Section 17.16.220.A.18).

Chapter 8.24 of the Zoning Ordinance establishes general noise regulations for the City, including regulations on construction noise. Construction is not allowed on Sunday or any day between the hours of 8:00 p.m. and sunrise that entails use of any air compressor; jack hammer; power-driven drill; riveting machine; excavator; diesel-powered truck, tractor, or other earth-moving equipment; hard hammers on steel or iron; or any other machine tool, device, or equipment within 500 feet of any residence. Refer to Attachment K for additional requirements.

6.2 Nearest Sensitive Receptor (Type, Distance)

Sensitive noise receptors include the following:

- Residence to the northeast in Los Angeles County at 239 Avenue G-8,
- Caretaker mobile home for an industrial facility 450 feet north of the laydown area (Parcel 3 on Figure 2-1),
- Single-family residences approximately 0.3 mile west across Sierra Highway
- Single-family residence on Avenue H-8 approximately 0.5 mile to the south.

6.3 Project Noise Level At Nearest Property Line

A noise analysis was prepared in May 2001 for by Doug Eilar & Associates. Refer to Attachment K for details of the analysis. The GE Frame-7B combustion turbine generators with the manufacturer's noise control package would produce approximately 107.6 dBA at the property line. With the addition of the unmitigated noise produced by the high-pressure gas compressor(s) and chillers, the unmitigated property line noise level would be between 107 and 108 dBA.

6.4 Proposed Mitigation if Required

All construction equipment will be maintained in good condition with factory-installed, or equivalent, noise control systems.

The Frame 7B units will require additional mitigation, beyond that provided by the manufacturer. However, the level of additional attenuation required may be achieved

with implementation of conventional noise reduction techniques as part of the system's design. The noise produced by Lancaster Energy Facility #1 can be reduced to levels below the nearby residential property line limitation of 65.0 dBA through the implementation of mitigation measures. Mitigation measures include:

- Designing the 900° F-system exhaust with silencing systems to ensure ongoing system functionality.
- Maintaining the high-pressure natural gas compressor, as mandated by the State of California; with a noise quieting system.

A single silenced turbine property line noise level is expected to be 69.5 dBA, which reduces to approximately 59.1 dBA at the nearest impacted residence. The noise level of three units at the residence would be approximately 63.9 dBA (the fourth turbine from any location will be distant enough to add only 0.1 to 0.2 dBA).

The high pressure natural gas pumps will be contained within a noise control enclosure to control their noise emissions. Without specific octave noise data, exact enclosure heights cannot be determined. However, the noise level should be reduced to less than 60 dBA with a noise control enclosure at least five feet above the highest point.

The power failure start-up engine exhaust will be mitigated to less than 60 dB(A) at 200 feet, and the engine will be contained within a building to control engine noise. Therefore, even though its use will be infrequent, the required property line noise limits will be maintained.

All noise control enclosures will be made of either a manufactured noise shielding/absorbing material or have noise absorbing material of at least 3-inch thickness applied to the surface facing the noise source

If the site is limited to a maximum nearby residential property line noise limit of 65.0 dB(A) L_{EQ} , the current daytime average onsite noise level will increase from approximately 55.0 dBA L_{EQ} to 65.0 dBA L_{EQ} .

With the implementation of noise mitigation, noise from all facility sources will be controlled to levels in compliance with the noise regulations of the City of Lancaster. The local noise environment will receive only a moderate impact. However, the nearby residential use will experience noise levels in compliance with zoning, but higher than they are currently used to. Refer to Attachment K for additional details.

SECTION 7

HAZARDOUS MATERIALS

7.1 Type and Volume of Hazardous Materials On-Site

Aqueous ammonia (NH_4OH) will be stored onsite in four 25,000-gallon, epoxy-lined tanks (one per unit) built inside a secondary steel, epoxy-lined containment vessel designed to retain a minimum of 110 percent of the storage tank volume. Aqueous ammonia will be used onsite for emission control using a SCR unit.

SCR is a post-combustion flue gas control technology that removes NO_x from the flue gas after it has been generated in the combustion process. The SCR uses aqueous ammonia to react with NO_x in the exhaust gasses and convert them into environmentally acceptable emissions. It is proposed that aqueous ammonia at a concentration of approximately 20 percent be used for the project. Onsite storage and handling of aqueous ammonia is regulated under the California Accidental Release Program (CalARP) requirements (California Health and Safety Code (CH&SC) Section 2770.1). A CalARP plan will be prepared for this project.

