

Throughout this Application, all references to Federal Power, Federal Power Avenal, LLC, and Federal Power Avenal refer to Avenal Power Center, LLC.

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6.9 LAND USE

The Project is located in the northeast corner of the City of Avenal, on industrial zoned lands, approximately 6 miles from the closest population center. The Project is consistent with the City of Avenal General Plan (City of Avenal, 2006). The Project represents a beneficial use of Avenal's industrial zoned lands that will help the City achieve the goals of the General Plan. Recognizing the benefits of the Project, City staff has been working with the Project proponent to plan the Project. The Project is a result of the City's effort and the continuing support by Kings County for the Project.

This section describes the land uses, zoning and other LORS relevant to the Project vicinity and Site. The Project's consistency with each of the LORS is described, and the potential for significant land use conflicts is evaluated. Based on detailed evaluations, the Project will have an overall beneficial land use impact.

6.9.1 EXISTING CONDITIONS

The Site is located on the west side of the San Joaquin Valley, approximately 2 miles east of Interstate 5 (Figure 6.9-1). The region is predominantly rural. East of Interstate 5, agriculture is the primary land use. West of Interstate 5, the Kettleman Hills and other uplands are primarily open space with grazing and oil/gas development. The region overall has a low population density. Lands throughout the region have been extensively disturbed by agriculture east of Interstate 5, and by oil exploration/production, grazing and other activities west of Interstate 5.

The Project Site encompasses approximately 148 acres and constitutes the majority of the northeast quarter of Section 19, Township 21 South, Range 18 East, Mt. Diablo Base and Meridian (see Figures 2.1-1A and 2.1-3B in Section 2.0, Project Description and Engineering). Federal Power holds a purchase option for the Site, which is located on a portion of Kings County Assessor's Parcel No. 36-170-035. Site facilities (including the access road, power block, switchyard, ZLDF, air cooled condenser and storm water evaporation/percolation basin) will occupy approximately 25 acres within the 148-acre Site.

6.9.1.1 Site Zoning and Land Uses

The Site is located on industrial zoned lands that are physically separated from the residential and business districts of the City by a distance of approximately 6 miles and the intervening topography of the Kettleman Hills. The industrial zoned area extends from the Kettleman

compressor station near Interstate 5 to the City's water treatment plant at the northeast corner of the City (Figures 6.9-2A and 6.9-3A). The City zoned these lands industrial in part to take advantage of the bulk natural gas supply available from the compressor station and the access from Interstate 5 (City of Avenal, 1992). In addition, the City's industrial area is also beneficially located from the perspective of proximity to an electrical transmission corridor. Development of the industrial area provides the City with a tax and employment base that is remote from the City's residential and business districts.

While the Site is designated and zoned industrial, it is currently in use for production of row crops. It has been farmed for more than 50 years. A description of ongoing agricultural land uses is provided in Section 6.4 - Agriculture and Soils.

The Project natural gas pipeline is located within the City's industrial zoned lands. A short segment of water pipeline is located partially on unincorporated lands of Kings County and Fresno County. These unincorporated lands are designated agricultural, and the water pipeline will be consistent with this designation. The electrical transmission line interconnection is located partially within the City of Avenal on industrial zoned lands and partially in Fresno County, on lands zoned Agriculture (Figures 6.9.-2B and 6.9-3B).

6.9.1.2 Surrounding Land Uses and Zoning

Existing land uses in the region are predominantly agriculture, consisting of row crops, orchards and vineyards. The closest population centers are the residential and business districts of Avenal, approximately 6 miles southwest of the Site on the other side of the Kettleman Hills. Huron is located approximately 8 miles north of the Site. Kettleman City is located approximately 10 miles southeast of the Site. Coalinga is located approximately 16 miles to the west (see Figure 6.9-1).

Figures 6.9-2A and 6.9-2B provide aerial photographs of lands within 1 mile of the Site and within one-quarter mile of Project linear facilities. There are no residences within 1 mile of the Site. One residence that is adjacent to Interstate 5 and the Kettleman compressor station is within one-quarter mile of the gas pipeline interconnection. One farm storage area with a farm office is located on the route of the proposed transmission line (Figures 6.9-2A and 6.9-2B). This area includes some fixed and modular structures that will be displaced by transmission line construction.

Existing nearby industrial uses include the approximately 80-acre Kettleman compressor station, a regional electrical transmission line corridor and the City of Avenal potable water treatment plant. The Kettleman compressor station compresses natural gas in transport along a major north-south pipeline route just east of Interstate 5. The regional transmission line corridor runs generally parallel to Interstate 5 in the Site area and includes three parallel sets of towers: two are 500 kV lines and one is two 230 kV lines. The City's water treatment plant processes raw water from the San Luis Canal for potable uses, and then pumps the treated water through a pipeline over the Kettleman Hills to the residential and business districts of the City and to the Avenal State Prison.

Figures 6.9-3A and 6.9-3B show zoning within 1 mile of the Site and within one-quarter mile of Project linear facilities. The Site and adjacent lands to the south and west are in the City of Avenal and are designated and zoned industrial. The adjacent lands to the north and east are unincorporated lands of Kings County and are designated for General Agriculture. The northernmost Project standby water supply well is located marginally into Fresno County on lands also designated for General Agriculture. The portion of the transmission line in Fresno County is located on unincorporated lands zoned Agriculture. No known unique geologic or physical features are located on or near the Site. There are no known or planned recreational, scenic, natural resource protection, natural resource extraction, educational, religious, cultural, historic areas or other unique land uses within 1 mile of the Site or within one-quarter mile of linear facilities. The San Luis Canal is located east of the Site and is used for recreational fishing.

The Project region is located far from large population centers and the pressures of urbanization. Based on consultations with the City, there are no notable trends in recent zoning changes or potential future land use development (City of Avenal, 2001d; City of Avenal, 2006). The Site and surrounding lands in the City of Avenal have been zoned industrial since at least 1992 when the previous General Plan was adopted. Since there are no trends of recent zoning changes or plans for potential future land use developments, there have been no discretionary reviews by public agencies initiated or completed within the last 18 months related to such trends.

The closest airport is the Avenal Airport, located more than 7 miles southwest of the Site and on the opposite side of the Kettleman Hills. There are no other airport facilities within 10 miles of the Site. The U.S. Geological Survey (USGS) 7.5 min. topographic map shows a landing strip just to the east of the Project Site. That landing strip has been abandoned, and the area is now used for agricultural production.

Aerial spraying is occasionally used on agricultural crops throughout the area, and the low-flying aircraft operate safely between features such as high voltage transmission lines, communications towers and irrigation water standpipes. Section 6.9.3.4 describes measures that will be engineered into the Project to minimize the impact of the stacks, transmission lines and other high facilities on aerial spraying.

6.9.2 LAWS, ORDINANCES, REGULATIONS AND STANDARDS (LORS)

The land use authorities applicable to the Project are:

- Commission, with land use authority under the Warren-Alquist Act.
- City of Avenal, with local land use authority implemented through the City's General Plan and Zoning Ordinance.

In addition, Kings County and Fresno County have land use authority on unincorporated lands on which a short segment of Project water pipeline and a segment of Project transmission line will be located. Relevant land use authority and related policies are described below.

