

15 GROWTH-INDUCING AND CUMULATIVE IMPACTS

15.1 INTRODUCTION

This chapter discusses the potential for growth-inducing and cumulative impacts that could result from Pacific Gas and Electric Company's (PGandE) Delta Distribution Planning Area Capacity Increase Substation Project (project). The California Environmental Quality Act (CEQA) requires a discussion of whether the project will foster economic or population growth, either directly or indirectly, in the surrounding environment, including projects that could remove obstacles to growth. CEQA and California Public Utilities Commission Rule 17.1 also require a discussion of any cumulative effects when the project is added to other closely related past, present, and probable future projects. The project is proposed to increase electrical service reliability in the Delta 21 kilovolt (kV) Distribution Planning Area (DPA), and implementation of the project will not result in any significant or growth-inducing cumulative environmental impacts.

15.2 GROWTH-INDUCING IMPACTS

15.2.1 Significance Criteria

Consistent with the CEQA Guidelines, the following criteria are used to evaluate whether the project will result in potentially individual or cumulative growth-inducing impacts.

- Will the project, either directly or indirectly, foster economic or population growth, or remove obstacles to growth in the area?
- Will the project provide new employment?
- Will the project provide access to previously inaccessible areas or extend public services to previously unserved areas?
- Will the project burden existing community services?
- Will the project cause development elsewhere?

15.2.2 Economic or Population Growth

The Delta 21 kV DPA has significant projected load growth due to major residential and commercial developments that are in various planning, approval, or construction stages. The electric demand in the Delta 21 kV DPA rapidly increased from 285.6 megawatts (MW) in 1995 to 373.7 MW by 2000, an average of more than 17 MW per year. Although load growth has abated somewhat since 2000, total electric demand in the Delta 21 kV DPA is projected to exceed the total capacity of the DPA (449.3 MW) by 2010. A description of development projects in the Delta 21 kV DPA that are underway, approved, or planned, is discussed in Chapter 1: Project Description. Most of that growth is concentrated in the southeastern portion of the DPA, where loads are projected to exceed available capacity in 2007. As a result, PGandE forecasts that the ability of the electric system to safely and reliably serve the area will be exceeded in 2007 unless a new substation is built.

Therefore, the project is responding to economic and population growth and will not directly or indirectly foster growth or remove obstacles to economic or population growth in the area. The project is designed to remove the deficiency in the current system that is projected to occur in eastern Contra Costa County in 2007, and to accommodate existing and planned electrical load growth in the Delta 21 kV DPA. The project will accommodate projected demand in the service area by providing additional electric transmission capacity to a system where, based on projected growth information, the existing transmission capacity cannot meet anticipated needs. If these improvements are not implemented, deterioration of services and increased likelihood of system instability will result.

15.2.3 New Employment

The project will provide short-term construction employment but no permanent employment. Approximately 24 construction workers will be at the construction site during peak construction. PGandE will draw primarily from PGandE's labor pool in the San Francisco Bay Area, with some local, non-PGandE contract laborers. The limited, temporary nature of this employment will not result in long-term growth in this area.

15.2.4 Extended Access or Public Services

The project will not require extension of public services to unserved areas, as PGandE currently provides electric service to the project area. The project will require an access road for construction and operation, which will be maintained by PGandE and will not be accessible to the public.

15.2.5 Existing Community Services

The project will not burden community services. The substation will not require water, wastewater, or permanent solid waste services, and its demand for City- and County-provided services, such as road improvements, law enforcement, and fire protection, will be negligible (see Chapter 13: Population and Housing, Public Services, and Utilities and Service Systems).

15.2.6 New Development

The project will not promote new development, either in the Delta 21 kV DPA area or elsewhere, because it is a response to existing and planned development. The project will satisfy PGandE's statutory obligation to accommodate the demand that the development market and local governments have projected or planned. Established and locally supported patterns of development and growth carry with them a corresponding electrical demand that PGandE is obligated to anticipate and serve to avoid the consequences of electrical overload, as discussed in Chapter 1: Project Description.

