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 as growth-inducing if it either directly or indirectly fosters economic or population growth or the construction of additional housing 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 growth-inducing projects include expansion of urban services into a previously un-served or under-served area, the creation or extension of transportation links, or the removal of major obstacles to growth. These direct forms of growth have secondary effects such as expanding the size of local markets and stimulating additional economic activity in the area.

Typically, the growth-inducing potential of a project would be considered significant if it stimulates human population growth or a population concentration 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.

Growth Caused by Direct and Indirect Employment

As described in Section D.11, Socioeconomics, the construction of the Proposed Project would not permanently affect the employment patterns in the area. PG&E would temporarily employ approximately 30 additional workers during transport, 100 to 700 additional workers during the staging and preparation phase and up to 900 additional workers during the removal and installation phases of the Proposed Project. The peak employment requirement of 900 additional workers would occur during the replacement of the original steam generators (OSGs) during which another 1,100 other temporary workers would be replacing spent fuel rods at DCPP. While refueling is not part of the Proposed Project, the cumulative impacts resulting from all 2,000 additional workers need to be considered for purposes of this analysis because refueling would occur at the same time as the Proposed Project. The 1,100 workers required to replace spent fuel rods are generally part of the local labor force who return to DCPP every 18 months during refueling outages, while the Proposed Project would involve up to 900 additional workers who would not return at successive outages. With the Proposed Project, up to approximately 2,000 additional temporary workers would be at DCPP compared to a non-outage normal period.

The specialists and laborers, who would be temporarily employed for the various Proposed Project phases, would be based both locally and outside of a 2-hour commute area of the Proposed Project. Existing hotels or other temporary accommodations would be available in the area to house outside contractors. There is an adequate supply of lodging within a 25-mile radius to support this temporary increase of commuting workers for all phases of the Proposed Project. In addition, the traffic and transportation circulation system in the vicinity of the Proposed Project, and the area's utilities and public services have adequate capacity for the additional 2,000 temporary workers (Proposed Project plus concurrent refueling workers).

Proposed Project operation and maintenance would be performed by current PG&E employees and therefore would not create new jobs.

F.2 Significant Irreversible Changes

The CEQA Guidelines (Section 15126.2(c)) require that an EIR identify any significant irreversible environmental changes caused by the Proposed Project. Such changes may include uses of nonrenewable resources or provision of access to previously inaccessible areas. In addition, any project-related accidents could result in long-term changes to the environment.

The steam generator replacement project would require a commitment of natural resources resulting from the direct consumption of construction materials, and fossil fuels for transportation of steam generators and workers. As described in Section D.3, Biological Resources, temporary and permanent storage facilities may be constructed on currently unoccupied land. However these lands have already been disturbed. After DCPP is returned to service, the RSGs would allow DCPP to function normally and continue producing electrical power. The OSGs would be stored at an onsite facility and decommissioned with the remainder of the DCPP facility at the end of its operating life.

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 commence operation during the timeframe of project activity. 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.

The projects comprising the cumulative scenario include a range of project types such as residential and industrial development, transportation infrastructure, and improvements to Port San Luis. Because the transport and delivery of the RSGs to DCPP would not begin until September 2007, several years from now, information on such future planned projects in San Luis Obispo County is limited and would be speculative. As a result, this analysis also considers the potential for cumulative impacts associated with forecasted growth in the Study Area.

Cumulative Projects List

Numerous agencies were contacted to obtain information regarding cumulative projects, including:

- City of San Luis Obispo, Community Development Department
- City of Morro Bay, Public Services Department
- City of Pismo Beach, Planning Division
- San Luis Obispo County, Public Works Department
- San Luis Obispo County, Planning and Building Department
- Avila Valley Advisory Committee
- Port San Luis Harbor District

Projects identified with the potential for cumulative impacts are presented in Table F-1.