6.9.2.1 Warren-Alquist Act

The Warren-Alquist Act (PRC Section 25000 et seq.) provides exclusive authority to the Commission for certifying all sites in the state for electrical transmission lines and thermal power plants of 50 MW or more. The issuance of a certificate by the Commission is in lieu of permits, certificates or similar documents otherwise required by state, local or regional agencies, or federal agencies to the extent permitted by law, for such use of the Site and related facilities. In considering Site certification, the Commission will solicit appropriate local, regional, state and federal agencies to make comments and recommendations regarding the design, operation and location of the Site facilities in relation to environmental quality, public health and safety, and other factors on which they may have expertise. Such input is integrated in the Commission's consideration of Site certification, and issuance of a certificate supersedes applicable statutes, ordinances and regulations of state, local and regional agencies, and federal agencies to the extent permitted by law.

The Commission Site certification process is implemented through PRC Section 25500 et seq., and CCR Title 20 Section 1001 et seq.

6.9.2.2 Avenal General Plan

State law requires that each city and/or county prepare and adopt a comprehensive General Plan for the physical development of the city or county. County jurisdictions cover rural and unincorporated areas of the state. The General Plan must be internally consistent, and it must contain implementation measures to ensure its compliance. There are seven mandated elements that must, by state law, be included in the General Plan: land use, circulation, housing, conservation, open space, noise and safety. The state also permits jurisdictions to adopt other elements, including recreation, public services, scenic highways and historic preservation. The California Government Code (Section 65302a) mandates a land use element designating the proposed general distribution, general location and extent of uses of the land. These state requirements are implemented through the Avenal General Plan and Avenal Municipal Zoning Ordinance.

The Project is consistent with the General Plan (City of Avenal, 2006). Table 6.9-1 describes the consistency of the Project with relevant General Plan community goals and objectives. In addition to consistency with relevant community goals and objectives, the Project is consistent with other policies from the General Plan that are relevant to the Project, as outlined in Table 6.9-2.

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TABLE 6.9-1

**PROJECT CONSISTENCY AND BENEFITS TO RELEVANT
GENERAL PLAN COMMUNITY GOALS**

RELEVANT GENERAL PLAN COMMUNITY GOALS & OBJECTIVES	BASIS FOR AVENAL ENERGY CONSISTENCY OR BENEFIT
<p>Ch. 8.3 Commercial and Industrial Development-Objective A: Ensure that all commercial and industrial development is attractive and of high-quality design, to enhance the image of the city.</p>	<p>The City lands generally east of Interstate 5 are designated for industrial use, and the City is planning development of an industrial park in this area. The General Plan describes industrial development in Avenal as "severely lacking." The Project will be a significant infrastructure improvement within the City's industrially designated area that will enhance the identity and image of Avenal through its presence. The Project will be state-of-the-art in design and function. In these ways, the Project will provide a benefit of helping the City achieve this community objective.</p>
<p>Ch. 2.1 Emergency Planning-Objective A: Reduce the potential for loss of life and property resulting from natural and manmade hazards to a minimum.</p>	<p>The Project will be designed and operated in accordance with applicable LORS for health, safety and environmental protection. The General Plan indicates that the industrial designation is used, in part, to designate areas appropriate for industrial development that will not adversely affect the public's health or safety.</p>
<p>Ch. 4 Economic Development Element-Objective E: Encourage a balance of commercial and industrial uses which support a strong and diverse economic base.</p>	<p>The Project will expand the diversity of employment opportunities in Avenal with approximately 25 new full-time, long-term management, technical and administrative jobs. Short-term construction jobs will also be available to residents of Avenal. In addition to these direct job benefits, there will be increased job opportunities from indirect sources such as the need for goods and services. The Project will bring a new industrial use to the City that will directly and indirectly benefit the commercial sector. The Project will provide direct and indirect benefits that will help diversify the local economic base.</p>
<p>Ch. 3.1 Natural Resources-Objective A: Protect natural resources, including groundwater, soils and air quality...</p>	<p>The Site is located in an area that is zoned industrial, so there will be no conversion of lands designated or zoned for agriculture. Biotic and cultural resource studies have been completed; development of the Site will not result in significant impacts to biological or cultural resources. (Biological and cultural resources are described in detail in Sections 6.6 and 6.7, respectively.) The Project will be designed and operated to protect water and air quality in accordance with applicable LORS.</p>
<p>Ch. 4 Economic Development Element-Objective D: Ensure that there are adequate infrastructure improvements which promote commercial and industrial development.</p>	<p>The Project represents a major infrastructure improvement utilizing modern combined-cycle technology to provide an effective and cost-efficient source of electricity to the state grid. This power will be available to service urban development in the City, region and state. In this way, the Project will provide a benefit of helping the City achieve this community objective.</p>
<p>Ch. 4 Economic Development Element-Objective C: Actively market and recruit new businesses... which generate local employment opportunities and sales tax revenues...</p>	<p>The Project will create approximately 25 new full-time, long-term management, technical and administrative jobs. Short-term construction jobs will also be available to residents of Avenal. In addition to these direct job benefits, there will be increased job opportunities from indirect sources such as the need for goods and services. The Project will provide a source of property tax revenue and sales tax revenue and additional indirect fiscal benefits that will improve the long-term fiscal condition of Avenal, Socioeconomic benefits are described in detail in Section 6.10. In this way, the Project will provide a benefit of helping the City achieve this community objective.</p>

TABLE 6.9-2

LAND USE STANDARDS AND POLICIES RELEVANT TO AVENAL ENERGY

PLAN	POLICY	IS PROJECT CONSISTENT WITH POLICY?	BASIS FOR CONSISTENCY WITH PROGRAM, POLICY, OR REGULATION	AFC SECTION
CALIFORNIA ENERGY COMMISSION, WARREN ALQUIST ACT (PRC Section 25000 et seq.)				
PRC 25500	In accordance with the provisions of this division, the Commission shall have the exclusive power to certify all sites and related facilities in the state, whether a new site and related facility or a change or addition to an existing facility. The issuance of a certificate by the Commission shall be in lieu of any permit, certificate, or similar document required by any state, local or regional agency, or federal agency to the extent permitted by federal law, for such use of the Site and related facilities, and shall supersede any applicable statute, ordinance, or regulation of any state, local, or regional agency, or federal agency to the extent permitted by federal law.	Yes	The Project is filing this AFC requesting certification from the Commission.	Entire AFC
AVENAL GENERAL PLAN				
AGPP 6-2	Maintain a roadway level of service (LOS) of C or better on local streets and Minor Collectors, and LOS of D or better for Collectors and Arterial streets.	Yes	Project-specific transportation and traffic analyses demonstrate that these levels of service will be maintained within the City of Avenal.	Section 6.11
AGPP 2-3	The City will establish five minutes or two miles travel distance as the maximum response time or travel distance from the nearest fire station. Outside of this response range, built-in fire protection systems (i.e. sprinklers) shall be required in all new buildings excluding single-family units.	Yes	The Project design includes built-in fire safety mechanisms including fire sprinklers, fire water storage, fire water pumps, fire hydrant systems, fire extinguishers and fire retardant building materials. The CTGs also will be equipped with carbon dioxide fire suppression systems.	Section 2.3.11.5
AVENAL ZONING ORDINANCE				
AMC Title 9				
9.73.18 A	Curbs, gutters, drainage, sidewalks, street trees, street signs, street lights, and required utilities shall be constructed as a condition of all development where deemed necessary by the City Manager.	Yes	Curbs, gutters, drainage, sidewalks, street trees, street signs, street lights, and required utilities will be installed where appropriate as required by City.	Sections 6.9.2.3 and 6.9.3.6

