

4.16 MANDATORY FINDINGS OF SIGNIFICANCE

Does the project have:	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
a) the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) the potential to achieve short-term, to the disadvantage of long-term, environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

CHECKLIST ISSUES

a) ENVIRONMENTAL QUALITY

As discussed in the above checklists, the project has the potential to degrade the quality of the environment. However, the project would not cause any of the other effects listed in Issue a) above. The project may cause potentially significant impacts on biological and archaeological resources and air quality, however, mitigation measures have been proposed in the Initial Study to reduce or eliminate all of the potentially significant impacts. These measures include reissuing non-transferable permits, agreeing to existing permit conditions, entering into agreements with regulatory agencies to continue existing operating procedures so that resources are not affected, and providing the new owners with all available information and training documents related to protecting natural resources to assist the new owners in meeting their legal obligations. Other

than air quality, biological, and archaeological resources, no resources were found to have potentially significant impacts.

Conclusion

On the basis of information discussed under individual sections of this Initial Study, some degradation of the quality of the environment could potentially occur. However, the implementation of the mitigation measures proposed in this Initial Study, coupled with the appropriate mitigation monitoring, would reduce the impacts to less-than-significant levels.

b) LONG-TERM VERSUS SHORT-TERM IMPACTS

The power plant sites are presently committed to industrial uses, and such uses are expected to continue in the future, with or without divestiture. The project involves the transfer of the plants to new owners. It is anticipated that new owners may increase generation at the plants within current permitted levels and extensive regulatory programs for environmental protection. Long-term environmental goals and standards would not be altered or adversely affected by the project. Thus, the project would not achieve short-term economic goals to the disadvantage of long-term environmental goals.

Conclusion

Long-term environmental goals would not be altered or adversely impacted by the proposed divestiture. Therefore, there is no impact.

c) CUMULATIVE IMPACTS

In addition to the project proposed by SDG&E and addressed in this document, four projects are reasonably foreseeable and may impact the environment cumulatively with the SDG&E project. They are: (1) the divestiture of power plant assets by Pacific Gas and Electric Company (PG&E); (2) other future power plants throughout California where applications have been filed (or are anticipated to be filed) with the California Energy Commission (CEC) to site power generating plants, or power plants that are either currently under construction or have received their certification from the CEC; (3) transmission facility upgrades; and (4) local development projects that could occur in the communities in which each of the power plants reside and that are located either adjacent to the facility or within reasonable proximity. These projects and their potential cumulative impacts with the SDG&E divestiture project are described below.

Description of Potential Cumulative Projects

Divestiture of PG&E Power Plants

In January 1998, PG&E filed an application (Application No. 98-01-008) to divest all of its remaining fossil-fueled power plants, (Contra Costa, Pittsburg, Hunters Point, and Potrero) with the exception of its Humboldt plant, and to sell its Geysers geothermal plant. On July 17, 1998,

PG&E amended its application, withdrawing the Hunters Point Plant from the proposed sale. Combined, the facilities proposed to be sold by PG&E consist of 4,289 megawatts of generating capacity. The Draft Environmental Impact Report for this round of PG&E plant sales has been published and the public comment period has closed.

The cumulative analysis in the EIR for the PG&E divestiture considered the Analytical Maximum capacity factor for each of the plants that PG&E proposes to sell. This Initial Study, however, assumes the Analytical Maximum capacity factor for the San Diego area plants only, in order conservatively to portray localized impacts of this project on a cumulative basis.

Future Power Plant Development

Information provided by the CEC indicates that the following facility has the necessary certification to construct, pending final siting and issuance of local building permits:

- The San Francisco Energy Facility is proposed to be built by the San Francisco Energy Company (a joint venture between AES Pacific, Inc. and Southern Natural Gas). It is intended to be a combined-cycle cogeneration plant capable of generating up to 240 MW. The facility would generate electricity and steam using natural gas or other process gas. San Francisco Energy Company has evaluated two sites in the Mission Bay/Potrero/Bayview-Hunters Point area of San Francisco. Final site plans and agreements have not been completed. There is no announced date for construction to commence, and the San Francisco Board of Supervisors issued a Resolution in 1996 opposing the siting of this power plant. However, San Francisco Energy Company is still attempting to locate a site where the proposed power plant could be built.

Additionally, the CEC lists eleven other potential power plant siting cases in California. They are: Pittsburg District Energy Facility, Pittsburg, Contra Costa County (500 MW); Otay Mesa Power Plant, San Diego County (660–1,060 MW); High Desert Power Plant, Victorville, San Bernardino County (680–830 MW); Sutter Power, Yuba City, Sutter County (500 MW); Pioneer Power, Livingston, Merced County (113 MW); Sunlaw Cogeneration Partners I Power Plant, Vernon, Los Angeles County (800 MW); La Paloma Generating Plant, McKittrick, Kern County (1,000 MW); Three Mountain Power, Burney, Shasta County (500 MW); Long Beach District Energy Facility, Long Beach, Los Angeles County (500 MW); Sunrise Cogeneration and Power Project, Fellows, Kern County (300 MW); and Delta Energy Center, Pittsburg, Contra Costa County (535–800 MW). These power plants are in the early stages of application development and review. On average, permitting takes from 2-3 years before construction may start. It is unknown at this time which of these power plants, if any, will ultimately be fully permitted and built. However, it is reasonably foreseeable that one or more will eventually be constructed. The following provides a brief description of each of these potential power plants (Haussler, 1998):