15.3 CUMULATIVE IMPACTS

To determine the potential for cumulative impacts, the General Plans of the cities of Antioch and Brentwood were reviewed, and respective planning department staff was contacted to determine if approved or proposed projects will occur in the same timeframe and location as the project. City planning department staff continually reviews and updates the list of potential projects for which development applications have been submitted.

A list of current and probable projects near the substation project that could create cumulative effects is provided in Table 15-1 and depicted in Figure 15-1. As part of the construction planning for the project, PGandE will coordinate with the cities of Antioch and Brentwood on these and any other projects that will occur in the timeframe and in the vicinity of the project to address potential concerns about localized traffic on roads used in common by the projects.

This section discusses ongoing and future planned residential and commercial development within the immediate vicinity of the southeastern portion of PGandE's Delta 21 kV DPA. See Chapter 1: Project Description for a discussion of potential projects located beyond the immediate vicinity of the project site, which are not considered in this cumulative impact analysis because of the distance from the project site and the low likelihood of contributing to cumulative effects.

15.3.1 Significance Criteria

Consistent with CEQA Guidelines (Section 15130), a project has a significant cumulative impact if a change in the environment results from the incremental impacts of the project when added to other closely related past, present, and probable future projects. Cumulative impacts could result from individually minor, but collectively significant, projects taking place over a period of time.

15.3.2 Analysis of Cumulative Impacts

This section analyzes whether the project, when combined with other proposed projects in the area, will result in either short-term or long-term environmental impacts. Short-term impacts are those related primarily to project construction, and long-term impacts are those related primarily to permanent project features or operation of the project. In the Delta 21 kV DPA, short-term construction impacts could include increased traffic, air emissions, and noise. Short-term construction-related impacts are not typically considered significant under CEQA. Long-term impacts could include those related to visual and biological resources.

Table 15-1: Planned and Current Projects in the Vicinity of the Project

Project Name	Address/ Location	Proximity to Project (approx.)	Type of Development	Description	Size	Status¹	Anticipated Construction Schedule
Extension of Hillcrest Avenue	South of existing Hillcrest Avenue	East side of PGandE parcel	Roadway	Extending Prewett Ranch Road south to Balfour Road	2.1 miles	C	Unknown
Kaiser Medical Facility	East of Deer Valley Road	0.5 mile	Commercial	Mixed used medical facility	78 acres	U	To be completed by 2007
Brentwood Hills	St. Regis Avenue	0.7 mile	Residential	Homes	278 lots	U	92 percent complete
Brighton Station	Grant Street	1 mile	Residential	Homes	199 homes	U	Unknown
Sand Creek Active Adult Community	Empire Mine Road	1.5 miles	Residential/ Recreational	Homes, golf course, activity centers, parks, trails	1,500 units	C	Unknown
Mokelumne Trail	Mokelumne East Bay Municipal Utility District right-of-way	1 mile	Extension of Class I Bikeway	Extend bikeway from Hillcrest Avenue to Brentwood, crossing Highway 4 Bypass	1.5 miles	P	Unknown

Sources: City of Antioch Planning Department, 2004; City of Antioch General Plan, 2003; City of Brentwood Planning Department, 2004; City of Brentwood

¹Status:

- C A project application is anticipated
- U The project is under construction
- P The project is pending in the formal application review process

Figure 15-1: Planned Projects

[INSERT B&W 8 ½ x11 FIGURE]

15.3.2.1 Aesthetics

Construction and operation of the project will not result in any significant impacts to visual resources with implementation of the mitigation measures listed in Chapter 4: Aesthetics. The broader surrounding area, however, is undergoing a rapid and fundamental change from open space to residential and commercial development, which will likely dramatically change the visual character of the area.

15.3.2.2 Air Quality

Air emissions will result from construction of the substation and the access road. As discussed in Chapter 5: Air Quality, the pollutant of concern during construction of a project is fugitive dust (PM₁₀). The worst-case scenario for total project emissions (including PM₁₀, reactive organic gas, carbon monoxide, nitrogen oxides, and sulfur dioxide) will be less than significant with the implementation of Bay Area Air Quality Management District CEQA Guidelines. The contributions for substation construction are 1 percent or less for all pollutant categories, which is very small when compared to the total emissions in Contra Costa County.