PLAN	POLICY	IS PROJECT CONSISTENT WITH POLICY?	BASIS FOR CONSISTENCY WITH PROGRAM, POLICY, OR REGULATION	AFC SECTION
9.60.08 E	Driveways for commercial and industrial developments shall be a minimum of twenty feet in width with a minimum of fifteen feet of vertical clearance.	Yes	Prior to construction, the design of the driveway will be submitted to the City Engineer for review to ensure compliance with the City Zoning Ordinance standards.	Sections 6.9.2.3 and 6.9.3.6
9.73.18 C	All street and road improvements shall be to City standards as adopted.	Yes	Prior to construction of improvements, the design will be submitted to the City Engineer for review to ensure compliance with the City Zoning Ordinance standards.	Sections 6.9.2.3 and 6.9.3.6
9.60 A-F	In order to prevent congestion and hazards, to assure maneuverability of emergency vehicles, and to prevent shortage of on-street parking spaces, off-street parking facilities shall be provided incidental to any new building or structure and alterations and enlargements of existing uses. Off-street parking facilities shall be designed in such a manner that they will protect the public safety and insulate surrounding land uses from their impacts.	Yes	The Project design includes off-street parking designed in accordance with the City Zoning Ordinance. Off-street parking will occur on the Project Site, away from the public, and will not affect adjacent land uses.	Sections 6.9.2.3 and 6.9.3.6
9.60.02	Industrial facilities shall provide one parking space for each employee during the shift of maximum employees plus additional parking spaces as prescribed by the Community Development Department.	Yes	Project parking will meet or exceed this minimum parking space requirement.	Sections 6.9.2.3 and 6.9.3.6
9.60.08 A	All parking areas and ingress and egress to parking areas shall be, surfaced in a manner to achieve a Traffic Index of 4, unless a higher index is determined to be necessary by the city engineer.	Yes	This requirement will be incorporated in the Project's parking lot design criteria.	Sections 6.9.2.3 and 6.9.3.6
9.63.01 D	All landscaped areas in commercial, industrial, and multi-family projects shall be surrounded with six-inch high concrete curbing, unless waived by the Community Development Director.	Yes	This requirement will be incorporated in the Project's parking lot design criteria.	Sections 6.9.2.3 and 6.9.3.6
9.60.03	Parking lot stalls shall meet minimum dimensions.	Yes	This requirement will be incorporated in the Project's parking lot design criteria.	Sections 6.9.2.3 and 6.9.3.6
9.60.08 G	All parking lots shall have one 15-gallon shade tree planted every three (3) parking spaces along parking rows. Fifty percent of the paved parking lot's surface shall be shaded by tree canopies within 10 years of planting.	Yes	This requirement will be incorporated in the Project's parking lot design criteria.	Sections 6.9.2.3 and 6.9.3.6

PLAN	POLICY	IS PROJECT CONSISTENT WITH POLICY?	BASIS FOR CONSISTENCY WITH PROGRAM, POLICY, OR REGULATION	AFC SECTION
9.60.08 G	For all parking lots containing 6 or more parking spaces, at least 5 percent of the total ground area of the parking lot shall be landscaped.	Yes	This requirement will be incorporated in the Project's parking lot design criteria.	Sections 6.9.2.3 and 6.9.3.6
9.60.08 L	All landscaped planters shall be provided with an automatic irrigation system.	Yes	This requirement will be incorporated in the Project's landscape design criteria.	Sections 6.9.2.3 and 6.9.3.6
9.79.08 N	Trash bins or dumpsters shall be kept within an enclosed building, trash enclosure, or screened from public view to the maximum extent feasible.	Yes	Bulk trash collection area will be screened and landscaped so as not to be visible from outside the Site perimeter.	Sections 6.9.2.3 and 6.9.3.6
9.63.01 C	All landscaping as required in the Zoning Ordinance of the City of Avenal shall be reviewed by the Community Development Director as to the type, density of planting and size of plants intended for use.	Yes	A detailed landscaping plan will be submitted to the Community Development Director for approval.	Sections 6.9.2.3 and 6.9.3.6
9.63.01 A	Plant materials consistent with Climate Zones 8 & 9 as identified in the Sunset Western Garden Book shall be used in all landscaping plans. Landscaping plans shall emphasize the use of drought-tolerant species, grouped by similar water usage. .	Yes	Project landscaping will incorporate these requirements.	Sections 6.9.2.3 and 6.9.3.6
9.63.01 C	Each property owner or occupant shall be responsible for the maintenance and care of all landscaping required by the Zoning Ordinance of the City of Avenal and in the street right-of-way abutting such property.	Yes	The Project will include a maintenance program that incorporates these requirements.	Sections 6.9.2.3 and 6.9.3.6
9.63.07 A	Irrigation plans shall be required to be submitted along with landscape plans. Irrigation plans must show an irrigation conformance calculation with a ten percent safety margin.	Yes	The Project landscaping plan will incorporate these requirements.	Sections 6.9.2.3 and 6.9.3.6
9.61.11	Businesses may have 1 monument sign up to 64 square feet in size in M-2 Industrial Zoned areas.	Yes	Project signage will incorporate this requirement.	Sections 6.9.2.3 and 6.9.3.6
9.61.11	One wall sign is permitted for each business per street frontage. Up to 75 square feet is allowed for the primary frontage and 37.5 square feet per secondary frontage up to an aggregate of 150 square feet.	Yes	Project signage will incorporate this requirement.	Sections 6.9.2.3 and 6.9.3.6

AFC = Application for Certification
AGPP = Avenal General Plan Page No.
AMC = Avenal Municipal Code
PRC = Public Resources Code

6.9.2.3 Avenal Zoning Ordinance

The Project is consistent with the Avenal Zoning Ordinance (City of Avenal, 2006). The zoning ordinance states that land where the Project is planned (zoned M-2 Industrial) has no building height restrictions (City of Avenal, 2005b, Table 9-2).

Zoning Ordinance Section 9.31 specifies uses permitted in an M-2 industrial district. An electric power generating plant is an allowable use in the M-2 zone, subject to the approval of a conditional use permit (CUP) (City of Avenal, 2006). A Site Plan Review is required of all CUP applications, following Zoning Ordinance 9.70 procedures. The Project would require a CUP and Site Plan Review under the Zoning Ordinance, except that state law provides for certification of power plant sites by the Commission in lieu of any local requirements. Therefore, Commission certification of the Project will satisfy the Zoning Ordinance requirement for a CUP and Site Plan Review.