In addition, the following materials will be stored on-site:

- Turbine lubricant oil: two 55-gallon drums.
- Zok 27 (gas turbine compressor washing fluid, water base cleaner, biodegradable, non-hazardous): 55-gallons.
- Miscellaneous water based housekeeping cleaners in small quantities.

Plant drains will be routed to a separation sump, with provisions for oil collection by a 2,170-gallon above grade oil/water separator (350 gallons oil, 1,340 gallons separation, and 480 gallons water). Any oil sludge will be properly disposed of at an appropriate waste disposal or recycling facility.

7.2 Storage Facilities and Containment

The Applicant will comply with the City of Lancaster General Plan, ensuring that anywhere hazardous materials are used or wastes are stored, the entire area shall be paved without expansion joints and with a curb sufficient for containment in accordance with City standards. Refer to Section 7.1 for additional details.

SECTION 8

BIOLOGICAL RESOURCES

8.1 Legally Protected Species and Their Habitat on Site, Adjacent to Site and Along Right of Way for Linear Facilities (Threatened or Endangered Species on State or Federal Lists, State Fully Protected Species)

A biological assessment was prepared in May 2001 for the project site and proposed gas pipeline corridor by Garcia and Associates (Attachment L). The assessment found that no threatened or endangered plant or animal species were found onsite or along the gas pipeline corridor. However, the alkali mariposa lily (*Calochortus striatus*), a federal plant species of concern, is present onsite and along the corridor. In addition, there is the potential for the desert tortoise (*Gopherus agassizii*) and the Mohave ground squirrel (*Spermophilus mohavensis*) to be present on the project site.

8.2 Designated Critical Habitat on Site or Adjacent to Site

There are no wetlands, vernal pools, or other critical habitat onsite or adjacent to the site. The project area is typical of large expanses of surrounding habitat and does not constitute a wildlife corridor.

8.3 Proposed Mitigation as Required

The following resource protection and mitigation measures are applicable based on our findings under the conditions provided below: Refer to Attachment L.

Alkali Mariposa Lily

- Prior to construction, a qualified biologist will fence the occurrence of alkali mariposa lily on the site and a construction-monitoring program will be implemented to ensure that the area is avoided. If alkali mariposa lily can not be avoided during construction, mitigation for the loss will be discussed with the California Department of Fish and Game.
- Because noxious weeds such as cheatgrass (*Bromus tectorum*) threaten the population of alkali mariposa lily on the site, a noxious-weed eradication program will be implemented.
- Monitoring will occur during pipeline construction to protect the two known populations of alkali mariposa lily along the alignment.

Mohave Ground Squirrel and Desert Tortoise

- The absence of Mohave ground squirrel, a state-threatened species, cannot be “verified” without a protocol-level survey including live trapping. If pre-construction trapping surveys document the presence of this species, mitigation land will be purchased at a 1:1 ratio (Scott Harris, pers. comm.). Alternatively, presence can be assumed and mitigation land purchased up-front.
- A construction-monitoring program will be implemented to protect sensitive animal species that might appear on the site. This will be performed by the qualified biologist monitoring the mariposa-lily occurrences.
- Because the pipeline alignment passes through potential desert tortoise and Mohave ground squirrel habitat, particularly in its northern half, a construction monitor will be present during trenching. The monitor will determine absence of tortoises and ground squirrels before each stretch of trench is dug. The trench will not be left open unnecessarily. The monitor will check all open trench for trapped animals regularly and before it is filled.
- Any pipeline laydown areas outside the right-of-way in desert tortoise habitat (creosote scrub) will be fenced to exclude tortoises and cleared by a qualified biologist before use. Fencing will be inspected frequently and any breach repaired before work continues.
- A worker-education program will be developed to inform workers of tortoise-protection measures. These measures are listed below.
 - Check for tortoises under vehicles before moving them (outside fenced areas).
 - No pets or firearms are allowed in the work area.
 - All organic and inorganic litter and garbage (including cigarette butts) must be disposed of properly, in covered containers.
 - Any tortoises encountered must be reported to the construction supervisor or biological monitor. No unauthorized person may touch a tortoise except to remove it from a paved road where it is in danger.
 - Vehicle speeds in the work area should not exceed 20 mph.