- The Otay Mesa Power Plant is proposed by US Generating, Inc., an unregulated affiliate of PG&E. The plant would be a merchant power plant, with a proposed generating capacity up to 1,060 MW (rather than the previous capacity of 660 MW), and would be located in southern San Diego County near the California-Mexico border. The project is proposed to be a combined-cycle plant able to handle either peaking loads or operate as a load-following plant. The project would require the construction of ancillary facilities, including

69 kilovolt (kV) and 230 kV electric transmission lines, a natural gas pipeline, water and wastewater pipelines and access roads. US Generating, Inc. has indicated it plans to file the Application for Certification (AFC) with the CEC in December of 1998.

- The Pittsburg District Energy Facility (PDEF) is proposed by Pittsburg District Energy, LLC (a joint venture between the City of Pittsburg, Enron, and USS-Posco Industries). The power plant would include a combined-cycle combustion turbine generator with a nominal capacity of 500 MW. The plant would be located on a 12-acre site on East 3rd Street, west of the intersection of East 3rd Street and Columbia Street in the City of Pittsburg in Contra Costa County. The site is located on the northwest corner of the property owned by USS-Posco Industries. The project would require construction of ancillary facilities, including a new electric transmission line, natural gas pipeline, sewer line and a reclaimed water line. Reclaimed water for turbine cooling would be supplied by the Delta Diablo Wastewater Treatment Facility located in the City of Antioch. The combined-cycle unit would be fueled by natural gas. It is expected that 10 percent of the generating capacity of the plant would be dedicated to USS-Posco Industries, while the remaining 90 percent would go to the power grid for distribution. The AFC was filed on June 15, 1998. From that date, the CEC has one year to reject or approve the application. The project sponsor hopes to begin plant operations as early as January 1, 2001.
- The High Desert Power Plant is proposed by Inland Energy and Constellation Power Development. It would be a natural gas-fired merchant power plant located on a 25-acre site on a portion of Southern California International Airport, formerly known as George Air Force Base, near Victorville in San Bernardino County. The project may be a peaking plant, or a baseload combined-cycle plant, or a combination of both. The project would require construction of ancillary facilities, including an electric transmission line, natural gas pipeline and water and wastewater pipelines. The AFC was initially filed on June 30, 1997. Staff recommendations to the CEC were heard on August 13, 1997 and the applicant was asked to submit additional information. Supplemental information was submitted over the next several months. The CEC accepted the AFC as complete on December 3, 1997. CEC licensing for the plant is currently in progress. If the project is approved, construction will begin in early 1999.
- Sutter Power is proposed by the Calpine Corporation. The facility would be a natural gas-fired merchant power plant located on a 10-12 acre site adjacent to Calpine's existing Greenleaf Unit No. 1 cogeneration plant, approximately seven miles southwest of Yuba City in Sutter County. The project would require construction of ancillary facilities, including a new natural gas pipeline and a 230 kV transmission line. Water needs for the plant would be provided by an on-site well system. The AFC was filed on December 15, 1997. On-going workshops are being held to discuss issues associated with the siting of the plant. Calpine recently announced plans to further mitigate environmental impacts of the project, including plans to reduce water use by 95 percent by using air-cooled cooling towers rather than once-through cooling using groundwater.
- The Long Beach District Energy Facility is proposed by Enron Capital and Trade. The project would be a 500 MW generating facility in the City of Long Beach in Los Angeles County. Details of the proposal are not available, but the company has announced its intentions to file its AFC with the CEC in November 1998.
- The Pioneer Power Project (also known as the Livingston Project) is proposed by Bock Energy, Merced Irrigation District (MID), Turlock Irrigation District, Foster Farms and

General Electric. The plant would be a 260 MW gas-fired combined-cycle cogeneration plant utilizing GE's Kalina cycle technology, located adjacent to a Foster Farms processing plant in the City of Livingston in Merced County. The project would require 9 miles of new or reinforced natural gas pipeline and a short 230 kV transmission line to connect to the Pioneer Substation, which MID recently constructed for service to the Foster Farms facility. The joint venture has stated it plans to file an AFC in early 1999.