City of Avenal property development standards are defined in the City Zoning Ordinance. General standards for street improvements, off-street parking, landscaping, fencing, and sign standards are identified in Zoning Ordinance Sections 9.73.18, 9.60, 9.63, 9.73.15, and 9.61 respectively. Furthermore, specific development standards for M-2 Industrial zoned lands can be found in Zoning Ordinance Section 9.31. The Project will be constructed and operated consistent with these standards. Table 6.9-2 provides the basis for Project consistency with relevant Zoning Ordinance standards and policies.

6.9.2.4 Kings County Land Use Policies

The Kings County General Plan policies, guidelines and standards apply only to land use and development within the unincorporated territory of the County. They do not apply to development within the City of Avenal. The City and the County work together to develop complementary planning documents. However, the County does not have land use authority in the City. The only Project land use that will occur on unincorporated lands in Kings County is the water pipe from the existing ground water wells located north of the Site (Figure 6.9-3A). This use is consistent with the Kings County General Agriculture land use designation and with the existing agricultural land uses surrounding the Site, as this use will not harm long-term agricultural use as directed by the Land Use Element of the Kings County General Plan. (Kings County General Plan, 1993, LU-10 & LU-11.)

Kings County has implemented a good neighbor policy between agricultural and nonagricultural property owners (Kings County General Plan, LU-9.) Essentially, this principle allows for nonagricultural industrial types of uses which are not inconsistent with the continued viability of the farmland to be conducted on land zoned General Agricultural. Because the proposed pipeline will not interfere with the surrounding farming activity, the pipeline is consistent with the General Agricultural designation.

6.9.2.5 Fresno County Land Use Policies

The Fresno County General Plan policies, guidelines and standards apply to land use development within unincorporated areas of Fresno County. The Project will include approximately 200 feet of water pipeline in Fresno County that will connect an existing well to the Site for standby water supply. The Project also will include approximately 4.3 miles of transmission line in Fresno County. The water pipeline and transmission line are consistent with the Fresno County General Agriculture land use designation. Under the Fresno County General Plan, non-agricultural uses in areas zoned for agricultural uses are permitted so long as those uses do not diminish agricultural production capacity, economic viability, or detrimentally impact surrounding agricultural operations to the extent that further losses in production may occur. (Fresno County General Plan, 2000, 2-10 & 2-11.) The short segment of subsurface water pipe has been designed in consultation with the farmer of the property to assure that it will not detrimentally affect the agricultural uses surrounding the Site. The transmission line in Fresno County has been designed to be adjacent to existing PG&E transmission lines so that it will not interfere with agricultural operations. Agricultural fields are currently maintained beneath the existing PG&E 500 kV and 230 kV regional transmission lines and will also be maintained beneath the adjacent new transmission line. The water pipe and transmission line uses are compatible with ongoing agricultural operations and are permitted in Fresno County.

6.9.2.6 Permits and Agency Contacts

There are no permits or approvals required for the Project related to land use that are outside the jurisdiction of the Commission. If not for the authority of the Commission to certify sites, the City of Avenal could require a Conditional Use Permit for the Project. Since the Site is located on incorporated lands in the City of Avenal, no Kings County authorizations for land use are required. Contact information for the City of Avenal, Kings County and Fresno County is provided in Table 6.9-3.

For the portion of the electric transmission line located in Fresno County, the County will perform a review of the proposed transmission line route under Fresno County Zoning Ordinance Section 875 (Fresno County, 2004). This review does not limit or interfere with the Commission AFC process. The County may recommend modifications if needed to protect health, safety and welfare.

TABLE 6.9-3

AGENCY CONTACTS FOR LAND USE

AGENCY AND CONTACT	PERMITTING/APPROVAL AUTHORITY
Steve Sopp Community Development Director City of Avenal 919 Skyline Blvd. Avenal, CA 93204 (559) 386-5766	City of Avenal General Plan and Zoning Ordinance
Larry Spikes Chief Administrative Officer County of Kings 1400 West Lacy Hanford, CA 93230 (559) 582-3211	County Land Use Authority
Alan Weaver Director of Public Works and Planning 2220 Tulare Street 6 th Floor Fresno, CA 93721 559-262-4078	Review of transmission line route under County Zoning Ordinance Section 875

6.9.3 IMPACTS

6.9.3.1 Significance Criteria

Significance criteria are based on the Commission Guidelines, Appendix G, CEQA Guidelines, Environmental Checklist Form (adopted January 1, 1999) and on performance standards or thresholds adopted by responsible agencies.

An impact may be considered significant if the project results in:

- Conflict with adopted environmental plans and goals of the community where the Project is located.
- Disruption or division of the physical arrangement of the established community.

- Generation of substantial growth or displacement of a large number of people.
- Conflict with established recreational, educational, religious or scientific uses in the area.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.
- Conflict with existing zoning for agricultural uses.
- Disruption or noise causing adverse effects to the development of future land uses.
- Disruption of traffic that would restrict access and adversely affect land uses, or disruption of visual resources, affecting other land uses such as recreation.

6.9.3.2 Consistency with Adopted Environmental Plans, Goals and Other LORS

Table 6.9-4 provides an evaluation of the Project's compliance with applicable LORS, with cross-references to Tables 6.9-1 and 6.9-2 for demonstration of consistency with the General Plan and Zoning Ordinance. The Project is consistent with applicable land use plans, policies and regulations, including the zoning and land use designations for the Site. No impacts or conflict will result to local land use plans, policies or regulations from implementation of the Project.

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TABLE 6.9-4

LAND USE LORS AND COMPLIANCE

JURIS-DICTION	LORS/AUTHORITY	ADMINISTERING AGENCY ⁽¹⁾	REQUIREMENTS/ COMPLIANCE	APPROACH TO COMPLIANCE	AFC SECTION
Federal	None applicable.	None applicable.	None applicable.	None Applicable.	None applicable.
State	PRC §25523(a); 20 CCR §1752, 1752.5, 2301-2308 and Chapter 5 Appendix B, Part (g) (3) and (4).	California Energy Commission.	Evaluate compatibility of proposed project with relevant land use plans.	The Commission will review compatibility of the Project in conjunction with Site certification.	Sections 6.9, 6.9.1, 6.9.2, 6.9.3 Pages 6.9-1 to 6.9-20
	Warren-Alquist Act, PRC Section 25523(a); 20 CCR §1752, 1752.5, 2301-2308 and Chapter 5 Appendix B, Part (g)(3) and (4).	California Energy Commission.	Provisions to assure protection of environmental quality, including compatibility of a proposed project with relevant land use plans.	The Commission will review compatibility of the Project in conjunction with Site certification	Sections 6.9, 6.9.1, 6.9.2, 6.9.3 Pages 6.9-1 to 6.9-20
Local	See table 6.9-2, Land Use Standards and Policies Relevant to Avenal Energy.	City of Avenal Planning and Building.	Project will meet local requirements.	See Table 6.9-2, Land Use Standards and Policies Relevant to Avenal Energy.	Table 6.9-2 Pages 6.9-7 to 6.9-9
	Fresno County Zoning Ordinance Section 875	Fresno County Department of Public Works and Planning	Submit Transmission Line Route and information for County review.	Fresno County will be provided the opportunity to review the proposed transmission line route.	Sections 6.9.2.5 and 6.9.2.6 Pages 6.9-11 to 6.9-12.
Industry	None applicable.	None applicable.	None applicable.	None Applicable.	None applicable.