SECTION 9

LAND USE

9.1 Local Land Use Restrictions (Height, Use, etc.)

Heavy Industrial (HI) zones in the City of Lancaster allow for the establishment of power plants. The landscaped setback requirement (measured from the back of sidewalk) for Lancaster Energy Facility #1 is 20 feet from both Avenue H and Division Street to the block wall. There are no setback requirements for interior property lines. Maximum height allowed in HI zones is 70 feet. There are no land use restrictions for the pipeline because it is an underground feature.

9.2 Use of Adjacent Parcels (Include Map)

The project site is bound by mostly vacant property. The only nearby development within the city limits is to the northeast; this site houses a light industrial building and an occupied mobile home. The area that is both east of Division Street and north of Avenue H is in Los Angeles County, and not within the City of Lancaster. Refer to Attachment M, a map showing the uses around the project site. The General Plan and use/zoning designation for the gas pipeline is also provided in Attachment I.

9.3 Ownership of Adjacent Parcels – Site and Linears

Refer to Attachment I.

9.4 Demographics of Census Tract Where Project is Located(Most Current Available)

The following demographic information is for the City of Lancaster. The City of Lancaster had a total population of 97,291 in 1990. Approximately 36 percent of Lancaster's population were younger than the age of 21; approximately 46 percent of the people were between the ages of 22 and 49; 14 percent of the people were between the ages of 50 and 69; and 5 percent were over the age of 70. The median family income for the City in 1990 was \$41,339 and approximately 10 percent of the total population was below the poverty level. The racial percentages of the total population for Lancaster are shown below.

Race	Percentage of Population
White	73.2%
Black	7.2%
Indian	0.8%
Asian	3.5%
Hispanic*	15.2%
Other	0.2%

Source: 1990 United States Census Bureau.

*It should that the Bureau of Census indicates that persons of Hispanic origin may identify with any of the minority population categories listed above, as well as with White and any other category, to capture undefined origins.

The following demographic information is for the portion of the gas pipeline corridor in Los Angeles County. The portion of the gas pipeline in Los Angeles County had a total population of 4,550 in 1989. Approximately 32 percent of the population were younger than the age of 21; approximately 39 percent of the people were between the ages of 22 and 49; 21 percent of the people were between the ages of 50 and 69; and 9 percent were over the age of 70. The median family income in 1989 was \$34,609 and approximately 10 percent of the total population was below the poverty level. The racial percentages of the total population for Los Angeles County portion of the pipeline are shown below.

Race	Percentage of Population
White	83%
Black	2%
Indian	1%
Asian	3%
Hispanic*	11%
Other	0.1%

Source: 1990 United States Census Bureau.

*It should that the Bureau of Census indicates that persons of Hispanic origin may identify with any of the minority population categories listed above, as well as with White and any other category, to capture undefined origins.

The following demographic information is for the portion of the gas pipeline corridor in Kern County. The portion of the gas pipeline in Kern County had a total population of 16,614 in 1989. Approximately 36 percent of the population were younger than the age of 21; approximately 42 percent of the people were between the ages of 22 and 49; 17 percent of the people were between the ages of 50 and 69; and 5 percent were over the age of 70. The median family income in 1989 was \$31,345 and approximately 14 percent of the total population was below the poverty level. The racial percentages of the total population for Kern County portion of the pipeline are shown below.

Race	Percentage of Population
White	77%
Black	3%
Indian	1%
Asian	2%
Hispanic*	17%
Other	0.3%

Source: 1990 United States Census Bureau.

*It should that the Bureau of Census indicates that persons of Hispanic origin may identify with any of the minority population categories listed above, as well as with White and any other category, to capture undefined origins.

SECTION 10
PUBLIC SERVICES

10.1 Ability to Serve Letter from Fire District

Captain Mark Bennett of the County of Los Angeles Fire Department has confirmed the County's ability to serve Lancaster Energy Facility #1. Refer to Attachment N for the ability to serve letter from the fire district.

10.2 Nearest Fire Station

The City of Lancaster contracts with the Los Angeles County Fire Department to provide fire protection and life safety services. Fire Station No. 33 is within two miles and Fire Station No. 117 is within four miles of the proposed project within the City of Lancaster.

SECTION 11

TRAFFIC AND TRANSPORTATION

11.1 Level of Service (LOS) Measurements on Surrounding Roads – A.M and P.M. Peaks

The City of Lancaster conducted a Level of Service (LOS) analysis for Avenue H, Trevor Avenue, and Division Street in the vicinity of the project site. The LOS for all street segments and intersections was LOS B or better (uncongested operations; all vehicles clear in a single signal cycle). The analysis shows that the additional traffic generated by construction and operation from the proposed project will have a negligible impact on the existing LOS. Refer to Attachment O.