Site No.	Project	Description/Size	Location	Status/Schedule
1	Independent Spent Fuel Storage Installation	Construction of facility to store spent nuclear fuel	DCPP	Storage tentatively scheduled for 2006
Avila Bea	ach Area			
2	Widening of SLO Creek Bridge		San Luis Bay Drive/ Avila Beach Drive	Construction in 2006
3	Construction of 54-room hotel		Avila Beach	Under construction; to be completed in Summer 2005
4	Construction of DeVincenzo Resort Hotel	125 rooms; restaurant; spa; gift shop; botanical garden	Avila Beach Drive/ Ontario Road	No estimate for construction.
5	Unocal Tank Farm Redevelopment		Avila Beach	Specific Plan application in March 2005
6	Construction of 24 homes		Avila Beach	Within the Proposed Project timeframe
7	Restaurant Expansion	Addition of 48 seats, 2000 sq. ft.	Front Street	Within the Proposed Project timeframe
8	USL Expansion	Addition of 4 lots	Avila Beach	Within the Proposed Project timeframe
9	6 lots		San Luis Bay Drive	Within the Proposed Project timeframe
10	PG&E Fuel Storage		Avila Beach	Within the Proposed Project timeframe
11	Stocker Oil Field Exploration	16 new wells	Price Canyon	Within the Proposed Project timeframe
12	Construction of a 7-unit condo		San Miguel/ Avila Beach Drive	Within the Proposed Project timeframe
13	Construction of an 8-unit condo		2nd Street/ Avila Beach Drive	Within the Proposed Project timeframe
Port San	Luis Harbor District			
14	Harford Pier Improvements	Long-term rehabilitation	Port San Luis, Harford Pier	Ongoing
15	Water/Sewer Line Repairs	Periodic repair of 35-year old sewer line due to increasing failures	Port San Luis	As Needed
16	Erosion Control	Periodic repair or preventative measures	Inland/Oceanside of Avila Beach Drive	As Needed
17	Improvements to Harbor Terrace	Infrastructure improve- ments for roadway, water system, grading, and fencing	Harbor Terrace	Upcoming
18	Partial or Full Development Harbor Terrace Program	Implementation of pro- gram in the Port San Luis Harbor District Master Plan	Harbor Terrace	Within the Proposed Project timeframe
19	Port Entrance and Water Access Improvements	\$1.9 million to construct infrastructure upgrades	Avila Beach Drive/ DCPP Access Road	Within the Proposed Project timeframe
20	Ocean Discharge Pipeline Repair and Extension	Reconstruction and extension of the waste- water discharge pipeline	Port San Luis, Avila Pier Area	Within the Proposed Project timeframe
Source:				

Table F-1. Cumulative Scenario – Projects

#6 – 13: Personal Communication with James Caruso, Senior Planner, County of San Luis Obispo Planning and Building Department, 1/05/05 #18 – 20: Personal Communication with Jay Elder, Port San Luis Harbor Manager, 1/05/05.

San Onofre Nuclear Generating Station (SONGS)

Southern California Edison is conducting a similar steam generator replacement project at San Onofre Nuclear Generating Station (SONGS), which is scheduled to commence in 2009. As discussed in Section A.3, coordination of industry resources between DCPP and SONGS is necessary to ensure full support for each company's steam generator replacement projects. Possible areas of coordination include training and qualifications programs that would be acceptable at both facilities; scheduling outages in order to maximize the period of time between outages; and coordination of steam generator installation contractors. Based on the current schedule, there would be adequate time between the DCPP outages and those outages scheduled to replace the steam generators at SONGS Units 2 and 3 as to not cause any cumulative impacts or shortages to the skilled workforce needed to replace the steam generators.

The SONGS facility is located in northwest San Diego County (surrounded by Camp Pendleton, San Onofre State Beach, and Interstate 5), which is beyond each project's radius of environmental influence, especially to the issue areas of concern, such as marine biological resources, public safety, and other hydrological impacts associated with water for the once-through cooling systems. In addition, because SONGS is currently operational, impacts associated with operation of the power plant are included in the base-line conditions, and therefore, would not contribute to cumulative impacts.

Because the DCPP and SONGS project timeframes and locations would not coincide and any operational impacts would be incorporated into the baseline conditions, the two steam generator replacement projects would not contribute to any significant cumulative impacts.

Independent Spent Fuel Storage Installation (ISFSI)

The Independent Spent Fuel Storage Installation (ISFSI) project consists of the construction and operation of an onsite storage facility for used nuclear fuel from Diablo Canyon Power Plant. PG&E requested a Coastal Development Permit for this project, and it was approved on April 20, 2004 by San Luis Obispo County. Construction is scheduled to begin in early 2005 and will be completed in 2006. Therefore this project is not expected to overlap with the proposed DCPP Steam Generator Replacement Project.

F.3.2 Forecasted Population Growth

In addition to proposed or pending projects in the vicinity of the DCPP Steam Generator Replacement Project, general growth trends forecast by regional planning agencies were utilized to characterize anticipated population and employment growth in the area. Demographic forecasts were obtained from the California Employment Development Department (EDD), California Department of Finance (DOF), and the San Luis Obispo Council of Governments (SLOCOG), as well as U.S. Census data and growth projections for San Luis Obispo County. Growth projections were forecasted by comparing population, employment and household information from the 2000 Census to future projections. Based on available data, population information was used to provide growth forecast data through 2010. Total households and employment were forecasted through 2008 and 2010, respectively. According to U.S. Census data, the area encompassing San Luis Obispo County had a total population of 246,681 in 2000. It is estimated that the 2004 population of this area was approximately 258,204. DOF forecasted that this area will have a total population of 324,741 in 2010. This represents a 21 percent increase compared to current estimated conditions.