⁽¹⁾ Pursuant to CCR Title 20, Appendix B(i)(1)(B): Each agency with jurisdiction to issue applicable permits and approvals or to enforce identified laws, regulations, standards, and adopted local, regional, state and federal land use plans, and agencies which would have permit approval or enforcement authority, but for the exclusive authority of the Commission to certify sites and related facilities.

6.9.3.3 Construction Impacts

Construction impacts of the Project will be temporary and are expected to last approximately 27 months. As described in Section 6.9.1 and Table 6.9-1, the Project will be consistent with the adopted environmental plans and goals of the community. The major construction activities will be focused on the Site and will not disrupt or divide surrounding land uses. Natural gas pipeline construction between the compressor facility and the Site will be primarily along the alignment of Avenal Cutoff Road and Plymouth Avenue. Disturbance due to pipeline construction will be short-term. The pipeline will be underground and will not divide the physical arrangement of established land uses. The water pipeline, and the southern approximately one-third of the electrical interconnection route, are located entirely within Kochergen Farms property and have been designed in consultation with the land owner to minimize impact on farming operations. North of Kochergen Farms, the transmission line route will be located adjacent to the existing PG&E transmission corridor so as not to impact agricultural operations. The transmission line in Fresno County will be adjacent to existing PG&E transmission lines so that it will not interfere with agricultural operations. Agricultural fields are currently maintained beneath the existing PG&E 500 kV and 230 kV regional transmission lines and will also be maintained beneath the new transmission line. A few structures associated with a farm office and equipment storage area will be displaced by transmission line construction approximately half way between the Site and the Gates substation (Figure 6.9-2B). The owner will be compensated for impact to this area. Based on these considerations, Project construction will not result in significant impacts on adopted environmental plans or goals of the community, or to disruption or division of the physical arrangement of the community.

Project construction will not result in substantial growth nor displace a substantial number of people. The Site is located in a rural area that is primarily in agricultural use. Section 6.10 describes socioeconomic impacts. As described, approximately 80 percent of construction worker jobs are expected to be filled from the existing available regional work force. The remaining 20 percent of the work force may take up temporary residence in the region during the construction period. Because of the short-term nature of Project construction, it is not expected that the construction work force would contribute to substantial urban growth. Based on these considerations, Project construction will have a less than significant growth or displacement impact. As described in Section 6.9.1, there are no established or planned recreational, educational, religious or scientific uses in the area. Therefore, Project construction will have no impact to these land uses.

The City's habitat conservation and natural community conservation goals are integrated in the General Plan. The construction of the Project on lands designated and zoned for industrial use is consistent with habitat conservation and natural community conservation goals. The Site has been utilized for agriculture for more than 50 years. Biotic studies have been completed, development of the Site will not result in significant impacts to biological resources. The lands that will be disturbed for Project construction are not a natural community and provide low-quality habitat. Biological resources and impacts are described in detail in Section 6.6. Based on these considerations, Project construction will have no impact on the community's habitat conservation plans or natural community conservation plans.

The Site and surrounding City lands are zoned for industrial development. The industrial designation of the Site vicinity is intended, in part, to identify areas appropriate for industrial development that will not cause land use conflicts with surrounding uses. The area surrounding the industrial zone is farmland. The farmhouse nearest to the Site is located approximately 1.3 miles away from the Site so noise will be attenuated by distance. Gas pipeline construction will occur near a residence located approximately 1.8 miles southwest of the Site, near Interstate 5 and the Kettleman compressor station, but noise and other effects on that residence will be short-term. Based on these considerations, there will be no impact to existing zoning for agricultural uses, and the level of land use impact due to disruption and noise occurring from Project construction will be less than significant.

Project construction will occur in accordance with traffic management procedures to minimize the effect of construction-related transportation on local traffic. The procedures will be designed, in part, to assure safe access to existing land uses during construction so that surrounding land uses are not adversely affected. Construction impacts of traffic disruption will be short-term, and no adverse effect to land uses is expected. Based on these considerations, Project construction will have a less than significant traffic disruption land use impact. Traffic and transportation are described in detail in Section 6.11.

Section 6.13 provides a detailed visual analysis of the Project. Visual effects of the Project will not affect other land uses in the area.

Based on the above evaluations of the Project compared to the defined significance criteria, Project construction will have a less than significant land use impact.

6.9.3.4 Operations Impacts

As described in Section 6.9.1 and Table 6.9-1, the Project will be consistent with the adopted environmental plans and goals of the community. The Site is surrounded by agricultural uses and will not disrupt or divide agricultural activities. The natural gas pipeline will be underground and located primarily along the alignment of Avenal Cutoff Road and Plymouth Avenue. Therefore, it will not divide the physical arrangement of established land uses. The water pipeline and electrical interconnection routes have been designed to minimize impact on farming operations, in consultation with the land owner and operator of farming operations on the Site and surrounding lands. Where the transmission line extends beyond Kochergen Farms, the route has been designed to be adjacent to existing PG&E transmission lines so agricultural operations will not be impacted. Based on these considerations, Project operation will not result in significant impacts on adopted environmental plans or goals of the community, or to disruption or division of the physical arrangement of the community.

Project operations will not result in substantial growth nor displace a substantial number of people. The Site is located in a rural area that is primarily in agricultural use. Section 6.10 describes socioeconomic impacts. As described, Project operations will provide approximately 25 full-time employment positions that will bring skilled jobs to Avenal. As described in Section 6.10 - Socioeconomics, Federal Power will hire from the existing local labor force to the extent practical. The City of Avenal General Plan considered the growth impacts of industrial development when the area was designated for industrial uses. The proposed Site use is consistent with the General Plan, and the Project provides an impetus for the City to achieve beneficial growth and improved feasibility consistent with the General Plan. The Fresno County General Plan and Zoning Ordinance allow transmission lines with County review pursuant to ordinance Section 875. Based on these considerations, Project operations will have a beneficial land use growth impact.

As described in Section 6.9.1, there are no established or planned recreational, educational, religious or scientific uses in the area. Therefore, Project operations will have no impact to these land uses. The Project will not affect recreational fishing in the San Luis Canal.

The City's habitat conservation and natural community conservation goals are integrated in the General Plan. Operation of the Project on lands designated for industrial use is consistent with habitat conservation and natural community conservation goals. Biotic studies have been completed; development of the Site will not result in significant impacts to biological resources. Biological resources and impacts are described in detail in Section 6.6. Based on these

considerations, Project operation will have no impact on habitat conservation plans or natural community conservation plans.

The Site and surrounding City lands are zoned for industrial development. The industrial designation of the Site vicinity is intended, in part, to identify areas appropriate for industrial development that will not cause land use conflicts with surrounding uses. The area surrounding the industrial zone is farmland. The farmhouse nearest to the Site is located approximately 1.3 miles away. Noise impacts are described in Section 6.12 - Noise Control and demonstrate that noise impacts will be less than significant. Based on these considerations, there will be no Project related noise impacts to existing agricultural uses.