- The Sunlaw Cogeneration Partners I Power Plant is proposed by Sunlaw Cogeneration Partners I (SCPI). As reported by SCPI, the proposed plant would be a state-of-the-art highly efficient, low cost and ultra low-emission merchant power station located in the City of Vernon in Los Angeles County. The facility would be fueled by natural gas. The project applicant plans to file its AFC in the fall of 1998.
- The La Paloma Generating Plant is proposed by La Paloma Generating Company, LLC. The plant would be a 1,048 MW natural gas-fired, combined-cycle facility located on a 24-acre site near McKittrick in Kern County, approximately 35 miles west of Bakersfield. The project would require construction of ancillary facilities, including a new natural gas pipeline, a new 230 kV transmission line, and a water supply pipeline. The project applicant recently filed its AFC with the CEC requesting approval of the project.
- The Three Mountain Power Plant is proposed by Three Mountain Power, LLC (also known as Ogden Pacific Power) of Redding, CA. The plant would be a 500 MW natural gas-fired, combined-cycle facility located adjacent to an existing 10 MW wood waste-fired power plant in Burney, CA. The project would require construction of some ancillary facilities, including a short transmission line to connect to an existing 230 kV PG&E transmission line. The applicants recently filed an AFC at the CEC (98-SIT-3) requesting approval of the project.
- The Sunrise Cogeneration and Power Project (previously known as the Monterey Power Project) is proposed by Texas Global Gas and Power. The plant would be a 300 MW natural gas-fired cogeneration plant located near the community of Fellows in western Kern County. The developer has announced its intention to file an AFC at the CEC in November 1998.
- Delta Energy Center (also known as the Calpine Pittsburg Project) is proposed by a joint venture of Calpine Corporation and Bechtel Enterprises (an affiliate of Bechtel Group Inc.). The plant would be a natural gas-fired, combined-cycle facility located at the Dow Chemical facility in Pittsburg, CA, the site of an existing 70 MW gas-fired cogeneration power plant that Calpine recently purchased from Dow. The joint venture intends to develop a plant of between 535 and 800 MW. The project would require construction of some ancillary facilities, but many are already in place, including a natural gas pipeline. The applicants recently filed an AFC at the CEC (98-SIT-5) requesting approval of the project.

A number of other merchant power plants are being considered for development in California, including four recently identified power plants in the Bay Area proposed by Calpine Corporation and a unit of Bechtel Group. No specific information is available for these plants, nor have formal application procedures been initiated with the CEC.

In order to examine a worst-case analysis, the construction and operation of the proposed plants were not considered in the cumulative impact analysis. By not recognizing the additional capacity the other plants would add to the power grid, the model analysis of the SDG&E plants is conservative and portrays the operation of the SDG&E plants at higher levels than if the other plants were included. An exception to this is the inclusion of the Otay Mesa plant in Variant 2, as described in the Potential Cumulative Impacts section below.

Transmission Facility Upgrades

SDG&E is considering upgrading several existing substation and transmission lines to increase the power importation capacity to the San Diego area so that the total importation capacity for the San Diego area would be 2,850 MW, which would serve projected load growth through 2005.

Local Development Projects

There is the potential for the divestiture project, together with development projects that are planned for the local communities in which a particular power generating facility resides, to result in cumulative impacts. Table 4.16.1 describes projects that have been identified by the Planning and Community Development departments for the communities surrounding the facilities to be sold. The list shows current and proposed development projects within a 1-mile radius of the facilities.

Potential Cumulative Impacts

The cumulative impact analysis compares the 2005 Cumulative Scenario to the 1999 Baseline Scenario. The reason that the Initial Study uses this approach instead of creating a 2005 Baseline Scenario for the analysis is to portray the maximum cumulative potential for environmental changes associated with the project.

This cumulative analysis considers two possible scenarios:

- Variant 1 assumes that the Encina Power Plant would be sold by auction and the South Bay Power Plant would be either sold by auction or purchased by the Port District - and would remain in operation as of 2005. Both plants by 2005 would have SCR equipment installed to comply with San Diego air quality limits and would continue to operate up to their analytical maximum capacities. In 2005, the effects of the proposed power plant projects described above, including the Otay Mesa plant, are not considered in order to establish a worst-case scenario for the operation of the existing SDG&E power generating facilities.
- Variant 2 assumes that the South Bay Power Plant would be purchased by the Port District and would be closed as of 2005. It is assumed that the South Bay plant's generating capacity has been replaced with the proposed 1,060 MW power plant at Otay Mesa to serve the San Diego Area. The South Bay plant would be dismantled and replaced by the Port District with a recreational, residential, or commercial land use, which has not been determined at this time.

**TABLE 4.16.1
LOCAL COMMUNITY PROJECTS WITHIN ONE MILE OF THE POWER PLANTS**

Project Name	Description
Encina Power Plant	
Lego Land Educational Theme Park	120-acre site providing education and entertainment for children ages 2-13. Forecast to be open to the public in April 1999.
City Golf Course	An 18 hole golf course off Palomar Airport Road and College Boulevard. The project also includes a clubhouse and driving range. The entire project is currently under public review.
South Bay Power Plant	
Chula Vista Bayfront Development	<p>Several projects are being planned:</p> <ul style="list-style-type: none"> • Mid-bayfront development of approximately 100 acres of land to include: 1.4 million square feet of resort, residential, commercial, recreational and public uses. • Retail/Entertainment. This component will include a theater, bookstore, music store, five restaurants, and smaller retail shops that will comprise approximately 163,456 square feet of net floor area. • Resort Hotel. The resort hotel will consist of 450 suites, meeting and banquet space, and three restaurants that will comprise approximately 285,000 square feet of net floor area. • Residential. Approximately 256 units of high rise residential uses are proposed in two 16-story buildings, with 127 units each. 743 multi-family units are also proposed as part of this project. • Research and Development. Approximately 27.6 acres of R&D/office and light industrial uses are proposed. • Retail. The project proposes approximately 1.12 acres of convenience retail that will comprise approximately 12,196 square feet of net floor area. • Park. Approximately 8.5 acres of active park uses, plus a 100-foot linear open space buffer between the residential component and the Sweetwater Marsh National Wildlife Refuge.
Kearny Construction and Operation Center CTs	
Old General Dynamics Property Redevelopment	180 acres of commercial and light industrial development at the old General Dynamics Property/ Mesa Community Planning Area

