F. Other CEQA Considerations

F.1 Growth Inducing Effects

The California Environmental Quality Act (CEQA) requires a discussion of the ways in which a proposed project could be an inducement to growth. The CEQA Guidelines [Section 15126.2 (d)] identify a project to be growth-inducing if it fosters economic or population growth or the construction of additional housing, either directly or indirectly, in the surrounding environment. New employees hired for proposed commercial and industrial development projects and population growth resulting from residential development projects represent direct forms of growth. Other examples of projects that are growth-inducing are the expansion of urban services into a previously unserved or under-served area, the creation or extension of transportation links, or the removal of major obstacles to growth. It is important to note that these direct forms of growth have secondary effects of expanding the size of local markets and attracting additional economic activity to the area.

Typically, the growth-inducing potential of a project would be considered significant if it fosters growth or a concentration of population above what is assumed in local and regional land use plans, or in projections made by regional planning authorities. Significant growth impacts could also occur if the project provides infrastructure or service capacity to accommodate growth levels beyond those permitted by local or regional plans and policies.

F.1.1 Growth Caused by Direct and Indirect Employment

As described in Section D.13, Socioeconomics, the construction and operation of the project itself would not affect the employment patterns in the area. The overhead segment would require an estimated total of about 100 to 200 crew members over the 13-month period. For the underground segment, a total of approximately 150 to 250 crew members would be required. It is anticipated that the majority of the construction personnel would come from the existing labor pool of the City and County of San Francisco (CCSF), northern San Mateo County, and the Bay Area. Project operation requires minimal staffing and would not create new jobs. Operation would be handled by current PG&E employees.

Some of the construction personnel may commute from outside of the project area and stay at existing local hotels during construction. There is an adequate supply of hotels and inns in the project area that could be utilized by the out-of-town personnel. Therefore, no growth in residential services would occur. Over the long term, the project would have no impact on population growth, as no long-term growth employment would result from project operations.

F.1.2 Growth Related to Provision of Additional Electric Power

The CCSF and northern San Mateo County are part of one of the largest and most dynamic metropolitan areas in the country. The area's employment and population have grown and are expected to continue to grow at a substantial rate. Between 1990 and 2000, Bay Area population is estimated to have grown by more than 900,000 people to a nine county total of approximately 6.9 million. At the same time, regional employment grew from 3.2 million to approximately 3.7 million, matching the 15 percent increase in population growth.

Because the San Francisco Peninsula is geographically isolated from the rest of the State except to the south, there are no transmission lines entering the CCSF from any direction except the south. There is limited power generation in the CCSF and northern San Mateo County areas. PG&E is required to serve existing and anticipated electricity demand, and it cannot assume that the necessary additional load-serving capacity will be added in a timely manner by third party generators. Also, as described in Section A, it is possible that the generation capacity currently available could decrease with the closure of Hunters Point Power Plant Unit 4. At the same time, load growth is expected to continue (albeit likely at a rate lower than that expected when the project was approved by the ISO).

The demand growth projected by PG&E and the ISO, with the anticipated employment, population, and housing growth, is the reason PG&E has proposed the Jefferson-Martin Project. As shown in Table F-1 and Figures F-1a and F-1b (cumulative projects scenario), there are several large development projects in the agency review process. Many other large projects are already under construction or have recently been completed in the area. The Proposed Project did not cause this growth to occur; rather, PG&E has proposed its construction because of the economic success of the Bay Area. PG&E is responding to growth that is occurring and planned and is increasing the reliability of the existing system, based on city and county planning documents.

F.2 Significant Irreversible Changes

CEQA Guidelines (Section 15126.2(c)) require that an EIR identify significant irreversible environmental changes that would be caused by the Proposed Project. These changes include, for example, uses of nonrenewable resources, or provision of access to previously inaccessible areas. These changes can also include project accidents that could change the environment in the long-term.

The transmission line construction phase would require an irretrievable commitment of natural resources from direct consumption of fossil fuels, construction materials, the manufacture of new equipment that largely cannot be recycled at the end of the project's useful lifetime, and energy required for the production of materials. Furthermore, construction of the transmission line would necessitate a small amount of permanent vegetation and habitat loss, as evaluated in Section D.4 (Biological Resources). Assuming implementation of the mitigation measures recommended in this EIR, permanent loss of biological resources would be confined to project small areas at each structure location.

During the project's operational phase, the transmission line would allow for the transport of additional electrical power generated from nonrenewable resources (e.g., natural gas, large hydroelectric, coal), as well as an increasing proportion of renewable resources (e.g., wind, solar, small hydroelectric). While the construction of the Proposed Project, a new transmission line, does commit the future use of some amounts of nonrenewable resources, the Proposed Project is indifferent to whether the energy it transports is nonrenewable or renewable.

The construction of larger transmission line towers in open space in the I-280 corridor would also create a permanent visual impact, as demonstrated by the presence of the existing 60 kV lines that were installed over 40 years ago. As described in Section D.3, the taller and larger towers required for the Proposed Project's 60/230 kV transmission line would be more visible from the I-280 freeway, adjacent residences, and recreational facilities.

Figure F-1a. Cumulative Project Locations, Southern Segment *For security reasons this figure is not included in the online version of the report.*

Figure F-1b. Cumulative Project Locations, Northern Segment *For security reasons this figure is not included in the online version of the report.*

F.3 Cumulative Scenario

As required by CEQA (Section 15130 et seq. of the CEQA Guidelines), this EIR includes an analysis of "cumulative impacts." A cumulative scenario has been developed to identify projects that are reasonably foreseeable and that would be constructed or operated during the life of the project. Table F-1 lists the projects comprising the cumulative scenario. Cumulative impact analysis is presented for each issue in Section F.4.