The height of taller Project structures could pose a short-term safety hazard, as agricultural operations in the region occasionally employ aerial spraying. However, once the location of the structures is well recognized, the hazard will be minimized and will be similar to existing conditions, which include the presence of high voltage electric lines, communication towers, water standpipes and other tall structures located throughout the region. To minimize the impact of tall structures on aerial spraying applications, the Project will include lighting and visibility features on higher structures, e.g., the stacks. In addition, prior to construction, Federal Power will coordinate with the agricultural commissioners for Kings and Fresno counties to provide notice of the structures to aerial spraying companies. Considering these measures, no impact to aerial spraying activities is expected.

Project operations will provide approximately 25 full-time positions, for 24-hour per day, 7-day per week operations. The largest operations shift typically would consist of approximately 15 persons. The traffic generated by a shift-change of this size can easily be accommodated by existing roadways without a change in level of service. Based on these considerations, Project operations will have a less than significant traffic disruption land use impact. Traffic and transportation are described in detail in Section 6.11.

Section 6.13 provides a detailed visual analysis of the Project. Visual effects of the Project will not disrupt other land uses in the area.

Based on the above evaluations of the Project compared to the defined significance criteria, Project operations will have a less than significant land use impact.

6.9.3.5 Cumulative Impacts

The Project Site is located in an industrial district in the City of Avenal. There are no urban/residential uses in the Site vicinity. The Project represents an infrastructure improvement within the City's industrially designated area that is consistent with the General Plan and related community goals. The transmission line construction in Fresno County is consistent with Agricultural land uses. The Project is consistent with local land use plans and policies for the area. Other projects with potential for cumulative impacts are identified in Section 6.1.4. It is expected that each of these projects will be reviewed for consistency with land use plans and policies. Projects identified for potential cumulative impact analysis in Section 6.1.4 are located too far from the Site to have cumulative land use impacts. The Site is located in the western San Joaquin Valley, far from the pressures of urbanization and other farmland conversions. There have been no recent trends in zoning changes or in plans for potential future development (City of Avenal, 2001; City of Avenal, 2006). The Site and surrounding lands in the City of Avenal have been zoned industrial since at least 1992 when the previous General Plan was adopted. Based on the consistency of the Project with long-established zoning and land use designations, the low level of land development occurring in the area, there will be no significant cumulative land use impact.

6.9.3.6 Project Design Features

The Project Site is located in an area designated and zoned industrial by the City of Avenal and is consistent with the General Plan. The electric transmission line interconnection will be located in a Heavy Manufacturing Zone (M-2) in the City of Avenal and on lands zoned Agriculture in unincorporated Fresno County. The Project is consistent with City land use plans, zoning and other controls. Design and operational features of the Project that help to minimize potential land use impacts are:

- The Site is located away from developed urban areas and is surrounded by agricultural lands. It is located at the outskirts of the City limits, in an industrial park.
- The Project will be located to ideally utilize existing industrial infrastructure, including water and gas supplies and electrical transmission lines. Only relatively short tie-ins to existing gas and water infrastructure systems will be required.
- The power plant will be constructed on lands that are zoned industrial, so there will be no loss of lands designated for agriculture, open space, wildlife, recreation or other conflicting uses. The Project Site use is consistent with the City's plan for industrial development in the area.

- The Site and infrastructure tie-ins occur on lands that have been extensively disturbed by agricultural activity. No disturbance of natural vegetation or wildlife habitat will occur.
- To minimize the impact of tall structures on aerial spraying applications, the Project will include lighting and visibility features on higher structures, e.g., stacks. In addition, prior to construction, Federal Power will coordinate with the agricultural commissioners for Kings and Fresno counties to provide notice of the structures to aerial spraying companies.
- The generating unit will be fueled by clean-burning natural gas. Equipment to control emissions to air will be provided in accordance with SJVAPCD BACT requirements. Also, emissions offsets will be obtained in accordance with SJVAPCD requirements.
- The Site is located down-slope and almost 2 miles from Interstate 5, which is the closest major transportation corridor. The distance and down-slope orientation will minimize visual impacts to receptors on the interstate corridor. The Project will not be visible from the developed area of Avenal due to the intervening topography of the Kettleman Hills. Site layout, paint and landscaping will be designed to minimize visual contrast with the surroundings.
- Equipment design will include noise attenuation technology to assure compliance with the City's noise element.
- Biological, cultural and paleontological resource studies have been completed. There is no evidence of significant resources at the Site.
- Waste products and hazardous materials will be managed in accordance with environmental and public safety laws and regulations to minimize the potential for impacts to occur.
- Project construction will occur in accordance with traffic management procedures to minimize the effect of construction-related transportation on local traffic. The procedures will be designed, in part, to assure safe access to existing land uses during the period of construction. The procedures will be developed in consultation with the City Public Works Department.
- Facility grades, finishes and landscaping will be coordinated with the City and will be consistent with the General Plan and Zoning Ordinance requirements for road improvements, curbs, gutters, parking lot specifications, trash receptacles, fencing, signage and other site features.

6.9.4 MITIGATION MEASURES

Based on the analysis of impacts in Section 6.9.3 and the Project design features incorporated to minimize potential impacts, land use impacts of the Project will be less than significant. Therefore, no mitigation measures are required.

6.9.5 SIGNIFICANT UNAVOIDABLE ADVERSE IMPACTS

No significant unavoidable adverse impacts are expected to result from the Project.

6.9.6 REFERENCES

City of Avenal. Personal communications with Steve Sopp, Director of Community Development. 2006.

City of Avenal. General Plan. 2005a.

City of Avenal. Municipal Zoning Ordinance. 2005b.

City of Avenal. Staff Report to the Avenal Planning Commission. June 4, 2001a.

City of Avenal. Initial Study/Proposed Negative Declaration for a Variance in the Maximum Height in an Industrial Zone (Duke Energy). April 18, 2001b.

City of Avenal. City Council Resolution. March 22, 2001c.

City of Avenal. Personal communications with Jim Doughty, Planning and Community Development Director. 2001d.

City of Avenal Municipal Code. 1998.

City of Avenal. General Plan and Draft Environmental Impact Report, Final Environmental Impact Report. 1992.

Fresno County. Ordinance Code of Fresno, Chapter 2, Part VII, Land Use Regulations and Planning. March 2, 2004.

Fresno County. Personal communications with Joe Prieto, Agricultural Commissioner. 2001.

Fresno County. General Plan. 2000.

Kings County. Personal communications with Bill Zumwalt, Director, Kings County Planning Department. 2001a.

