

D.10 Public Services and Utilities

This section addresses the environmental setting and impacts to public services and utilities resulting from the Proposed Project and alternatives. This analysis focuses on the capabilities and capacities of existing public services and utilities and examines how the Proposed Project would affect these systems.

D.10.1 Environmental Setting for the Proposed Project

This public service and utility system analysis examines the utility and service provisions for the site of the Proposed Project, including offloading areas and transportation routes. Because government agencies have recently categorized data pertaining to utility systems (including their location, capacity, and type) as sensitive critical infrastructure information, public access to this data is generally restricted for security reasons. As such, only information that is readily and publicly accessible is presented in this section. While additional data would provide a better picture of the existing utilities in the project area, in large part, this level of detail is unnecessary for the level of analysis needed to determine the impacts generated by the Proposed Project.

The Proposed Project area is served by public service and utility systems in San Luis Obispo County (including Port San Luis and Avila Beach) and within the DCPD site. Although project activities would not occur in the other communities around the project area, temporary workers associated with the project may find temporary accommodations in neighboring communities such as the City of San Luis Obispo, the City of Morro Bay, the City of Pismo Beach (which also includes the unincorporated community of Shell Beach), and the community of Los Osos. See Section D.11 for further details on housing of workers.

A variety of local purveyors in these areas provide and maintain utility and service system facilities associated with electricity, water, stormwater and wastewater, solid waste, and natural gas. Municipally operated lines provide sewer services in each of the jurisdictions. Similarly, stormwater flows are conveyed by the flood control facilities of each respective jurisdiction. Underground Service Alert (also known as USA or “Dig Alert”), a non-profit organization supported by utility firms, provides specific information on the location of underground utilities to contractors upon request, prior to construction. Table D.10-1 summarizes the public services and utilities providers serving the Study Area.

Water service is provided to jurisdictions in the project area by a variety of water purveyors generally through the public works or utilities departments of the jurisdictions shown in Table D.10-1. Potable water for DCPD is provided by three groundwater wells and an onsite reverse osmosis (RO) seawater plant. DCPD’s current demand for potable water is 470 acre-feet per year, although the total supply available through the existing onsite systems is 1,370 acre-feet per year. Potable water is not used for plant cooling.

Sewer services, stormwater, and wastewater conveyance facilities are supplied by each jurisdiction as listed in Table D.10-1. DCPD’s wastewater is treated onsite in a three-step treatment program licensed by the Regional Water Quality Control Board (RWQCB) for domestic wastewater. The treatment plant is designed for a normal operating flow of 40,000 gallons/day, but on average receives a flow rate of approximately 15,000 gallons/day. Additionally, each jurisdiction provides waste management services through regional landfills and permitted treatment and disposal facilities. DCPD is served by South County Sanitation Service. Table D.10-2 lists the total and remaining capacities of solid waste facilities serving the project area.