It is anticipated that construction traffic will have regional access to the project site via the Antelope Valley Freeway, State Route 14 (SR-14), which runs north-south and is located west of the project site. Direct access to the site from SR-14 would be from Avenue H. An alternative access route would be via Sierra Highway, which serves both regional and local needs. Sierra Highway runs north-south and is located east of the project site. Direct access to the site from Sierra Highway would also be from Avenue H.

SR-14 has four lanes of through traffic separated by a standard freeway-sized dirt culvert divider. Avenue H has two to three through lanes, and is the northern arterial for regional access. An overpass has been constructed on Avenue H at Sierra Highway. Sierra Highway has two through lane north of Avenue H-8, and four through lanes to the south. Division Street has two to four through lanes over its length.

11.2 Traffic Control Plan for Roads During Construction

Traffic control for the construction of improvements on the streets adjacent to the project site will be designed in accordance with the Caltrans Traffic Manual. The street improvements will be designed and constructed by the City of Lancaster. Traffic control for the construction of the proposed gas pipeline will be designed in accordance with the Caltrans Traffic Manual and Los Angeles County and Kern County permit requirements.

A standard traffic control plan consistent with the size and scope of the Lancaster Energy Facility #1 construction activity will be designed to minimize impact to traffic flow. Some of these safety measures include:

- Utilize proper signs and traffic control measures in accordance with Caltrans and City of Lancaster requirements.
- Install crossing structures to avoid obstructing roads.

- Coordinate construction activities with appropriate County departments if closures of major roads are necessary during pipeline construction.
- Coordinate crossing of State highways with Caltrans in accordance with Caltrans regulations and permit requirements.
- Schedule traffic lane or road closures during off-peak hours whenever possible.
- Limit vehicular traffic to approved access roads, construction yards, and construction sites.
- Construct offsite pipelines in accordance with applicable State and local encroachment permit requirements. Cover trenches in roadways during non-work hours.

In addition, the traffic control plan will address these potential mitigation measures:

- Establishment of construction work hours outside of the peak traffic periods to ensure that construction workforce traffic occurs during off-peak hours.
- Schedule delivery of heavy equipment and building materials by truck during off-peak hours.

The Applicant will obtain the following permits prior to project construction:

- Transportation permits required by Caltrans to transport oversize, overweight, overheight, and overlength vehicles on State highways (in compliance with California Vehicle Code Section 35780; the Streets and Highways Code Section 117 and 660-711; and 21 California Code of Regulations 1411.1 and 1411.6);
- Encroachment permits required from Caltrans for work along State highways and pipeline crossings of State highways; and
- Encroachment permits required from Los Angeles and Kern Counties for work along county-maintained roadways and pipeline crossings of county-maintained highways.

In addition, the Applicant will comply with California Vehicle Code Section 31300 et seq. regarding the transportation of hazardous materials.

11.3 Traffic Impact of Linear Facility Construction

Traffic impact during construction of the linear facilities will be minimal because construction will take place outside of the travel way. Traffic lanes will not be closed

during construction, except for a few street crossings. Traffic control will be set up for these crossings in accordance with the Caltrans Traffic Manual and Los Angeles County and Kern County permit requirements.

11.4 Equipment Transport Route

The GE Frame 7-B gas turbines will be shipped in by rail and then placed on heavy-duty trucks for movement to the project site. The nearest rail line is the Union Pacific Railroad, which parallels Sierra Highway approximately 0.25 mile west of the project site.

All other equipment will either use SR-14 or Sierra Highway to access Avenue H for transport to the project site. Refer above to Section 11.1.

11.5 Parking Requirements – Workforce and Equipment

The project will require parking for workers and equipment during the construction period. Adequate parking would be provided by an onsite parking area located along Division Street (Figure 1-3). Unloading of equipment will take place onsite north of the gas turbine generator sets. The facility will be remotely operated; approximately five employees would be dispatched to the site during times of peak energy need. Parking spaces will be provided onsite. No impacts are anticipated to off-site parking.

SECTION 12

SOILS AND WATER RESOURCES

12.1 Wastewater Volume, Quality, Treatment

Wastewater will be discharged to the Los Angeles County Sanitation District 14 sewer system. To establish sewer service for the project, the City of Lancaster will extend a new sewer line about 700 feet across Avenue H onto the project site. There will be three sources of wastewater. The first is the oil/water separator process, which will remove oil from specific plant drains around the combustion turbine generators. Plant drains will be routed to a separation sump, with provisions for oil collection by an oil/water separator system. Any oil sludge will be properly disposed of at an appropriate waste disposal or recycling facility.