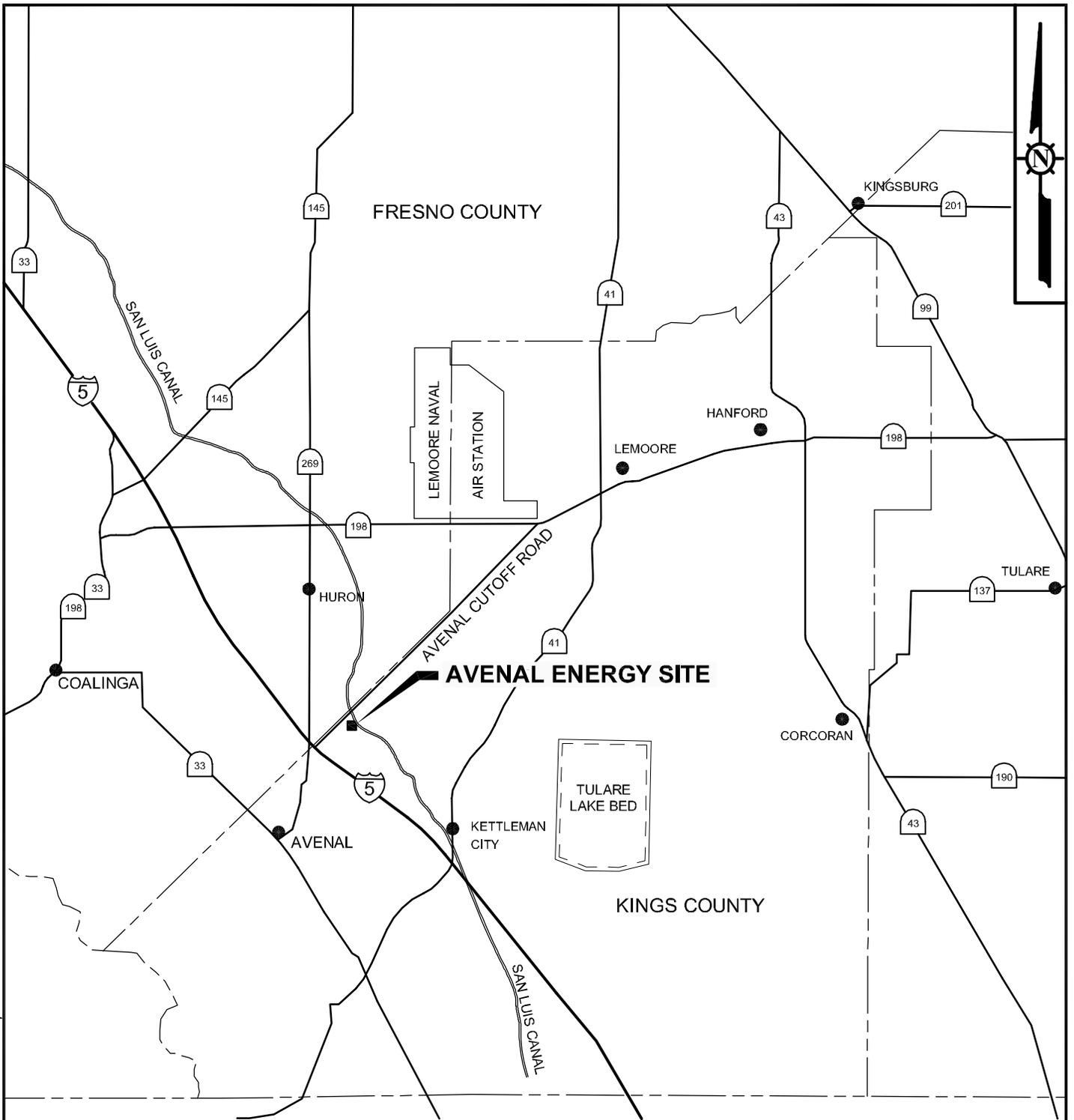
Kings County. Personal communications with Kevin McCallister, Kings County Public Works Department. 2001b.

Kings County. Personal communications with Dennis Bray, Agricultural Commissioner and Tim Niswander, Assistant Agricultural Commissioner. 2001c.

Kings County. Zoning Ordinance. 2000.

Kings County. General Plan. 1993.

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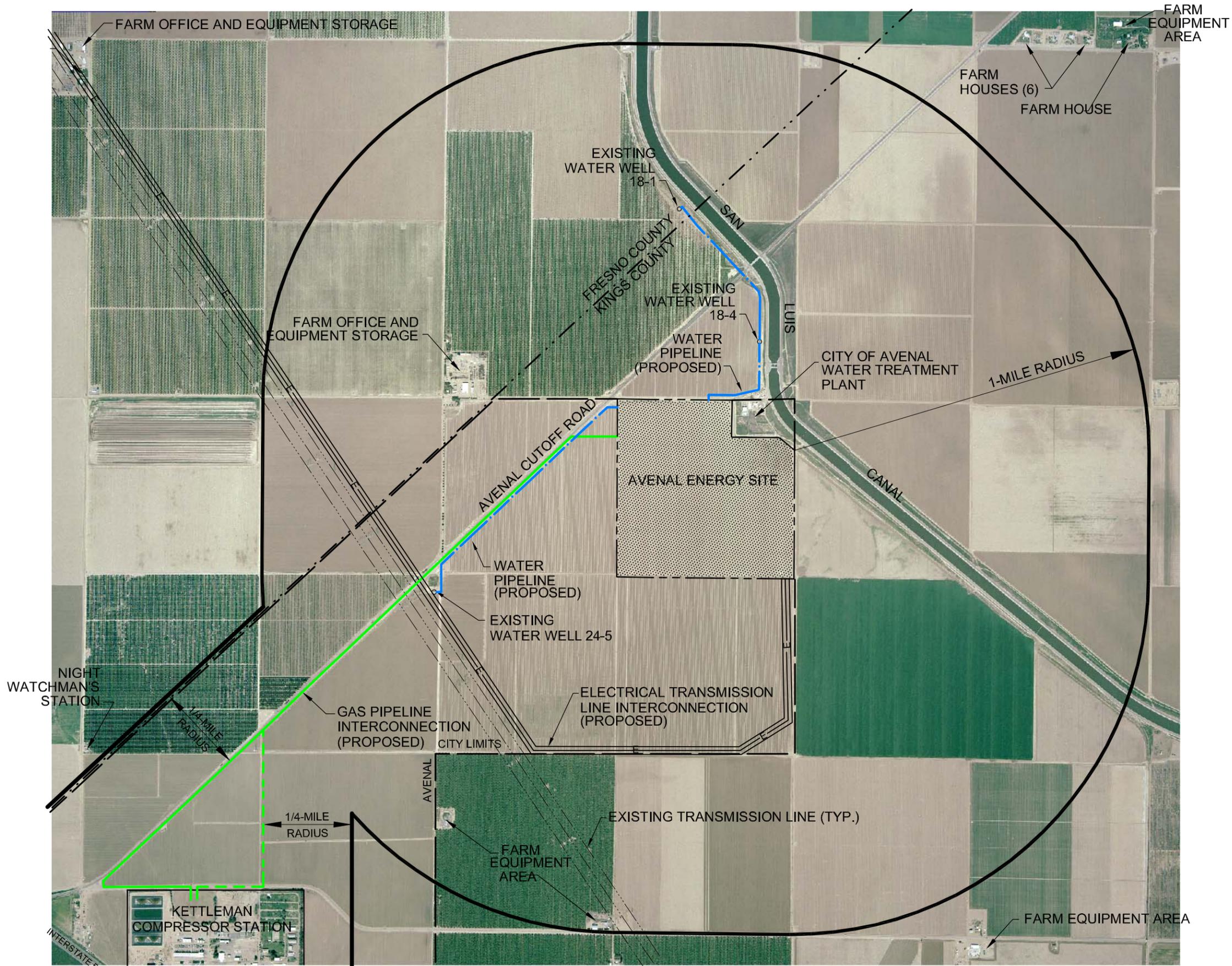