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LOCAL COMMUNITY PROJECTS WITHIN ONE MILE OF THE POWER PLANTS**

Project Name	Description
Naval Training Center CT	
Point Loma Village	Urban Design Study, expected to conclude December 1998.
North Bay Redevelopment Project Area	Current development projects include new single family homes, small multifamily residential developments and limited small-scale commercial projects.
Division Substation CT	
San Diego Airport/ Lindbergh Field	Airport Master Plan projects and redevelopment through the year 2005. Airside improvements include runway rehabilitation and terminal reconfiguration as well as landside parking improvements.
El Cajon Substation CT	
Regal Cinemas 18 Screen Megaplex	Theatre located within the Parkway Plaza shopping center at 103-695 Fletcher Parkway. Completion expected by November 1998.
Aztec Court Development	A six-unit single-family planned residential development. Construction is expected to begin in November 1998.
Mayberry Lane Development	A 10-unit single family planned residential development. Awaiting City Council consideration.
North Island Naval Air Station CTs	
Thesauris Inc. Development	14 unit condominium and 1000 sq. feet of retail space.
Perking Development	Seven unit residential and 4500 sq. feet of retail
El Rancho Development	30 unit motel
Sun Properties Development	Four unit condominium
La Avenida Development	36 room hotel
Wharf Project and Planning Area	Two Restaurants : a 7,500 sq. feet/226 seat facility and a 10,000 sq. feet/331 seat full service facility

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LOCAL COMMUNITY PROJECTS WITHIN ONE MILE OF THE POWER PLANTS**

Project Name	Description
Miramar Yard CTs	
Mira Mesa Community Planning Area	There are no current or proposed projects identified by the City of San Diego Community Development Department within a one mile radius of this site.
Naval Station CT	
Coronado Bridge/ Mercado Commercial Site	Barrio Logan Redevelopment Area Commercial Development. Mixed small retail and office space development.
Trolley Site	Commercial development with mixed small retail and office space and landscaping improvements.
24th Street Terminal Refueling Facility	
Marina Development	250 slip marina in the City of National City (approved by the Corps of Engineers and the Coastal Commission)
CDC New Road	A proposed new road to be placed adjacent to the SDG&E oil pipeline between 24th Street and the Sweetwater Channel.

Both variants include the CTs being sold as proposed.

The potential sale of the South Bay Power Plant to the Unified Port District is described in the Project Description (Chapter 2). The Port District endeavors to purchase the plant in order to eventually decommission and dismantle the plant. The Port District’s long-term plan is to change the land use of the 165-acre property to uses that are more compatible with the surrounding residential, commercial, and recreational land uses. However, the South Bay Power Plant is currently designated as a “must-run” facility, so under the sale agreement the Port District would be required to take assignment of SDG&E’s must-run agreement with the California Independent System Operator (ISO) and continue operating the plant to fulfill the must-run obligation until a replacement plant could serve the community and service area in the same manner as the current plant does. In the event that the Port District purchases the South Bay plant, the Port District has entered into a Memorandum of Understanding (MOU) with US Generating (a PG&E subsidiary) to operate the South Bay Power Plant after the two year Operation and Management agreement with SDG&E expires. US Generating would continue to operate the facility until a replacement power plant is built.

If the Port District acquires the South Bay plant, Variant 2 assumes that a new plant is in operation in the San Diego region, probably at an undetermined location in the Otay Mesa area, by 2005. As noted earlier, US Generating has proposed to build a plant in the Otay Mesa area. The original application to the CEC was for a power plant of 660 MW. US Generating is now proposing to build a combined cycle plant of 1,060 MW. This proposed facility would provide enough power to accommodate the decommissioning (and replacement) of the South Bay Power Plant, expected load growth and system reliability requirements. This new plant also would be a load-following plant that displaces electric power imports from outside SDG&E's service area, which would otherwise be needed to meet demand in the area. The new plant may also export power to other service areas, including southward into Mexico. As described previously, Variant 1 does not consider the power contribution of an Otay Mesa plant in order to portray a worst-case scenario for the operation of the existing SDG&E facilities.

Sierra Energy and Risk Assessment, Inc. (SERA) performed SERASYM™ modeling to provide information about the possible operational changes that could occur with divestiture in conjunction with the cumulative projects described above. (SERASYM™ modeling results were also used to provide the basis for analyzing project-specific impacts in Chapter 4, Environmental Checklists of this Initial Study.) Consistent with CEC demand forecasts (California Energy Commission, 1998), the SERASYM™ modeling results assume electricity demands will increase throughout California in the future, either with or without divestiture. The model also assumes that, in certain areas, additional electrical generation or transmission capacity will be needed to meet these future demands.