The projects that comprise the cumulative impact scenario do not include existing projects that are under construction now, completed, or in operation. Existing projects are included as part of the environmental setting for individual issue areas and are analyzed with respect to each issue area in Section D. The projects considered to be part of the cumulative scenario are presented in Table F-1, showing the approximate geographic location of each project. Figure F-1 is a two-page map showing the location of each of the projects listed in Table F-1.

The projects in the cumulative scenario include a range of project types from small single-family housing developments and road improvements to large commercial developments and highway projects. Proposed and pending projects are presented that would have at least some portion of their area within approximately 300 feet (on either side) of the centerline of the proposed transmission line route or in the vicinity of alternative routes.

Site			Project		
No.	Project	Project Type	Description/Size	Project Location	Permitting Status/Schedule
Uninc	orporated San Mateo C	County			
1	Highway 92 Widening	Roadway widening	Widen road to 6 lanes	Highway 92, for 4.7 miles east from I-280 crossing, Caltrans District 4	Currently on hold
2	Highway 92 Slow Vehicle Lane	Roadway construction	Slow vehicle lane safety	Highway 92, for 2.1 miles west of I-280, Caltrans District 4	Planned for construction in late 2004-2005
3	Major Subdivision	Residential development	25 lots for SFD development	Ascension Drive and Bel Aire Road in the San Mateo Highlands, San Mateo County	Application submitted and EIR process is just beginning
4	Major Subdivision	Residential development	26 lots for SFD development and 40 units for condominium development	Polhemus Road in the San Mateo Highlands, San Mateo County	Application submitted but rezoning, General Plan amendment and grading permit needed (project is currently delayed)
5	Old State Hiking and Riding Trail	Trail construction	Creating public hiking and riding trail on SFPUC Watershed service road and Old State Hiking and Riding Trail along Skyline Boulevard	From Crystal Springs Dam south in Watershed lands, crossing Skyline Boulevard and following the Old State Trail to Highway 92, San Mateo County	Plans being finalized

Site No.	Project	Project Type	Project Description/Size	Project Location	Permitting Status/Schedule
6	Crystal Springs Dam/Cañada Road Bridge	Bridge replacement	Build a new Cañada Road Bridge	Across the Crystal Springs Dam, San Mateo County	In planning stage – County is working with SFPUC concerning environmental issues
7	El Camino Real Rehabilitation	Roadway improvements	Rehabilitate roadway signals and lighting	El Camino Real in Burlingame, Millbrae, San Bruno, and South San Francisco, Caltrans District 4	Planned for next year or so
City o	f Burlingame				
8	Skyline Terrace Subdivision	Residential redevelopment	Remodel and replace existing residential units	Westside of Skyline Boulevard along Skyline Drive and Loma Vista Drive, Burlingame	On-going upgrades to older neighborhood
9	Private house development	Residential development	Building house on vacant lot and need direct access to Skyline Boulevard	West of Skyline Boulevard, Burlingame	Under residential review by San Mateo County
10	Burlingame Hills	Roadway improvements	Road reconstruction and resurfacing	Summit Drive and Tiptoe Lane in Burlingame Hills, San Mateo County	Currently planned for upcoming year
	f San Bruno				
11	Church of the Highlands 103-Car Parking Lot	Remote parking lot	103-car parking lot (with use allowed for Trailhead parking)	Northwest corner of San Bruno Avenue at Glenview Drive (at the proposed transi- tion station site), San Bruno	Currently receiving private bids; construction to begin in April 2003
12	Townhouses	Planned development	Construction of six townhouses	Northeast corner of San Bruno Avenue at Glenview Drive, San Bruno	In discussion with developer, who has just purchased the site
13	Skyline Boulevard Widening – Sneath Lane south to I-280 Redevelopment "Report to Council, Chapter II, Circulation and Landscaping Improvements, May 1999	Roadway improvement	Widen Skyline Bou- levard to 2 lanes in each direction to match other segments	Skyline Boulevard between Sneath Lane and I-280, San Bruno	Currently under discussion with General Plan Update Committee; consistent with San Bruno Redevelopment Plan
14	Sneath Lane Repaving	Roadway improvement	Pavement overlay	Skyline Boulevard to El Camino Real, San Bruno	Construction in 2003 (in two segments)
15	Caltrain Grade Separation Project	Fixed rail transit improvement	Grade separation for four tracks (and "baby bullet" capacity)	San Bruno Avenue at Huntington Avenue, San Bruno	Community meetings currently being held by Joint Powers Board on proposal
16	The Crossing	Mixed-use, transit-oriented development	300 multi-family residential units, 200 senior housing units, offices, hotel	Northwest corner of I-380 and El Camino Real, San Bruno	Multi-family units under construction; senior units approved with bid proposals in June 2003