LEGEND:

- INTERSTATE HIGHWAY
- STATE HIGHWAY
- COUNTY LINE

PROJECT REGION	
FEDERAL POWER AVENAL, LLC	
AVENAL ENERGY	FIGURE 6.9-1

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LEGEND:

- ELECTRICAL TRANSMISSION LINE INTERCONNECTION (PROPOSED)
- EXISTING TRANSMISSION LINE
- WATER PIPELINE (PROPOSED)
- GAS PIPELINE INTERCONNECTION (PROPOSED)
- AVENAL ENERGY SITE BOUNDARY
- COUNTY LINE
- AVENAL CITY LIMITS



EXISTING MANMADE FEATURES

AVENAL POWER CENTER, LLC



FIGURE 6.9-2A

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NOT TO SCALE
(NOT OTHO-RECTIFIED)

SOURCE: GlobeXplorer, image date 12/1/2004.

**EXISTING MANMADE FEATURES
(TRANSMISSION LINE ROUTE)**

AVENAL POWER CENTER, LLC



FIGURE 6.9-2B

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LEGEND:

- ELECTRICAL TRANSMISSION LINE INTERCONNECTION (PROPOSED)
- WATER PIPELINE (PROPOSED)
- GAS PIPELINE INTERCONNECTION (PROPOSED)
- AVENAL ENERGY SITE
- COUNTY LINE
- AVENAL CITY LIMITS

AVENAL GENERAL PLAN LAND USE DESIGNATIONS

- (HC) HIGHWAY COMMERCIAL
- (I) INDUSTRIAL
- (P) PUBLIC FACILITIES

AVENAL ZONING CLASSIFICATIONS

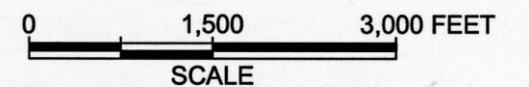
- (H-C) HIGHWAY COMMERCIAL
- (M-2) HEAVY MANUFACTURING

KINGS COUNTY UNINCORPORATED LANDS

- (AG) AGRICULTURE

FRESNO COUNTY

- (AG) AGRICULTURE



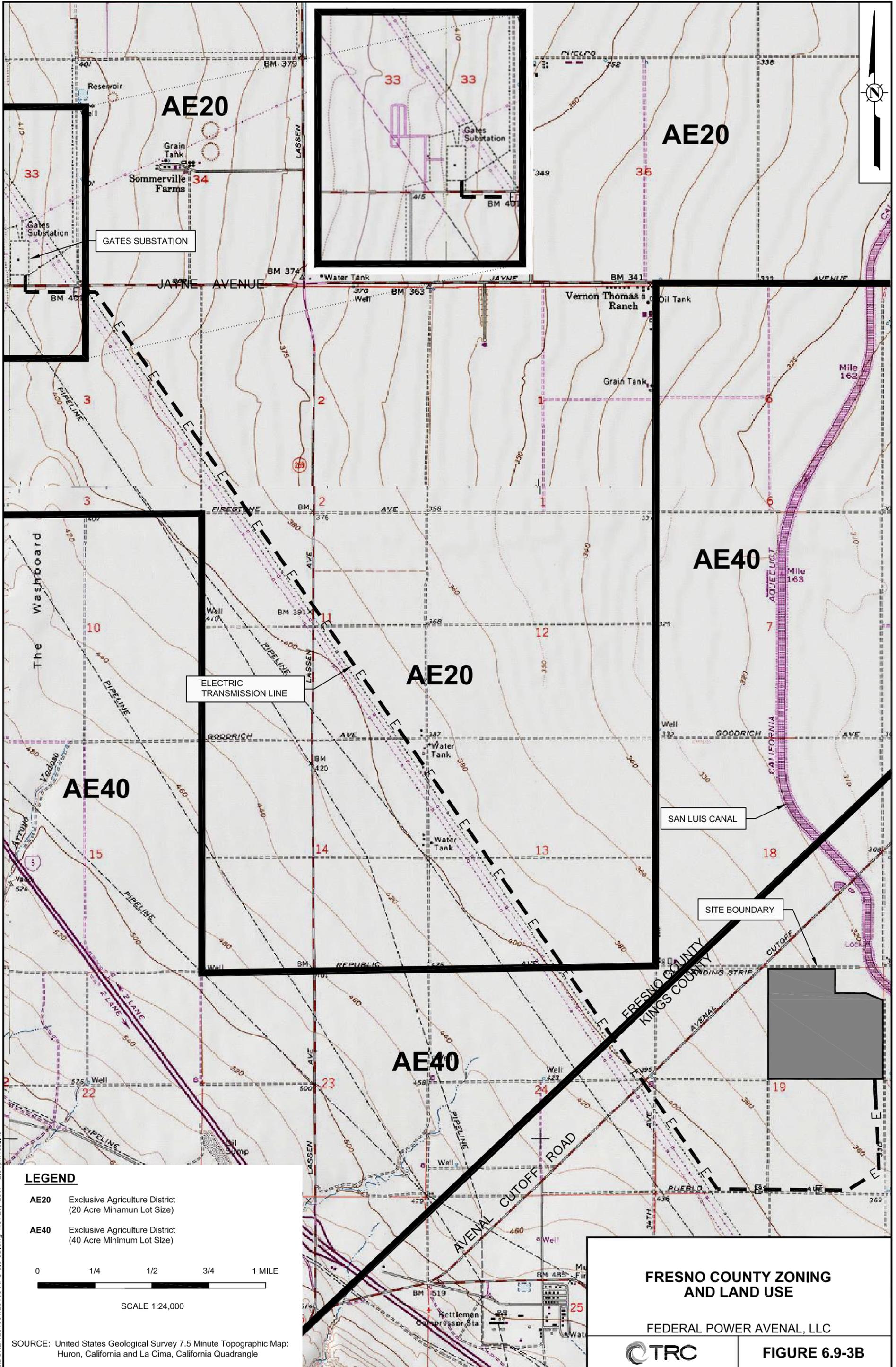
AVENAL LAND USE DESIGNATIONS AND ZONING

FEDERAL POWER AVENAL, LLC



FIGURE 6.9-3A





AE20

AE20

AE40

AE20

AE40

AE40

GATES SUBSTATION

ELECTRIC TRANSMISSION LINE

SAN LUIS CANAL

SITE BOUNDARY

LEGEND

- AE20** Exclusive Agriculture District
(20 Acre Minimum Lot Size)
- AE40** Exclusive Agriculture District
(40 Acre Minimum Lot Size)



SCALE 1:24,000

SOURCE: United States Geological Survey 7.5 Minute Topographic Map: Huron, California and La Cima, California Quadrangle

FRESNO COUNTY ZONING AND LAND USE

FEDERAL POWER AVENAL, LLC



FIGURE 6.9-3B

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