The second source of wastewater is from the operation of the reverse osmosis water treatment system used to produce high purity water for injection into the turbines as part of the air emissions control system. The quality of the reverse osmosis wastewater will be good, with the cycles of concentration between 3 and 4 times that of fresh water. There will be no chemical treatment of the reverse osmosis wastewater. The water will be of good enough quality that it could be used for landscaping purposes rather than sending it to the sewer.

The third source will be the waste stream from the turbines. The four GE Frame 7-B turbines will use an estimated 100 gpm per unit with an estimated waste stream of 30 gpm per unit. Of the 30 gpm, approximately 18 gpm will go to the evaporative cooler unit and the rest will be used for internal and external project site needs.

The Los Angeles County Sanitation Districts have discharge requirements for temperature, pH, and various heavy metals. Lancaster Energy Facility #1 will meet all requirements for discharge into the sewer lines.

12.2 Status of Permits for Wastewater Discharge or Draft Permit (WDR/NPDES)

Erosion and sediment controls and other Best Management Practices (BMPs) will be implemented for the construction, post-construction, and operation phases, in accordance with the California NPDES General Permit for Storm Water Discharges Associated with Industrial Activities, and with other local laws and ordinances as applicable.

Lancaster Energy Facility #1 will prepare a detailed water discharge permit application for submittal to the Los Angeles County Sanitation Districts. The application will be submitted prior to startup.

12.3 Draft Erosion Prevention and Sedimentation Control Plan or Mitigation Strategy

In conjunction with detailed design of the project, a detailed erosion and sediment control plan will be developed to ensure that the construction and operation of the facility will conform to regulatory requirements involving erosion and sedimentation control. The plan will include details such as contours and grading sedimentation controls, area inlet sedimentation barriers and dams, road sections, storm drains and manholes, permanent and temporary road, surfacing materials, construction entrances, etc. The detailed plan will be contained primarily on civil drawings that will be made available to the applicable state and local agencies.

12.4 Spill Prevention/Water Quality Protection Plans

In accordance with 40 CFR 112.1 (d) (2), the site will not have aboveground storage capacity for oil that exceeds 1,320 gallons, and no single container will have a capacity in excess of 660 gallons. Therefore, a Spill Prevention Control and Countermeasure Plan for Lancaster Energy Facility #1 is not required.

The storage and handling of aqueous ammonia at the site will be covered under the California Accidental Release Program (CalARP). The CalARP will be completed and approved, as appropriate, prior to the introduction of the chemical onsite.

The total area of the project site is approximately 4 acres; the 4-acre parcel north of the site will be used as a laydown area. Therefore, a Storm Water Pollution Prevention Plan (SWPPP) for construction activities will be in place prior to the start of construction. The SWPPP will include a description of BMPs for storm water pollution prevention to be implemented at the site during the construction phase. These BMPs will include but not be limited to culverts, berms, sandbags, and other acceptable procedures for the prevention of storm water pollution from onsite materials. The SWPPP will be submitted to the local Regional Water Quality Control Board (RWQCB) for approval.

The operating facility will require an SWPPP and a Storm Water Monitoring Plan. A Notice of Intent (NOI) will be submitted to the RWQCB before the start of industrial activities according to their requirements. This will be followed by the preparation of an SWPPP for the site. All chemicals/oils stored onsite will be in closed containers and will include secondary containment to prevent flow of chemicals and oils into the storm sewers. The SWPP will contain the following elements:

- 1.0 General description of facility operations;
- 2.0 Significant materials used at the facility;
- 3.0 History of chemical releases from the site;
- 4.0 Location, storage, and handling of significant materials, oil, and chemicals;

- 5.0 Current storm water flow patterns and pollution prevention measures;
- 6.0 Storm water drainage system;
- 7.0 Spill prevention and response;
- 8.0 Sediment control and erosion prevention;
- 9.0 Employee training program and facility record keeping;
- 10.0 Elimination of non-storm water discharge; and
- 11.0 Storm water management controls.

The following will also be prepared to record storm water activity.

- Facility storm water inspection checklist.
- Storm water sampling list.
- Annual report preparation format.