Site No.	Project	Project Type	Project Description/Size	Project Location	Permitting Status/Schedule
17	Expansion of Tanforan Park Shopping Center	Regional shopping center	Remodeling and addition of 60,000 square-feet	Northwest corner of I-380 and El Camino Real (also Sneath Lane and Huntington Avenue), San Bruno	Permits to first phase to be issued in April 2003; additional parking garage and 10-12 multiplex cinema to be issued in October 2003
City o	f South San Francisco				
18	El Dorado Project	Roadway improvements	Road reconstruction and resurfacing	El Dorado Road between Alta Vista and Country Club Park Roads, San Mateo County (within the boundary of South San Francisco)	Currently planned for upcoming year
19	Linear Park in BART ROW	Park construction	Two-mile linear park including 30 acres of paved paths, bikeways, and open turf	Along BART ROW between Noor Avenue and South San Francisco BART Station, South San Francisco	Planning and building is estimated to take five to eight years
Town	of Colma				
20	Colma Police Facility	CIP Project	Renovation	El Camino Real and Serramonte Boulevard, Colma	Scheduled to begin 2003
	f Daly City				
21	Escuela Drive	Residential Development	Construction of four units	12-26 Escuela Drive, Daly City	Design review approved on 11/4/02, under plan check review
22	Lausanne Subdivision	Residential Development	10 units on 1.06 acres	Lausanne, north of Edgewood Court, Daly City	Design review pending; grading plan submitted
23	Serramonte Condos and Hotel	Condos/Hotel Development	200 units on 6.3 acres	Serramonte Boulevard, Daly City	Application under review, EIR process to be initiated
24	George Smith/Tealdi Subdivision	Residential development	Three-lot subdivision	Northwest corner of Castle Street and Hillside Boulevard, Daly City	Awaiting final map and building permit approval
25	Best Western Hotel	Building construction	Demolish existing motel and construction new motel	3233 Geneva Avenue between Bayshore and Talbert Street, Daly City	Design review granted 2/14/03; awaiting building permit application
26	Self Storage	Building construction	Construction of 127,800 s.f. self-storage building	Carter Street, Daly City	Building permit application submitted and is under review
27	KFC/Taco Bell Drive-Thru Restaurant	Building construction	Demolish and construct new 2,574 s.f. building	2815 Geneva Avenue at Acacia Street, Daly City	Plans submitted for building permits
28	Velasco/Velasco	Residential development	18 single-family detached units	Velasco and Velasco Streets, Daly City	Redevelopment agency review and subdivision application to be submitted

Site	Destant	Destruct Torres	Project (2)	But all and	D
No. 29	Project Carter Street Hillside Residential Development	Residential development	160 to 182 multi- family rental/sale units on 19 acres	Project Location West side of Carter Street, south of Saddleback Condominiums, Daly City	Preparation of DEIR underway
30	Bayshore Community Center	Building construction	Construction of new community center and library	450 Martin Street between Carter Street and Rio Verde, Daly City	Design plans underway
City o	f Brisbane				
31	Northeast Ridge Development	Residential construction	37 single-family homes under construction; an additional 60 single-family homes and townhouses approved	Northeast ridge of San Bruno Mountain off of Silverspot and Mission Blue Drives, Brisbane	Some under construction, others approved but not permitted yet
32	One Quarry Road	Residential construction	183 single-family and townhouse units	Guadalupe Valley quarry site, Brisbane	Under environmental review
33	Tunnel Avenue Bridge	Overpass construction	Reconstruction of the existing bridge	Bayshore Boulevard and Tunnel Avenue, Brisbane	Working drawings in preparation
34	Muni Light Rail	Transit construction	3 rd Street extension to Caltrain intermodal	Bayshore Boulevard/ Tunnel Avenue, Brisbane	Under environmental review
35	Caltrain Station Improvements	Transit upgrade	Station improvements, including a new track, overpass, and utilities	Tunnel Avenue near Visitacion (Station located in CCSF), Brisbane	Track under construction, other improvements in working drawings
Midpe	ninsula Regional Oper	Space District			
36	Pulgas Ridge Open Space Preserved Public Access Improvement Project	Staging area and trailway construction	Construct a parking lot and 4 miles of multi-use trails within the preserve	Pulgas Ridge Open Space Preserve, east of I-280, parking/stag- ing area off Edmonds Road with trails to the north within the park, Midpeninsula Regional Open Space District	In planning stage with construction scheduled for next year and within timeframe of federal grant through the Land and Water Conservation Fund (expires June 2005)
	rancisco Public Utilitie	•			
37	Lower Crystal Springs Dam Improvements	Dam improvements	Raise existing para- pet wall and install four 8-foot high auto- mated gates in spill- way structure	Lower Crystal Springs Dam, SFPUC	In final design phase and envi- ronmental review is underway (involves a joint agreement with San Mateo County con- cerning the bridge replace- ment project; see #6 above)
38	Crystal Springs Bypass Tunnel	Tunnel con- struction below the landslide plane	4,200 linear feet of 84-inch tunnel	Parallel to the exist- ing pipeline from the existing Crystal Springs Bypass Tunnel to Crystal Springs Road	Project design will begin in 2003-2004 fiscal year and project construction will begin in 2004-2005 fiscal year.

Site No.	Project	Project Type	Project Description/Size	Project Location	Permitting Status/Schedule
39	Adit Leak Repairs	Repair of existing structures	Repair of leaks at Lower Crystal Springs Outlet Tower No. 1	Lower Crystal Springs Reservoir, SFPUC	In planning phase
40	Pulgas Reservoir Rehabilitation	Rehabilitation of existing structures	Roof replacement and other general structural rehabili- tation and construc- tion of new physical and/or mechanical mixing and chemical feed improvements	Pulgas Balancing Reservoir, SFPUC	In planning phase
41	Harry Tracy Water Treatment Plant (HWTP) Short- (Phases A and B) and Long-Term Improvements		Phase A: Improve the existing filtration facilities. Phase B: Improve the coagula- tion/flocculation facilities.	Harry Tracy Water Treatment Plant (HWTP) near the end of Crystal Springs Road in San Bruno, SFPUC	Project design for Phase A will begin in the last quarter of the 2003-2004 fiscal year. Project design for Phase B will begin first quarter of the 2003-2004 fiscal year and construction will begin in the 2003-2004 fiscal year. Project construction will be staged to maintain plant operations and minimize disruptions
42	Crystal Springs Pump Station and Crystal Springs-San Andreas Pipeline Capacity	Facility upgrades	Installation of new pumps, standby generator, electrical upgrade, and new water pipelines.	Crystal Springs Reservoir Outlet Facilities, Crystal Springs Pump Station, Crystal Springs Aqueduct, and Outlet facilities from San Andreas Reservoir to the HTWTP, SFPUC	In planning phase
43	San Andreas #3 Pipeline Installation	Pipeline construction	About 5 miles of new pipeline.	Extension of pipeline from San Pedro valve lot on the Peninsula to Sunset Reservoir in CCSF, SFPUC	In planning phase. Project design will begin in the last quarter of the 2004-2005 fiscal year and construction will begin in the 2006-2007 fiscal year.