There are no long-term air emissions associated with the operation of the substation. Since the substation is unmanned, there will be no vehicular emissions associated with regular commuting to and from the substation. Therefore, no contribution to cumulative impacts will result.

15.3.2.3 Biological Resources

Field studies will be conducted prior to construction to confirm whether special-status species are present at or near the project site. Should special-status species be identified, the implementation of the mitigation measures identified in Chapter 6: Biological Resources will result in less than significant impacts.

Construction and operation of the substation will not contribute to a significant cumulative impact, as PGandE proposes to purchase habitat at a 3:1 ratio for the San Joaquin kit fox. Also, because the habitat that will be purchased for the San Joaquin kit fox is also suitable California red-legged frog and California tiger salamander upland habitat, potential loss of habitat for these species will also be reduced to less than significant levels. The site is currently disturbed (agricultural use) and there are no other scheduled developments immediately adjacent to it. As noted in Table 15-1, there are other planned and current projects in the vicinity of the site. In addition, as discussed in Chapter 1: Project Description, the substation is necessary due to current and planned growth in the broader region. Given that PGandE will purchase habitat at a 3:1 ratio and implement other mitigation measures included in Section 6.6 in Chapter 6: Biological Resources, the project will not contribute appreciably to any cumulative loss of species' habitat.

15.3.2.4 Hydrology and Water Quality

The project will not adversely impact hydrology because there will be minimal use of groundwater for irrigation and no discharges to surface water. All future projects considered in this cumulative impacts assessment are required to comply with National Pollutant Discharge

Elimination System regulations governing stormwater discharges, which will require the use of best management practices (BMPs) during construction and the implementation of stormwater controls during operation. These BMPs will control and reduce contaminants in stormwater runoff to levels acceptable to the Regional Water Quality Control Board.

With the implementation of the mitigation measures discussed in Chapter 10: Hydrology and Water Quality, the construction and operation of the substation will not adversely impact hydrology or water quality in the project area or contribute to a significant cumulative impact.

15.3.2.5 Noise

As discussed in Chapter 12: Noise, construction and operation of the project will not result in any potentially significant noise impacts. Temporary noise will likely affect nearby residents during construction of the substation and access road. The construction noise from earthmoving equipment, trucks, and cranes could occasionally be audible at 0.4 mile from the site, but with the implementation of the mitigation measures, these noise levels constitute a less than significant impact. The nearest residence to the substation site is 0.4 mile away, and no planned development in closer proximity has been identified as either preceding or coinciding with the construction of the substation. Impacts from noise levels during operation of the substation will be less than significant.

As noted in Chapter 11: Land Use and Planning, Recreation, and Agricultural Resources, the plan for the Sand Creek Focus Area is on hold indefinitely and the Antioch City Council is likely to entertain development within the area only if there is little or no impact on schools or traffic. Should housing and other developments in the area proceed and Hillcrest Avenue be extended past the substation site, there will be an incremental increase in noise levels in the area. However, the project will result in a less than significant noise impact during construction and operations, and will, therefore, not contribute to a significant cumulative impact.

15.3.2.6 Transportation and Traffic

Construction and operation of the project will not result in any potentially significant transportation or traffic impacts. Use of local roads for transport of construction equipment and construction personnel will be a temporary impact during construction and will be mitigated through the traffic control and trip-reduction measures discussed in Chapter 14: Transportation and Traffic.

In addition, the development of a substation is consistent with the City of Antioch Resolution No. 2004/94, which specifies that a project in the Sand Creek Focus Area shall not generate significant traffic demand at peak hours on regional traffic routes.

Taken into consideration with other potential development in the project area, the incremental contribution to traffic from construction and operation of the substation will not constitute a significant cumulative impact.

15.4 REFERENCES

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