SECTION 13

CULTURAL RESOURCES

13.1 Identification of Known Historic/Prehistoric Sites

A cultural resources assessment was prepared in May 2001 for the project site and proposed gas pipeline corridor by Garcia and Associates (Attachment P). Four previously unrecorded historic era resources were identified in the project area. Additionally, seven new features of a previously recorded site were also documented. In addition, one previously identified historic era site is discussed in the assessment.

The newly identified resources were evaluated for their eligibility as historical resources as defined by the California Environmental Quality Act (CEQA). After subsurface testing was completed, it was determined that three of the sites, all historic trash scatters, did not meet the eligibility criteria for listing on the California Register. The remaining site was flagged for avoidance.

13.2 Proposed Mitigation if Required

No mitigation is proposed since no cultural resources have been identified as being impacted by the project. In the unlikely event that previously unknown cultural resources are found through project activities, all work in that vicinity will stop until an assessment can be made of the materials by a qualified archaeologist. Should human remains be encountered, work in the vicinity will likewise stop, and the Los Angeles County or Kern County Coroner will be immediately notified. If the remains are determined to be Native American, the coroner will contact the Native American Heritage Commission.

As described in Attachment P, Site GAA-3, the large metal tank set on a concrete pad, has not been evaluated for listing on the CRHP as a Historic Resource due to insufficient data. As a result, it has been flagged for avoidance as a mitigation measure.

13.3 Notification of Native Americans

The Native American Heritage Commission (Sacramento, CA) was notified of the project on March 8, 2001. The Commission requested that 11 individuals/organizations be contacted regarding the potential for the presence of cultural resources. Contact letters and those responses received are included in Attachment P.

SECTION 14

PALEONTOLOGICAL RESOURCES

14.1 Identification of Known Paleontologic Sites

A paleontological assessment was prepared in April 2001 for the project site and proposed gas pipeline corridor by LaRamie Soils Service (Attachment Q). Based on findings from a literature and database search as well as a field survey, the project site and the gas pipeline right-of-way are not considered paleontologically sensitive and vertebrate fossils are not expected to be found during construction.

14.2 Proposed Mitigation if Required

Because the project site and the gas pipeline right-of-way are not paleontologically sensitive, no mitigation is necessary for paleontological resources at the project site of along the gas pipeline corridor.

SECTION 15

VISUAL RESOURCES

15.1 Plan for Landscaping and Screening to Meet Local Requirements

The power plant site layout will include features that are designed to integrate it into the surrounding area. These features are intended to be compatible with the City of Lancaster's development standards for the surrounding heavy industrial area, as follows:

- Provide a 20-foot landscaped setback and masonry-screening wall along Avenue H, which is a regional arterial street within the City of Lancaster. Landscaping within the Avenue H setback area will be designed to soften the overall appearance of the power plant and wall primarily through a combination of shrubs and trees.
- Provide a 20-foot landscaped setback and masonry-screening wall along Division Street, which is a major arterial street within the City of Lancaster. Landscaping will consist primarily of a combination of shrubs and trees designed to soften the overall appearance of the power plant and wall.
- Required street trees shall be incorporated into the overall landscape design for the setback areas along Avenue H and Division Street.
- All landscape designs and plans shall conform with the requirements of Lancaster City Ordinance No. 629, which establishes approved plant lists, irrigation standards, and water conservation requirements.

15.2 Full Size Color Photo of the Site and Rendering of Proposed Facility With Any Proposed Visual Mitigation if Available

Photo simulations of the site are currently being prepared. Full color photos of the site are provided in Attachment D.

SECTION 16

TRANSMISSION SYSTEM ENGINEERING

16.1 Conformance with Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (Or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electric Code

The project will conform to Title 8, High Voltage Electrical Safety Orders, CPUC General Order 95 (Or NESC), CPUC Rule 21, PTO Interconnection Requirements, and National Electric Code.

All construction and installation work shall be performed in conformance with the latest editions of the “Green Book” or the Standard Specifications for Public Works construction, as written and Promulgated by the Joint Cooperative Committee of the Southern California Chapter of the American Public Works Association, the National Electrical Code, (NEC applicable to 600V class and below only) the National Electrical Safety Code, and CPUC General Orders 95 and 128. The electrical design of new facilities will be in accordance with the latest version of the applicable industry codes and standards including applicable standards of the American National Standards Institute, the American Society of Mechanical Engineers, and the Institute of Electrical and Electronics Engineers. Applicable federal, state, and local codes and standards will also be observed.