The 2000 U.S. Census identified a total of 92,739 households in San Luis Obispo County. It is estimated that there were 98,500 households in San Luis Obispo County in 2004. By 2008, SLOCOG estimates that

this area will contain 112,786 households, representing a 13 percent increase (or a 3 percent annual growth rate) over current estimates.

According to the 2001 U.S. Census, total employment in San Luis Obispo County was 97,100 jobs. EDD projections estimate that there will be 112,500 jobs occupied in San Luis Obispo County in 2008 (EDD, 2003).

The increase in regional growth in San Luis Obispo County may indirectly contribute to potential cumulative impacts in the area. An increase in population growth directly impacts the demand for jobs and housing, which may increase the number of planned development and improvement projects, such as public service facilities or transportation system expansions, in San Luis Obispo County.

F.4 Cumulative Impact Analysis

This section presents an analysis of the potential for the Proposed Project to create cumulative effects when the impacts of the Proposed Project are considered together with the projects listed in Table F-1 and the forecasted population growth for San Luis Obispo County.

F.4.1 Air Quality

Future and proposed construction projects in close proximity to the Proposed Project could contribute to a cumulative annual increase in regional air pollutant emissions. There is a possibility of a variety of projects, mainly infrastructure improvements or local residential development, to occur within the project time frame. Proposed Project construction activities would take place approximately 7 miles from the cumulative projects in Avila Beach and Port San Luis. Potential transportation-related impacts to air quality would occur over a period of four days within Port San Luis and during transport along Avila Beach Drive to the DCPP facility.

Pollutants generated by construction of the projects listed in Table F-1 coupled with the emissions associated with residential heating and increased traffic due to local development and increased population growth could further exacerbate the potentially significant, but mitigable, project-related transportation and construction related impacts (Impact A-1). The mitigation measures identified for the Proposed Project impacts would reduce cumulative air quality impacts to a level that would be less than significant. These measures are:

- A-1a: Develop and implement a trip reduction plan;
- A-1b: Develop and implement a diesel combustion emission control plan;
- A-1c: Offset tugboat NOx emission with an offsite mitigation program;
- A-1d: Conduct an acute health hazard screening analysis for the toxic diesel component acrolein;
- A-2a: Use registered portable equipment

F.4.2 Biological Resources

Potentially significant impacts to sensitive vegetation and wildlife could result from residential, commercial, or industrial improvement and development projects in the areas of Avila Beach and Port San Luis. However, a majority of the projects listed in Table F-1 are relatively small in size and generally occur in areas lacking significant native vegetation and wildlife habitat. The area between the cumulative projects identified in Table F-1 and the construction site of the Proposed Project are separated by nearly 6 miles of undeveloped native habitat. The Proposed Project would not have any significant, unavoidable effects on biological resources due to the fact that all Proposed Project activities would be conducted in previously disturbed areas and mitigation could successfully reduce all potentially significant impacts. The small size of the cumulative projects and their minimal impact on native vegetation and wildlife coupled with the localized effects of the Proposed Project on terrestrial biological resources suggests that no cumulatively considerable impacts to terrestrial biological resource would occur.

Construction projects in Port San Luis and Avila Beach may have potentially significant impacts to marine waters and organisms, including disruption of sediment (e.g. Port San Luis Ocean Discharge Pipeline Repair and Extension Project). Those projects that would occur concurrently with the offloading of the steam generators in Port San Luis may contribute to the cumulative adverse impacts on marine biological resources. As discussed in Section D.3.3.2, replacement steam generator offloading within Port San Luis would not cause significant impacts to marine biological resources. The Proposed Project would facilitate continued operation of DCPP at least through the end of the NRC licenses (2021, 2025). No cumulative biological impacts would result from the Proposed Project.

F.4.3 Cultural Resources

Ongoing and future projects listed in Table F-1 could contribute to cumulative impacts on cultural resources. Increased population growth in the project vicinity may exacerbate the potential for disturbance or illicit take of cultural resources. However, with proper environmental planning and appropriate mitigation, the potential for adverse impacts would be minimized. With the exception of actions completed under statutory or categorical exemptions, specific project actions in San Luis Obispo County would come under CEQA or NEPA review (or both), which requires assessment and mitigation to potential cultural resources impacts. The Proposed Project would not cause any significant impacts to cultural resources because project activities would occur on previously developed (paved) land. Therefore, there would be no cumulatively considerable impacts on cultural resources resulting from the Proposed Project.