F.4 Cumulative Impact Analysis

This section presents the analysis of the potential for the Proposed Project to create cumulative effects when the impacts of projects listed in Table F-1 are considered together with the impacts of the Proposed Project. Sections are presented in the same order in which they appear in Section D.

F.4.1 Land Use

The potential for the Proposed Project to result in cumulative land use impacts would be limited to disruptions during construction activities. This would include the generation of noise, dust, and odors and, in some cases, the potential for temporarily disrupted access to residential and/or commercial properties. The Proposed Project could contribute to cumulative construction impacts on residential receptors in the vicinity of the approved Skyline Terrace Subdivision (Project 8) project in Burlingame.

Some residents in proximity to the Proposed Project and this residential redevelopment project could be exposed to longer periods of construction noise, dust, or odors as a result of these projects. Similarly, the potential construction of townhouses across from the proposed transition site could create cumulative construction impacts on nearby residential receptors, though there is sufficient buffer between the nearest residences and both potential construction sites that the impacts would not be significant at this location.

The Proposed Project could also result in cumulative construction noise and dust impacts in conjunction with construction of a proposed linear park within the BART right-of-way (Project 19), expansion of the Tanforan Shopping Center (Project 17), and construction of The Crossing residential project (Project 16). Construction of these projects could overlap with the Proposed Project, which could incrementally increase noise levels and dust generation. Alternatively, the duration of impacts at residences along the alignment could be extended if construction of the projects did not overlap.

Similar types of cumulative impacts could occur with implementation of several of the alternatives. The following approved or pending projects listed in Table F-1 could interact with construction of a project alternative to create cumulative land use impacts on residents and/or businesses related to noise and dust generation and/or disrupted access: El Camino Real Rehabilitation (Project 7) and PG&E Route Option 1B or Modified Existing 230 kV Underground ROW; Sneath Lane Repaving (Project 14) and the Cherry Drive Alternative or the Sneath Lane Transition Station with Sneath Lane Underground Route; Caltrain Grade Separation Project (Project 15) and the Modified Existing 230 kV Underground ROW; and Colma Police Facility (Project 20) and the Junipero Serra Boulevard Alternative.

Mitigation measures that would minimize construction-related impacts caused by the Proposed Project would minimize the cumulative effects of these impacts. Because each project individually would need to avoid disruption of neighboring land uses during construction, the effects of the Proposed Project would be adverse, but not cumulatively considerable.

F.4.2 Visual Resources

Cumulative impacts to visual resources would occur where project facilities occupy the same field of view as other built facilities or impacted landscapes. It is also possible that a cumulative impact could occur if a viewer's perception is that the general visual quality of an area is diminished by the proliferation of visible structures (or construction effects such as disturbed vegetation), even if the new structures are not within the same field of view as existing structures. The significance of the cumulative impact would depend on the degree to which (1) the viewshed is altered; (2) visual access to scenic resources is impaired; (3) scenic character is diminished; or (4) the project's visual contrast is increased.

To the extent that the Proposed Project during construction would be visible within the same field of view as one or more of the cumulative projects, which are also under construction, adverse visual impacts would occur with the visible presence of construction equipment, vehicles, materials, and personnel. However, these visual impacts would be temporary and would not create significant cumulative effects. No additional mitigation measures are recommended beyond V-1a (reduce visibility of construction activities and equipment).

A portion of the southern segment of the Proposed Project near Highway 92 would be visible within the same field of view as the Highway 92 projects (Projects 1 and 2). However, these road improvement projects would not change the character of the existing landscape. The Proposed Project in conjunction

with either or both of these projects would not result in visual impacts noticeably different than those that would occur with the Proposed Project alone. Therefore, the Proposed Project would not result in cumulative visual impacts with Projects 1 and 2.

The Proposed Project would not be visible within the same field of view as the major subdivision projects along Polhemus Road (Projects 3 and 4). Also, these residential projects are consistent with other residential uses in the region and do not share the same or similar industrial character as the Proposed Project. Therefore, the Proposed Project would not result in cumulative visual impacts with Projects 3 and 4.

Although a portion of the Proposed Project (Towers 4/25 to 6/38) would be visible within the same field of view as the proposed Old State Hiking and Riding Trail (Project 5), the proposed trail would not contribute any noticeable built features to the landscape and would not alter the existing landscape character. Therefore, the Proposed Project would not result in cumulative visual impacts with Project 5.

A portion of the Proposed Project (Towers 6/36 to 7/39) would have very limited visibility within the same field of view as the projects in the vicinity of Crystal Springs Dam (Projects 6, 37, 38, 39, 41, 42). However, the dam and bridge project would not appreciably change the character of the existing landscape and would not share the same or similar industrial character as that of the Proposed Project. Therefore, the Proposed Project in conjunction with these cumulative projects would not result in a noticeable cumulative visual impact.

A portion of the Proposed Project (Towers 10/63 to 10/68) would be visible within the same field of view as the residential projects along Skyline Boulevard and Loma Vista Drive (Cumulative Projects 8 and 9). However, these residential projects are consistent with other residential uses in the project area and would not noticeably change the existing suburban landscape character. Also, Projects 3 and 4 do not share the same or similar industrial character as the Proposed Project. Therefore, the Proposed Project would not result in cumulative visual impacts in conjunction with Cumulative Projects 8 and 9.