Table 4.16.2 presents annual plant capacity factor estimates for the plants being divested under various operational scenarios. The assumptions used for modeling the 1999 Baseline and Analytical Maximum scenarios are discussed above, and more thoroughly defined in Chapter 3, Approach to Environmental Analysis, and in Attachment D of this Initial Study. The 1999 Baseline model run assumes that SDG&E would continue to own and operate the Encina and South Bay Power Plants and the 17 additional combustion turbines (CTs). The plants would continue to operate to meet reliability and local system support requirements. The 1999 Analytical Maximum model run assumes the new owners of the divested generating assets have access to natural gas at a price 25 percent less lower than prices projected by the California Energy Commission, in order to capture the maximum potential environmental impacts. Both 1999 model runs assume the new owners would have access to low-priced residual fuel oil, in order to fully account for potential impact from oil burns.

The 2005 Cumulative Analytical Maximum model runs are intended to capture the maximum possible change in operations and resultant environmental impacts that could occur from divestiture plus cumulative projects. One 2005 Analytical Maximum model run assumes a new 1,060 MW power plant is on line in the San Diego area, allowing the Unified Port District of San Diego to shut down the South Bay plant. The other 2005 Analytical Maximum model run assumes the South Bay plant remains operational and that no new power plant is constructed in the San Diego area. Both 2005 model runs assume the new owners of the plants would have access to natural gas at discounted prices, but unlike the 1999 model runs, the 2005 model runs

**TABLE 4.16.2
SDG&E PROJECTED POWER PLANT ANNUAL CAPACITY FACTORS ^a**

Plant	Unit	Type	Fuel	Net Capacity (MW)	1999		2005	
					Baseline ^b	Analytical Maximum ^c	Without new 1,060 MW plant (Variant 1)	With new 1,060 MW plant (Variant 2)
Encina	1	ST	NG	100	4.5	48.5	25.4	40.0
	2	ST	NG	103	4.0	48.5	24.2	40.7
	3	ST	NG	109	5.1	62.5	29.2	51.8
	4	ST	NG	299	16.3	50.8	46.9	62.2
	5	ST	NG	329	24.1	74.4	33.5	49.3
	CT	CT	NG	15	0.1	0.3	3.2	2.3
Annual Plant Capacity				955 ^d	14.9	59.0	34.9	51.0
South Bay	1	ST	NG	145	35.0	84.3	54.5	N/A
	2	ST	NG	149	33.8	76.7	41.4	N/A
	3	ST	NG	174	32.2	75.0	53.7	N/A
	4	ST	NG	222	0.7	35.7	20.9	N/A
	CT	CT	JF	15	0.0	0.0	0.0	N/A
Annual Plant Capacity				705 ^d	22.5	63.3	39.8	N/A
New Otay Mesa 1,060 MW Plant	1	CC	NG	960	NA	NA	NA	90.5
	2	CT	NG	100	NA	NA	NA	6.1
Annual Plant Capacity				1,060	NA	NA	NA	82.5
Division		CT	DF	14	0.0	0.0	0.0	0.0
El Cajon		CT	NG	15	0.2	0.4	3.4	2.4
Kearny 1	1	CT	NG	16	0.2	0.3	3.8	2.6
Kearny 2	A	CT	NG	15	0.1	0.3	3.5	2.5
	B	CT	NG	15	0.1	0.3	3.1	2.3
	C	CT	NG	15	0.2	0.4	3.5	2.5
	D	CT	NG	14	0.2	0.3	3.3	2.3
Kearny 3	A	CT	NG	16	0.2	0.4	3.6	2.6
	B	CT	NG	15	0.1	0.3	3.4	2.3
	C	CT	NG	15	0.2	0.4	3.7	2.8
	D	CT	NG	15	0.2	0.4	3.4	2.4
Miramar 1	A	CT	NG	18	0.2	0.4	4.0	2.8
	B	CT	NG	18	0.3	0.4	4.0	2.9
Naval Station		CT	NG	22	0.3	0.4	4.4	3.1
Naval Tr. Ctr		CT	NG	15	0.2	0.4	3.5	2.7
North Island	1	CT	DF	18	0.0	0.0	0.0	0.0
	2	CT	NG	18	0.1	0.2	2.2	1.6
Annual Plant Capacity				274 ^e	0.2	0.3	3.1	2.2

a Capacity factor is the ratio of energy actually produced by a generating unit to the maximum energy it could possibly produce (that is, its rated generating capacity) in the same time period.

b Baseline is the manner in which SDG&E would be expected to operate the plants in 1999.

c Analytical maximum is the analytically derived maximum capacity under a set of assumptions described in Section 3.5.2.

d Net capacity for entire plant.

e Net capacity for 17 CTs being sold as a package.

NOTE: The capacity factors were derived using the SERASYM™ unit-specific, California-wide data set, which was processed by the SERASYM™ production cost model to forecast plant operations.