F.4.4 Geology, Soils, and Paleontology

Considering all proposed or pending development in the project area, cumulative geologic impacts consist of potential alteration of the topography, impacts to paleontological resources, and triggering of erosion or slope failures. All of the proposed development in the Port San Luis or Avila Beach areas, and the Proposed Project, would be subject to unstable slope or soil conditions and seismically induced ground failure in the event of an earthquake on the nearby Hosgri fault zone or other nearby capable faults. Construction of the OSG Storage Facility would contribute only a negligible increase to the potential cumulative geologic impacts. Implementation of recommended mitigation measures related to impacts to geology, soils, and paleontology would minimize the cumulative effects of these impacts to less than significant levels. These measures are:

- G-1a: Prevent overloading of unstable ground along transport route;
- G-2a: Protect workers from temporary effects of earthquake shaking;
- G-2b: Prevent casualties caused by falling rocks;
- G-3a: Long Term Seismic Program Update; and
- G-4a: Evaluate slope stability in the vicinity of the OSG Storage Facility site.

F.4.5 Hazardous Materials

The Avila Beach area is experiencing an increase in development as a result of a 3-year remediation project conducted by Unocal to prevent surface hydrocarbon exposure. Since the remediation project has been completed, Avila Beach has continued to rebuild. Development projects in the Avila Beach area are not expected to release hazardous materials, and they would be expected to follow measures to protect the integrity of the remediation efforts in the area. Because the Proposed Project activities occur almost exclusively at DCPP, which is approximately 7 miles northwest of Avila Beach, there is no potential for the Proposed Project to contribute to cumulative adverse hazardous materials impacts in the project vicinity.

Any on-going cleanup and removal of contaminated soil and/or groundwater resulting from other projects would be considered a beneficial impact. Cleanup of contaminated sites related to other projects becomes 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. However, no significant quantities of contaminated soil are expected to be encountered during the Proposed Project timeframe, resulting in a less than significant impact. With implementation of the recommended mitigation measures, the effects of the Proposed Project would not be cumulatively considerable.

F.4.6 Hydrology and Water Quality

Some of the cumulative development projects in the Avila Beach and Port San Luis areas may result in ground disturbance, locally increased runoff due to the increase in impervious surfaces, and the potential for sediment loading and contaminant spills. These potential activities may result in adverse impacts to local drainages and San Luis Obispo Bay. Because DCPP is located approximately 7 miles northeast of the planned cumulative development projects, construction-related impacts of the Proposed Project would be isolated from these hydrological features. The Proposed Project would result in minimal ground disturbance and erosion, as the construction and transportation components of the project would occur on previously paved land. However, there is the potential for accidental release of petroleum products, which could adversely impact the Diablo Creek watershed and the Pacific Ocean.

As described in Section D.7.3, impacts of the Proposed Project to hydrology and water quality would not be considered significant. Each of the projects listed in Table F-1 would be subject to NPDES stormwater regulations, which mandate a stormwater pollution prevention plan to mitigate any potential impacts to hydrology and water quality. These measures coupled with the isolated location of DCPP and proper implementation of mitigation measures (H-1a, H-1b, and H-2a) diminish any potential for the Proposed Project's effects on hydrology and water quality to be cumulatively considerable.

F.4.7 Land Use, Recreation, and Agriculture

The Proposed Project's impacts to land use, recreation, and agriculture would be temporary and localized, resulting from disruptions associated with transport activities or the increased recreation needs of a temporarily larger workforce required to complete the Proposed Project. The Proposed Project would not contribute to long-term cumulative impacts to land use, recreation, or agriculture as continued operation of DCPP would be the same as prior to the project, with the exception of having the OSG Storage Facility onsite. The majority of the projects listed in Table F-1, which are representative of the ongoing level of development in the region, would be located in areas away from the Proposed Project's area of impact and would not affect the same lands. As the only permanent structure associated with the Proposed Project is the OSG Storage Facility, which would be built on previously disturbed land, the Proposed Project would not contribute cumulatively with the projects listed in Table F-1 toward a loss of recreation or agricultural lands. Consequently, the Proposed Project would not result in cumulative impacts to land use, recreation, or agriculture.