Although a portion of the Proposed Project (Towers 10/63 to 10/68) could be visible within the same field of view as the Burlingame Hills roadway improvement project (Project 10), the road project would not noticeably change the existing landscape character. Also, the roadway project would not exhibit the same or similar industrial character as that of the Proposed Project. As a result, the Proposed Project in conjunction with Project 10 would not result in visual impacts noticeably different than those that would occur with the Proposed Project alone. Therefore, the Proposed Project would not result in cumulative visual impacts with Project 10.

The portion of the Proposed Project west of Skyline Boulevard near San Bruno Avenue, as well as the transition station, would have limited visibility within the same field of view as the Church of the Highlands parking lot project (Project 11). However, the parking lot project would not noticeably change the existing landscape character and it would not exhibit the same or similar industrial character as that of the Proposed Project. As a result, the Proposed Project in conjunction with Project 11 would not result in a perceived increase in industrialization of the existing landscape. To the extent that the resulting cumulative visual impact is visible, it would be adverse but not significant.

The Proposed Project's transition station would be visible within the same field of view as the proposed townhouses on Glenview Drive (Project 12). However, the townhouse project would be consistent with the suburban character of the area around this location and would not diminish the visual quality of the

existing landscape (the parcel is presently occupied by an abandoned gas station). Also, the townhouse project would not exhibit the same or similar industrial character as that of the Proposed Project though it would contribute to the ongoing urbanization of the area. While the Proposed Project in conjunction with Project 12 would not result in a perceived increase in industrialization of the existing landscape, the two projects would cause a cumulative visual impact that would be adverse but not significant.

The northernmost overhead segment of the Proposed Project west of Skyline Boulevard would be visible within the same field of view as the proposed widening of Skyline Boulevard (Project 13). However, the road-widening project would not substantially change the visual quality or character of the existing landscape. Also, the road-widening project would not exhibit the same or similar industrial character as that of the Proposed Project though it would contribute to the ongoing urbanization of the area. While the Proposed Project in conjunction with Project 13 would not result in a perceived increase in industrialization of the existing landscape, the two projects would cause a cumulative visual impact that would be adverse but not significant.

For the underground portion of the Proposed Project, during project operation the project would not be visible and no cumulative visual impacts would occur with any of the cumulative projects in the vicinity of the underground route. Therefore, the underground portion of the Proposed Project would not cause cumulative visual impacts with any of the planned projects in the vicinity.

F.4.3 Biological Resources

Potentially significant impacts to sensitive vegetation and wetlands may result from residential, commercial, industrial development, transit, transportation, and recreation improvement projects in the region. Impacts of these projects may include vegetation removal, altered hydrology, erosion/sedimentation, and spread of noxious plant species. Mitigation of each project's individual effects through avoidance, minimization, and on- and off-site compensatory habitat should reduce most cumulative effects of the Proposed Project to less than significant levels. However, this EIR cannot require mitigation for these other projects.

Several housing development and highway infrastructure improvement/expansion projects are proposed or planned within the vicinity of the project. While most of these projects would be in developed urban areas, some (e.g., SFPUC pipeline projects) would occur within the Watershed Lands and would contribute to an overall loss of vegetation and wetlands. Although the Proposed Project would contribute to the cumulative loss of biological resources in the vicinity, implementation of mitigation measures designed to minimize project effects and restore affected areas to pre-existing conditions would result in less than significant cumulative impacts to vegetation and wetlands.

Cumulative effects to wildlife are those that result from the incremental impacts of an action added to other past, present, and reasonably foreseeable future actions, regardless of who is responsible for such actions. Cumulative effects to wildlife can result from individually minor but collectively significant actions taking place over a period of time. Future project activities that would potentially affect wildlife species in the Proposed Project area, especially the southern segment, include, but are not limited to, residential, commercial, industrial development, transit, transportation, and recreation improvement projects in the region, such as those listed in Table F-1.

As described above for vegetation and wetlands, impacts of these projects may include vegetation removal, altered hydrology, erosion/sedimentation, and spread of noxious plant species which, in turn, may affect habitat for special status wildlife species. In addition, construction of the Proposed Project may indirectly and temporarily displace wildlife in the vicinity due to noise, dust, human disturbance,

and other related disturbances. Project-related impacts to serpentine grasslands may affect special status plants and the animal species that depend on this habitat such as the Bay checkerspot butterfly. The proposed construction of the project may also affect other special status wildlife such as California red-legged frog, San Francisco giant garter snake, and special status raptors that nest in the vicinity of the project. Section D.4 provides a more detailed description of the effects of the Proposed Project on biological resources.

The Proposed Project would primarily result in temporary impacts to wildlife habitat. The temporary removal of wildlife habitat within the project corridor and at other projects that permanently and temporarily remove wildlife habitat in the vicinity, creates a cumulative effect on wildlife habitat. However, the temporary loss of wildlife habitat would not result in a significant cumulative impact to wildlife with the implementation of mitigation measures designed to minimize effects to wildlife species, to restore affected wildlife habitats to pre-existing conditions, and to compensate for the small amount of habitat permanently affected.