UNIT TYPES: CT combustion turbine FUELS: NG natural gas NA = not applicable
ST steam turbine DF diesel fuel
JF jet fuel

SOURCE: Sierra Energy and Risk Assessment, Inc., and ESA, 1998.

assume the new owners would only have access to relatively high-priced residual fuel oil. The high-priced oil assumption best simulates the expected operations of the steam plants under the proposed mitigation measure prohibiting oil burns except in cases of force majeure.

The difference between the Baseline model runs and the Cumulative Analytical Maximum model run represents the maximum possible change between 1999 and 2005 affected by the project at the Encina and South Bay plants and the CTs (together with cumulative projects, including expected demand increases). Table 4.16.2 shows the change in annual capacity factors at each of the plants under two model runs each in 1999 and 2005. The actual cumulative impact of the project may in fact be less and may approach zero (i.e., no difference between the annual plant capacity factors with a new owner and those with SDG&E). The table reflects merely the possibility that operations could increase within this range of capacity factors.

With respect to the change in annual plant capacity factors in 2005 under the Cumulative Analytical Maximum model run relative to the 1999 Baseline model run and the 1999 Analytical Maximum model run for divestiture alone, several conclusions can be made, including:

- In comparison to the 1999 Baseline, the annual electricity generation (GWh) and plant capacity factors at each of the plants being divested would see a net increase in 2005 (with the exception that the South Bay plant would be shutdown under one 2005 scenario).
- At the Encina Power Plant, the annual plant capacity factor in 2005 (without a new power plant in the area) would be roughly 2.3 times higher than the 1999 Baseline, but about 43 percent lower than the 1999 Analytical Maximum for divestiture alone. The analytical maximum declines from 1999 to 2005 because of two factors: (1) electric transmission import capability increases by 400 MW by 2005, and (2) the gas supply system becomes more constrained by 2005 because of gas load growth in the region. Generation at Encina increases considerably in the model run with South Bay retired and a new 1,060 MW plant on-line in the area because more gas would be available to the Encina plant. The Encina and South Bay plants share a common gas delivery pipeline; with the South Bay plant shut down, essentially all the gas that was previously available for both plants would now be available for the Encina plant alone, allowing it to increase generation considerably over what it could produce with South Bay still on line.
- At the South Bay Power Plant, the annual plant capacity factor in 2005 (without a new power plant in the area) would be roughly 2.3 times higher than the 1999 Baseline, but about 41 percent lower than the 1999 Analytical Maximum for divestiture alone. The analytical maximum declines from 1999 to 2005 because of the same two factors mentioned in 2) above. Under the second 2005 model run, the South Bay plant would be retired and a new 1,060 MW plant would come on-line, as called for in SDG&E's agreement with the Port District.

In summary, Table 4.16.2 shows that the project, in conjunction with other cumulative projects, would reduce the operational levels at the Encina and South Bay Power Plants from that of

divestiture alone. This is because the assumed 1,060 MW facility would be considerably more efficient than the older Encina plant, and would operate at a relatively high annual capacity factor (82.5 percent), and because electric power import capability will increase by 400 MW, thereby offsetting generation within the service area. (While generation at Encina could increase when the South Bay plant is shutdown, total generation from the divested plants would decrease considerably.) Therefore, the project-specific impacts analyzed in Chapter 4 of this Initial Study address the anticipated worst-case impacts that are related to operational levels at these plants.

The following topic-by-topic analysis considers the cumulative impacts of the project (Variants 1 and 2), the transmission line upgrades, and the local development projects. The effects of the Otay Mesa plant and for decommissioning the South Bay plant were considered only in Variant 2. Differences between the effects of Variants 1 and 2 are noted when relevant. It should be noted that each of the cumulative projects—all of the local development projects; the conversion of land use, dismantling of the power plant and construction of new facilities at the South Bay plant site; and the construction and operation of the new Otay Mesa plant—would undergo separate CEQA review. Each CEQA document would also need to address cumulative impacts and would have more information to base the analysis as details of the projects are developed. Also, each project would need to obtain permits from such agencies as the Regional Water Quality Control Board (RWQCB), U.S. Fish and Wildlife Service (USFWS), California Department of Fish and Game (CDFG), and would be required to follow local government planning and zoning regulations.

Land Use and Planning

The various local development projects are under consideration for approval from the community planning agencies and will be accepted or rejected based on their individual compliance with local planning and zoning regulations and policies. Each of the facilities to be divested appears to be consistent with the planning and zoning regulations that pertain within the local jurisdiction. No cumulative impacts on land uses are anticipated from the transmission facility upgrades. Therefore, the project would not result in cumulative impacts on land use and planning.

For Variant 2, land use and planning impacts at the existing South Bay plant site and the construction of the Otay Mesa plant may be realized from a conversion of land uses. If the Port District were to replace the plant with a residential, commercial, or recreational land use, or a combination thereof, there could be beneficial impacts to land use. As with the local development projects, the location of the Otay Mesa plant will be accepted or rejected based on its compliance with local planning and zoning regulations and policies. Therefore, no cumulative significant impacts with the project would occur.