F.4.8 Noise and Vibration

Future and proposed construction projects in close temporal and spatial proximity to the Proposed Project could have cumulative noise impacts within the Project area. Noise impacts of the Proposed Project would result from additional trucks on the roads and the use of heavy machinery in the Port San Luis and Avila Beach areas during RSG offloading and transport, which would occur over a period of four days for each delivery. There is a possibility for a variety of projects, mainly roadway improvements or local development, to occur at the same time as RSG offloading and transport. While noise would temporarily increase during offloading and transport of the steam generators, there would be no cumulative construction noise impacts from the Proposed Project, because all Project-related construction would occur at the DCPP site. Due to the relatively isolated location of DCPP, construction noise from the Proposed Project could combine with the construction noise from roadway improvement or local development projects to locally increase noise levels. However, this increase would only be temporary for the time of project overlap, which would be a maximum of about fifteen months at any given location.

F.4.9 Public Services and Utilities

Some of the development projects listed in Table F-1 would increase local population growth and may result in increased demands on public services and utilities. The demands made by the Proposed Project on public services and utilities during construction would be within the capacities and capabilities of existing service and utility providers. After the Proposed Project returns to service, the demand for utilities would return to pre-project conditions at DCPP. As described in Section D.12, System & Transportation Safety, updates to emergency plans could identify an increased need of special equipment for public service providers and would call for the procurement of that equipment. Other additional public service demands are not anticipated. Section D.10 provides a more detailed description of the effects of the Proposed Project on public services and utilities. While the Proposed Project could require additional specialized equipment for public service providers, this specialized equipment is unlikely to be necessary for other projects listed in Table F-1. Overall, the Proposed Project's contribution to the demand on public services and utilities would not be cumulatively considerable.

F.4.10 Socioeconomics

The Proposed Project, along with other proposed or future projects in the Proposed Project vicinity could result in cumulative impacts to socioeconomics if they were to significantly contribute to a cumulative, substantial population growth, demand for housing, or displacement of people or housing.

Residential development projects planned in the area would directly increase local population growth. However, the Proposed Project would have no significant impact on population growth in the area. The contribution of the Proposed Project to population growth, demand for housing or displacement of people or housing would not be cumulatively considerable, as no additional permanent workers would be brought into the area.

F.4.11 System and Transportation Safety

While not a specific CEQA category, System and Transportation Safety should be considered because of the potentially detrimental impacts resulting from accidents on other environmental issue areas. Barges that would deliver the RSGs to Port San Luis may pose a temporary navigational hazard within Port San Luis, especially if other projects are utilizing Port San Luis concurrently. With implementation of the mitigation measures (S-1a, Barge Navigational Safety Plan) recommended in this EIR, effects of the Proposed Project on transportation safety would not be cumulatively considerable.

F.4.12 Traffic and Circulation

Future and proposed construction projects in close proximity to the Proposed Project could have cumulative traffic and circulation impacts within the Study Area, depending on location, intensity, and scheduling. Construction to widen the San Luis Obispo Creek Bridge may potentially intensify cumulative traffic impacts on Avila Beach Drive, which would be used by temporary DCPP workers during the Proposed Project. Widening of the San Luis Obispo Creek Bridge is tentatively planned to be finished in 2006 or the beginning of 2007, and therefore, should not interfere with the Proposed Project.

Construction of the cumulative projects and a forecasted increase in regional population growth could further exacerbate the short-term potentially significant circulation and traffic impacts associated with construction of the Proposed Project (Impacts T-1, T-2, and T-3). However, the mitigation measures recommended for the Proposed Project would reduce cumulative traffic and circulation impacts to a less than significant level. These measures are:

- T-2a: Avoid travel during peak season on Avila Beach Drive;
- T-2b: Avoid travel during peak time on Highway 101;
- T-3a: Develop a trip reduction program; and
- T-3b: Avoid travel during peak season on Avila Beach Drive and San Luis Bay Drive.

F.4.13 Visual Resources

Cumulative impacts to visual resources would occur where project facilities or actions would be viewed in combination with other past, present, or foreseeable future developments. The significance of cumulative visual impacts would depend on: the degree to which the viewshed is altered; the degree to which visibility of scenic resources is impaired due to either view obstruction or direct impacts to scenic resource features; and the degree to which visual contrast or dominance is increased, due to visibility of the project in combination with other foreseeable projects.

The principal visual impacts of the Proposed Project would be short-term and temporary during the period when the RSGs are being offloaded at Port San Luis and transported to DCPP. These short-term impacts would not be experienced in combination with other currently foreseeable cumulative projects. Under the Proposed Project, the temporary and permanent structures that would be erected at DCPP would not be visible from the viewshed of Avila Beach and Port San Luis projects listed in Table F-1. Therefore, the Proposed Project would not contribute to cumulative visual impacts.

F.5 References

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