F.4.4 Cultural Resources

Proposed construction of the Jefferson-Martin transmission line could contribute to the potential for loss of significant cultural resources, especially when viewed in context of the many other development projects occurring in San Mateo County. Section D.5 provides a more detailed description of the effects of the Proposed Project on cultural resources. However, with proper environmental planning and appropriate mitigation, the project is expected to successfully preserve significant cultural resources, and can provide opportunities for increasing our understanding of past environmental conditions and culture history. With the exception of actions completed under statutory and categorical exemptions, specific project actions in San Mateo County would come under either CEQA or NEPA review (or both), which requires assessment and mitigation of potential impacts to cultural resources. Therefore, the potential for cumulative loss of significant resources would be expected to be low. Specific archival research and field investigations along the proposed transmission line route and alternatives has provided data as to where significant cultural resource sites are and would likely be located, and these areas will be avoided by construction when feasible. In the event the Proposed Project or any other nearby project cannot avoid a resource, implementation of appropriate mitigation would reduce the impact to less than significant levels, and data gathered during the mitigation process would be used to augment the understanding of area history and prehistory. Cumulative impacts on cultural resources are not expected to be significant.

F.4.5 Geology, Minerals, and Paleontology

Potential cumulative geologic impacts (considering all proposed and in-progress development in the project area) consist of loss of unique geologic features or known mineral, energy, and/or paleontological resources, substantial alteration of the topography, or triggering or acceleration of slope failures by the Proposed Project. Seismic impacts (groundshaking, coseismic ground failure, or fault rupture) comprise the impact of the geologic environment on the project and are not cumulative. Construction of the Proposed Project would contribute only a negligible increase to the potential cumulative geologic impacts. Section D.6 provides a more detailed description of the effects of the Proposed Project on geologic resources. Because other identified projects that are not subject to ministerial exemption would come under CEQA or NEPA review (or both), cumulative impacts on the geology, soils, and paleontologic resources of the area, brought on by other planned or under-construction projects in the area, would be

negligible. Projects approved without formal CEQA review would be expected to have impacts that are less than significant.

F.4.6 Water Resources and Hydrology

The cumulative projects identified would be located within or near the heavily urbanized areas of San Mateo County. The types of impacts that will occur are mostly related to construction, which will generally require stormwater pollution prevention plans to mitigate impacts. The impact of increased runoff through construction of impervious areas will be fairly pronounced in the cumulative sense, particularly since several of the projects are large housing development tracts. The Proposed Project's contribution to this cumulative impact is minimal. The incremental impact of the Proposed Project on water resources is minimal. Section D.6 provides a more detailed description of the effects of the Proposed Project on water resources and hydrology.

Impact F-1: Multiple Construction Projects Near the Proposed Project Could Create Cumulative Impacts on Water Quality

There many unrelated projects listed in Table F-1 that have a potential to impact the stream and surface water environment near the Jefferson-Martin Transmission Line alignment. Coordination between the Proposed Project and four of these projects may be advised to help reduce cumulative construction-related stormwater impacts (Projects 11, 12, 19, and 36). Project 11, Church of the Highlands 103 Car Parking Lot, is very close to the proposed transition station at San Bruno Avenue. Project 12, Townhomes, is also very close to the proposed transition station at San Bruno Avenue. A coordinated effort to reduce storm water pollution from onsite runoff is advised in the event project construction occurs simultaneously. Project 19, Linear Park in BART ROW, coincides with the underground portion of the proposed transmission main alignment along the BART ROW. These two projects will have five watercourse crossings in this area, four of which are on Colma Creek. Project 36, Pulgas Ridge Open Space Preserved Public Access Improvement Project, will be built very close to the transmission line route, south of the Jefferson Substation. A coordinated effort is advised to avoid a potentially significant (Class II) cumulative impact; Mitigation Measure F-1a is recommended.

Mitigation Measure for Impact F-1

F-1a Cumulative Impacts: Water Quality During Construction. PG&E shall coordinate with developers of concurrent construction projects within the Proposed Project ROW (or alternative ROW, if an alternative is approved) to ensure that runoff from adjacent construction areas is minimized. Documentation of consultation and coordination shall be submitted to the CPUC at least 60 days prior to the start of construction.

With implementation of the APMs and mitigation measures applicable to Hydrology and Water Quality in this EIR and Mitigation Measure F-1a above, effects of the Proposed Project would not be cumulatively considerable.

F.4.7 Public Health and Safety

Because electric and magnetic field (EMF) issues are not considered in this EIR under CEQA, no discussion of cumulative impacts for EMF is presented. Therefore, this section focuses on hazardous materials and contamination.

Any cleanup and disposal of contaminated soil and/or groundwater resulting from construction of the Proposed Project and from other projects would be a beneficial impact. Clean up of contaminated sites related to other projects could become an adverse impact when the combined volume of contaminated soil requiring treatment from the Proposed Project and other projects exceeds the capacity of the available treatment facilities.

Identifying the available capacity of treatment facilities that would be used by the Proposed Project at the time of project construction and determining the volume of contaminated material that would be handled by these facilities is difficult. Construction of the Proposed Project would be phased and would likely only coincide with a few of the cumulative projects in Table F-1. Additional approved and pending projects not listed in the cumulative scenario due to distance from the project could also impact the capacity of hazardous waste treatment facilities during construction of the Proposed Project.

Impact F-2: Disposal of Large Quantities of Contaminated Soil in the Project Area Could Stress the Capacity of Qualified Treatment Facilities

The combined volume of contaminated soil requiring treatment from cleanup of contaminated sites near the Proposed Project and at sites related other projects could exceed the capacity of the available treatment facilities. As illustrated in Tables D.8-1 through D.8-4, there are many sites with known soil and/or groundwater contamination near the proposed route with a potential to affect the project. Many of these sites are undergoing continued investigation or remediation. Offsite transport and treatment of contaminated soils from both the Proposed Project and approved and pending cumulative projects could result in a potentially significant (Class II) cumulative impact if the volume of contaminated soils exceeds treatment facility capacity at that time.