Population and Housing

The list of local projects includes many projects that will have incremental effects on community growth and housing. However, neither of the divestiture variants would be likely to generate additional population or give rise to housing demand, and would thus have no effect cumulatively with these projects. Additionally, no cumulative impacts on population and housing are anticipated from the transmission facility upgrades and the construction of the Otay Mesa plant.

Geologic Problems

Neither of the divestiture variants would alter the geologic conditions or hazards existing on or near the power plant sites. The local projects would not have any synergistic or cumulative impact on geologic conditions. Additionally, no cumulative impacts on geologic conditions are anticipated from the transmission facility upgrades and the construction of the Otay Mesa plant.

Water

Although many of the local projects will have some effect on the demand for water, the minor amount of potable water used by either of the project variants would result in essentially no cumulative effect with the local development projects. Neither of the variants would have substantial impacts on erosion or runoff, and no cumulative impact with local development projects would be expected. There are no water quality discharges from the local development projects that would commingle or otherwise affect the discharges from the divestiture project variants. No cumulative impacts on water resources are anticipated from the transmission facility upgrades.

For Variant 2, cumulative impacts to water resources would be dependent on the source of the cooling water chosen for the new power plant, presumably located in Otay Mesa. One alternative would be to pump water from San Diego Bay to and from the new plant site. This would result in similar water intake and discharge impacts as described for the South Bay plant in Section 4.4, although the required flowrate would likely be higher for the larger capacity new plant. Groundwater could be utilized for cooling, as is done at inland power plants elsewhere in the state by Southern California Edison, with potential impacts on groundwater availability and flow disruption. Another potential source would be highly treated wastewater (recycled water) delivered by Otay Water District. This may provide beneficial impacts by replacing existing wastewater discharges to watercourses.

The cooling water for the Otay Mesa plant would replace the water currently used at the South Bay plant. Since the South Bay plant would be decommissioned, the water needed for the Otay Mesa plant would not cumulatively impact with the water currently used at the South Bay plant. It would also not cumulatively impact with the water used at the Encina plant since the Encina plant draws cooling water from the ocean sufficiently distant from San Diego Bay as to not affect the conditions in the bay. Without knowing the source of cooling water for the proposed Otay Mesa plant or the planned water needs for the new land use at the South Bay plant, it would be speculative to precisely determine the cumulative effects of cooling water intake and discharge. However, permits from the RWQCB would be required for the discharge of cooling water and the use of reclaimed water. Permits would not be issued if significant impacts would result from the discharge.

The overall cumulative water impacts of the project variants with the local development projects and the transmission facility would not be significant.

Air Quality

Section 4.5 of this Initial Study, Air Quality, discusses the potential for air quality impacts from divestiture alone and in combination with the same cumulative projects considered in detail in this section to affect regional criteria air pollutant emissions and the potential for inconsistency with regional air quality plans. Mitigation measures are identified in the Air Quality section that would reduce all potentially significant impacts to less than significant.

Transportation and Circulation

Transportation and circulation impacts from the divestiture project, if any, are negligible. The incremental impacts of the project would pose no cumulatively considerable impacts when considered with local development projects. Additionally, no cumulative impacts on transportation are anticipated from transmission facility upgrades.

For Variant 2, cumulative impacts at the existing South Bay plant site may be realized on transportation from a conversion of land uses. If the Port District replaces the plant with a residential, commercial, or recreational land use, or a combination thereof, there could be potential impacts to area transportation depending on the nature of the new land use. The significance of the impact cannot be determined without knowing the characteristics of the new land use and, therefore, the cumulative impacts would be speculative. No cumulative impacts are anticipated from the construction or operation of the Otay Mesa plant.

Biological Resources

As mitigated, the impact of divestiture on local sensitive habitats would be less than significant, and the local development projects are not expected to affect these habitats in a way that would produce significant impacts in combination with the project. Additionally, no cumulative impacts on biological resources are anticipated from the transmission facility upgrades.

For Variant 2, the construction of the new Otay Mesa plant may have biological impacts, but these impacts would depend on site-specific conditions at the chosen site, which are currently unknown. As previously discussed, permits from the RWQCB would be required for discharges from the plant to protect aquatic species and beneficial uses. Additionally, permits would be required from the USFWS or the CDFG for any streambed alternatives or to protect sensitive species. There would be no cumulative impacts from decommissioning the South Bay plant, since replacing the plant with a new land use should not affect biological resources.

Energy and Mineral Resources

All of the local development projects will consume some energy and mineral resources for construction and for operation. However, the divestiture project variants, the transmission facility upgrades, and the local development projects do not conflict with any adopted energy conservation plans; are not anticipated to be wasteful or inefficient; and would not affect known mineral resources. Therefore, there would be no significant cumulative impacts with regard to energy and mineral resources.

Hazards

The project was found to pose less than significant impacts to the environment with respect to risks of accidental explosion or exposure of people to potential health hazards. The hazards associated with the project would not interact cumulatively with the local development projects and the transmission facility upgrades.