Mitigation Measure for Impact F-2

F-2a Cumulative Impacts: Disposal of Contaminated Soil During Construction. PG&E shall analyze the capacity of treatment facilities prior to the start of construction and shall submit a report on capacity to the CPUC at least 60 days before the start of construction. If capacity of qualified treatment facilities are impacted, PG&E shall utilize portable on-site treatment units, or in-situ treatment prior to construction to greatly reduce transport- and treatment-related cumulative impacts. Applicable technologies such as chemical stabilization and fixation, thermal combustion, vapor extraction, or bioremediation can be selected based on site conditions.

With implementation of the APMs and mitigation measures in this EIR and Mitigation Measure F-2a above, effects of the Proposed Project would not be cumulatively considerable.

F.4.8 Recreation

Cumulative recreation impacts could occur through (1) construction-related disturbances of the Proposed Project in combination with other construction activities along the ROW resulting in impeded recreation access or disruption to recreational uses; or (2) construction and operation of the Proposed Project precluding future recreational uses, especially along the overhead portions.

Table F-2 lists the proposed and planned recreation resources and facilities that potentially could be impacted due to construction or operation of the Proposed Project and describes potential cumulative impacts.

Recreational Resource Potential Impacts and Applicable Mitigation Measures					
	230 kV / 60 kV Overhead Transmission Line				
Pulgas Ridge Open Space Preserve Public Access Improvement Project (Project 36)	Impacts would be largely the same as those discussed for the Pulgas Ridge Open Space Preserve in Section D.9 (Recreation). Impacts would be exacerbated by construction associated with the Public Access Improvement Project, but with the implementation of the mitigation measures, impacts would be potentially significant (Class II), but could be reduced to less than significant levels.				
Old State Hiking and Riding Trail (Project 5)	The Old State Hiking and Riding Trail is in the general vicinity of the San Mateo Creek Trail and would be impacted similarly, as described in Section D.9 (Recreation). With the addition of APM 5.7 to the other APMs listed for San Mateo Creek Trail in -Section D.9 and implementation of the mitigation measures described for San Mateo Creek Trail, impacts would be potentially significant (Class II), but could be reduced to less than significant levels.				
Crystal Springs Dam/ Cañada Road Bridge (Projects 6 and 37)	Impacts to Crystal Springs Dam/Cañada Road Bridge would be similar in nature to those described in Section D.9 (Recreation) for Crystal Springs Trail and Bikeway. Although impacts could be exacerbated by improvements to the dam and bridge, the Applicant is coordinating with SFPUC to ensure that cumulative environmental impacts are minimized. Impacts would be potentially significant (Class II), but with implementation of the mitigation measures described for Crystal Springs Trail and Bikeway in Section D.9, impacts would be reduced to less than significant levels.				
Sweeney Ridge Connector Trail/San Andreas Trail Extension [to be completed 2003]	The planned Sweeney Ridge Connector Trail/San Andreas Trail Extension is located more than 400 feet away from the proposed transmission line and transition station. Impacts resulting from construction, dust and noise in particular, would be short-term in nature and at least partially screened by intervening uses. Impacts would be adverse (Class III), but less than significant.				
Skyline Boulevard Bike Lane (Project 13)	Construction along the proposed Skyline Boulevard Bike Lane would have impacts similar to those described for the Skyline Frontage Bikeway in Section D.9. With the APMs and mitigation measures described for the Skyline Frontage Bikeway, impacts would be potentially significant (Class II), but could be reduced to less than significant levels.				
Church of the Highlands 103 Car Parking Lot (Project 11)	The location of the proposed transition station at the northwest corner of San Bruno Avenue and Glenview Drive in San Bruno would preclude the use of the Church of the Highlands Parking Lot as trailhead parking for the San Andreas Trail, and would disrupt the improvement of a San Andreas Trail trailhead at this location. As no alternatives have been proposed for the relocation of this parking area, this preclusion would be a significant unavoidable (Class I) impact.				
	230 kV Underground Transmission Line				
Linear Park and Bikeway on BART ROW (Project 19)	Although it is unlikely that Proposed Project construction would occur prior to completion of the BART ROW park, the BART/SamTrans bikeway may be completed. If construction trenching begins after the bikeway is completed, construction activities along this ROW would result in significant impacts to recreationists, similar to those described for Hillside Boulevard Bikeway. Impacts resulting from noise, dust, and traffic would reduce the recreational value of the bikeway for the duration of construction. As the transmission duct bank alignment would traverse the length of the entire park, construction would impact bikeway users for an extended period of time. Although mitigation measures such as those described in Section D.9 (Recreation) for the Hillside Boulevard Bikeway could reduce impacts, impacts would remain significant and unavoidable (Class I).				
Hillside Community and Cultural Park [to be complete 2003]	The Hillside Community and Cultural Park would be located adjacent to the Proposed Project route and will be completed prior to construction. Impacts to the park would be similar to those described for Bayshore Circle Park and Orange Memorial Park in Section D.9. Using the APMs and mitigation measures described for these two parks in Table D.9-6 for the Hillside Community and Cultural Park, impacts would be potentially significant (Class II), but could be reduced to a level that is less than significant.				
Bayshore Community Center (Project 30)	The Bayshore Community Center would be located approximately 2,000 feet from construction activities along Guadalupe Canyon Parkway and would largely be screened from impacts by intervening uses. Impacts due to the Proposed Project would be less than significant (Class III).				