For Variant 2, the sale of the South Bay plant would lead to decommissioning of the facility and an advancement of remediation activities at the site. This would be a beneficial cumulative impact of the project. The potential for creation of hazardous conditions at the proposed Otay Mesa plant is dependent on the site-specific conditions at the location to be chosen for the plant, which is unknown at this time. The Otay Mesa plant would be required to comply with all relevant laws and regulations related to hazardous materials and hazardous wastes and thus would pose no cumulative impacts.

Noise

Noise from the project was found to be less than significant. Although there are local development projects planned in the vicinity of some of the facilities, the noise from construction and operation of the local development projects would be sufficiently distant from any particular project facility so that the minor potential impacts from the project, from other local development projects, and from transmission facility upgrades would not cumulatively raise decibel levels above community standards.

For Variant 2, the construction of the proposed Otay Mesa plant, the dismantling of the South Bay plant, and the construction of new land uses at the South Bay site may have noise impacts. However, appropriate site-specific limitations on the times of construction for these projects would reduce this impact to less than significant.

Public Services

It was determined that there would be less than significant impacts to local public services as a result of divestiture. Although the local development projects would require additional public services, the minor potential impacts from the divestiture project would not be expected to additionally burden public services substantially more than the needs for the community projects. The transmission facility upgrades would not require public services and therefore would not add cumulatively to the potential impacts. Since the incremental effects of the project variants are not considerable when viewed in connection with the proposed local development projects, cumulative impacts would be less than significant.

Variant 2 may have some minor cumulative impact on public services, depending on the land use that ultimately replaces the South Bay plant and the location chosen for the proposed Otay Mesa plant. Since this information is not known at this time, their cumulative impacts with local development projects is speculative.

Utilities and Service Systems

The divestiture was found to have negligible impacts on utilities and service systems. Although the local community projects would place additional demands on utilities and service systems, the minor potential impacts from the divestiture project would not be expected to additionally burden these systems substantially more than the needs for the community projects. The transmission facility upgrades would not require additional utilities and service systems and therefore would not add cumulatively to the potential impacts. Since the project's incremental effects would not be considerable when viewed in conjunction with the local development projects, cumulative impacts would be less than significant.

Variant 2 may have some minor cumulative impact on utilities and service systems, depending on the land use that ultimately replaces the South Bay plant and the location chosen for the proposed Otay Mesa plant. Since this information is not known at this time, their cumulative impacts with local development projects is speculative. However, it is unlikely that the local development projects, the new land use at the South Bay plant, and the Otay Mesa plant would be constructed without the needed utilities and service system infrastructure in place. Therefore, it is reasonable to assume that cumulative impacts would be less than significant.

Aesthetics

Because the physical modifications of the project are minor, such as new fences within industrial areas, the project would have a less than significant impact on local aesthetics and vistas and scenic highways. The transmission facility upgrades would not affect aesthetics and therefore would not add cumulatively to the potential impacts. Although the local development projects may have some effects on aesthetics, the divestiture project's effects are so minor that they would not be cumulatively significant with those of the other projects.

Variant 2 may have some beneficial cumulative impact on aesthetics, depending on the land use that ultimately replaces the South Bay plant. The construction of the Otay Mesa plant may have some cumulative effect on aesthetics, depending on the site chosen for the plant and the proximity to any community development projects, but the location and potential aesthetic impacts of the construction of the plant is not known at this time, so the cumulative aesthetic impacts are speculative.

Cultural Resources

The minor construction projects (e.g., fences and soil remediation) that could result from the divestiture project may potentially impact currently unknown subsurface archaeological and paleontological resources. Mitigation methods are proposed to fully mitigate impacts should they occur. It is possible that the local development projects may also impact cultural resources. However, since the divestiture project impacts would be fully mitigated and the impacts of the local community projects could be (and likely would be) similarly mitigated, no cumulative impacts would be expected.

Similarly, for Variant 2, the construction of facilities that would replace the South Bay plant and the construction of the Otay Mesa plant, depending on the chosen location of the plant, may have impacts on cultural resources. However, it is reasonably foreseeable that cultural resource evaluations would be made prior to construction of these facilities and that impacts would be fully mitigated. Therefore, cumulative impacts would be less than significant.

Recreation

The divestiture project may result in a very slight increase in employment at plants where new owners increase operation of the plants, which may correspond to a small increase in demand for recreational facilities. Similarly, small increases in the demand for recreational facilities may occur from the local development projects. No impacts on recreation would be anticipated from the transmission facility upgrades. Cumulatively, these increases would be less than significant.

For Variant 2, cumulative beneficial impacts at the existing South Bay plant site would be realized if the Port District were to replace the plant with a recreational land use.

Conclusion

According to the above analysis, the community development projects, the transmission facility upgrades, and the potential construction and operation of the Otay Mesa plant are not anticipated to affect resources in a manner that would create significant impacts in combination with the project. Therefore, the cumulative impacts are less than significant.

d) EFFECTS ON HUMAN BEINGS

As discussed in the above checklists, the project could result in substantial adverse effects on human beings from potential increases in air emissions. However, with the proposed mitigations and mitigation monitoring, all potentially significant impacts are reduced to less than significant.

Conclusion

On the basis of the information and the analysis discussed under the individual checklists and summarized above, the potential effects on human beings as a result of divestiture would be less than significant.