F.4.9 Air Quality

Future and proposed construction projects in close proximity to the Proposed Project could have cumulative air quality impacts on the study area. There is the possibility of a variety of projects, mainly roadway improvements or local commercial and residential development, occurring at the same time as project construction. The pollutants generated from construction of these projects would have an impact on ambient air quality that would overlap with those of the Proposed Project if the construction work occurs in close proximity, at the same time. Construction of the cumulative projects could further exacerbate the potentially significant project-related construction impacts, Impacts A-1, A-2, and A-3. Mitigation measures identified for the Proposed Project would remain applicable, and other cumulative projects would also need to comply with local ordinances prohibiting nuisances, and larger cumulative projects would probably incorporate BAAQMD recommendations for minimizing impacts. Section D.10 provides a more detailed description of the effects of the Proposed Project on air quality. Implementing the mitigation measures recommended for the Proposed Project would ensure that the air quality impacts would not be cumulatively considerable.

Cumulative impacts during the operation of the Proposed Project are not expected since negligible amounts of emissions would be generated by the Proposed Project. The long-term impacts to air quality (Impact A-4) would not be cumulatively considerable.

F.4.10 Noise

Future and proposed construction projects in close proximity to the Proposed Project could have cumulative noise impacts within the study area. There is the possibility of a variety of projects, mainly roadway improvements or local commercial and residential development, occurring at the same time as project construction. In the localized areas where project construction may occur simultaneously, noise generated from the projects would have a cumulative impact on sensitive receptors. Construction of the cumulative projects could further exacerbate the short-term potentially significant noise and vibration impacts associated with the construction of the Proposed Project (Impacts N-1, N-2, and N-5). Section D.11 provides a more detailed description of the effects of the Proposed Project on noise. Mitigation measures identified for the Proposed Project would remain applicable, and other cumulative projects would need to comply with local noise ordinances. The mitigation measures identified for the project impacts would reduce cumulative impacts to a level that would be less than significant.

Cumulative impacts during the operation of the Proposed Project (Impacts N-3, N-4, and N-6) are not expected because noise-related to the Proposed Project would be limited to less than significant impacts.

F.4.11 Transportation and Traffic

As presented in Table F-1, a number of projects both proposed and underway have been identified within the study area. The identified cumulative projects are proposed projects, such as residential and other developments, roadway improvement projects, building construction, and transit projects. Some of these projects could potentially exacerbate the construction impacts of the Proposed Project and project alternatives depending on location, intensity and scheduling. In the event that the Proposed Project is approved and that PG&E project construction activities overlap with those of the cumulative project, there would be a need for coordination between the conflicting actions and the appropriate agencies to ensure that safe vehicle, pedestrian and bicycle access and circulation is maintained. In addition, see Section D.12 for detailed discussions of impacts because of conflict with planned transportation projects

(Impact T-9). Section D.12 identifies conflicts between the Caltrain Grade Separation Project (Project 15) and the Proposed Project, Crystal Springs Dam/Cañada Road Bridge (Project 6) and the PG&E Underground 1B Alternative, and the Skyline Boulevard Widening Project (Project 13) and the Sneath Lane and Westborough Alternatives. To avoid cumulative impacts, the Proposed Project would not require additional mitigation measures beyond those identified in Section D.12.

F.4.12 Socioeconomics

As with the impacts analyzed for the Proposed Project and alternatives above, the significance criteria described in D.13.3.1 present the conditions under which the Proposed Project along with other projects in its vicinity could result in cumulative impacts.

The large number of projects planned in the area, particularly residential development, would increase population. The Proposed Project, however, would have no significant effect on population in the area., and the contribution of the Proposed Project to population growth would not be cumulatively considerable as no additional workers would be brought into the area for construction or operation of the project. Although the Proposed Project would not supply power to the projects along the proposed route, it and other projects like it in the Bay Area are designed to accommodate the demands and infrastructure necessary for projects that have already been reviewed and approved. The Proposed Project's contribution to impacts resulting from population growth in the area would be adverse, but not cumulatively considerable. Section D.13 provides a more detailed description of the effects of the Proposed Project on socioeconomics.

Overlapping construction schedules for the Proposed Project and other construction in the area could create a large demand for workers. The large number of available workers in the Bay Area should be able to accommodate that demand. It is not expected that this demand for labor would displace people or housing such that new housing would need to be built. Similarly, operation of the proposed transmission line would have no significant effect on labor and housing, even when combined with other projects. Cumulative impacts would be adverse, but less than significant.

F.4.13 Public Services and Utilities

Of the projects planned along the Proposed Project's route, there are only a few infrastructure projects which when combined with the Proposed Project could disrupt utility systems or cause a collocation accident. These projects include the Crystal Springs Dam/Cañada Road Bridge replacement (Project 6), the Caltrain Grade Separation Project (Project 15), Tunnel Avenue Bridge construction (Project 33), Muni Light Rail construction (Project 34), and Caltrain Station Improvements (Project 35).

Due to the size and invasiveness of the projects listed above, construction of the Proposed Project could create significant cumulative impacts resulting from collocation accidents or utility disruptions. With the implementation of Mitigation Measures U-1a and U-1b described in Sections D.14.3.3 and D.14.3.5, the portion of utility disruption impacts contributed by the Proposed Project would not be cumulatively considerable.

Many of the planned projects described in Table F-1 would disrupt traffic as a result of roadway construction or improvements. Construction of the Proposed Project simultaneously with these other projects could cumulatively restrict access to emergency vehicles or to public facilities. The APMs proposed for this project and Mitigation Measures T-2a and R-3a would ensure that the Proposed Project's contribution to cumulative impacts is not considerable.

The large number of projects planned in the area, particularly residential development, would increase population and result in increased demands on public services and utilities. The Proposed Project would have relatively minor demands to public services and utilities during construction and would not require public services or utilities during operation. Section D.14 provides a more detailed description of the effects of the Proposed Project on public services and utilities. Overall, the Proposed Project's contribution to demand on public services and utilities is not cumulatively considerable. The Proposed Project's cumulative public services and utilities impacts would be adverse, but less than significant.