DCPP Steam Generator Replacement Project
D.10 PUBLIC SERVICES AND UTILITIES

Table D.10-1. Utility and Service Providers by Jurisdiction

Jurisdiction	Utility or Service Provider
County of San Luis Obispo	Natural Gas & Electricity - PG&E Water - County of San Luis Obispo Public Works Department Wastewater - County of San Luis Obispo Public Works Department Fire protection - California Department of Forestry and Fire Protection (CDF)/San Luis Obispo County Fire Department Police protection - San Luis Obispo County Sheriff's Department Telecommunications - SBC Hospitals - French Hospital Medical Center, Arroyo Grande Community Hospital, General Hospital , Sierra Vista Regional Medical Center, Twin Cities Community Hospital Solid Waste - Mid-State Solid Waste & Recycling, Mission Country Disposal, Paso Robles Country Waste, San Luis Garbage, San Miguel Garbage, South County Sanitary Services
Avila Beach	Natural Gas & Electricity - PG&E Water - County of San Luis Obispo Public Works Department Wastewater - County of San Luis Obispo Public Works Department Fire protection - CDF/San Luis Obispo County Fire Department Police protection - San Luis Obispo County Sheriff's Department Telecommunications - SBC Hospitals - French Hospital Medical Center, Arroyo Grande Community Hospital, General Hospital , Sierra Vista Regional Medical Center, Twin Cities Community Hospital Solid Waste - South County Sanitary Services
Los Osos	Natural Gas & Electricity - PG&E Water - County of San Luis Obispo Public Works Department Wastewater - County of San Luis Obispo Public Works Department Fire protection - CDF/San Luis Obispo County Fire Department Police protection - San Luis Obispo County Sheriff's Department Telecommunications - SBC Hospitals - French Hospital Medical Center, Arroyo Grande Community Hospital, General Hospital , Sierra Vista Regional Medical Center, Twin Cities Community Hospital Solid Waste - Mission Country Disposal
Morro Bay	Natural Gas & Electricity - PG&E Water - Morro Bay Water Services Wastewater - Morro Bay Wastewater Collection Division Fire protection - Morro Bay Fire Department Police protection - Morro Bay Police Department Telecommunications - SBC Hospitals - French Hospital Medical Center, Arroyo Grande Community Hospital, General Hospital , Sierra Vista Regional Medical Center, Twin Cities Community Hospital Solid Waste - Morro Bay Garbage
Pismo Beach	Natural Gas & Electricity - PG&E Water - City of Pismo Beach Public Works Department Wastewater - City of Pismo Beach Public Works Department Fire protection - CDF/Pismo Beach Fire Department Police protection - Pismo Beach Police Department Telecommunications - SBC Hospitals - French Hospital Medical Center, Arroyo Grande Community Hospital, General Hospital , Sierra Vista Regional Medical Center, Twin Cities Community Hospital Solid Waste - South County Sanitary Services
San Luis Obispo	Natural Gas & Electricity - PG&E Water - City of San Luis Obispo Utilities Department Wastewater - City of San Luis Obispo Utilities Department Fire protection - San Luis Obispo City Fire Department Police protection - San Luis Obispo Police Department Telecommunications - SBC Hospitals - French Hospital Medical Center, Arroyo Grande Community Hospital, General Hospital , Sierra Vista Regional Medical Center, Twin Cities Community Hospital Solid Waste - San Luis Garbage

Source: CDF/San Luis Obispo County Fire Department, 2004b; Central Coast Tourist, 2004; City of Morro Bay Fire Department, 2004; City of Pismo Beach Police Department, 2004; City of San Luis Obispo Fire Department, 2004; City of San Luis Obispo Police Department, 2004; City of San Luis Obispo Utilities Department, 2004; Morro Bay Police Department, 2004; San Luis Obispo County Franchise Administration Program, 2004; San Luis Obispo County Public Works Department, 2004; San Luis Obispo County Sheriff's Department, 2004.

Table D.10-2. Solid Waste Capacity

Facility Name	Total Capacity (cubic yards)	Remaining Capacity (cubic yards)	Remaining Capacity	Maximum Throughput (tons per day)
Cold Canyon Landfill	10,900,000	3,800,000	34.9%	1,200
Chicago Grade Landfill	2,700,000	2,692,376	99.7%	500
Paso Robles Landfill	6,495,000	4,533,216	69.8%	250

Source: CIWMB, 2004; San Luis Obispo County Franchise Administration Program, 2004.

Fire and police protection for all DCPD operations are made available jointly by PG&E and the local public service providers. Table D.10-1, above, lists the public service providers for each jurisdiction in the areas around the Proposed Project. Significant public service demands would be placed on local emergency service providers in the event of a major accident at DCPD.

The DCPD Fire Department is the first responder to fire and medical emergencies within the site, with the CDF/San Luis Obispo County Fire Department providing backup fire protection service if requested. The nearest CDF/San Luis Obispo County Fire Department crew is based at the Avila Valley Fire Station, approximately five minutes from the DCPD Access Gate. The DCPD Fire Department is equipped with one fire engine and four to five industrial firefighters/Emergency Medical Technicians (EMTs) on duty 24 hours a day. In addition to the firefighters/EMTs, DCPD also employs one physician's assistant or nurse practitioner that is available 40 hours a week (PG&E, 2004c). All fire stations in the County would respond as needed in accordance with the California Master Mutual Aid Agreement, Section 8561 of the California Government Code. CDF/San Luis Obispo County has a total of 27 fire engines (with eight reserves), 176 full-time personnel, and 245 paid-call firefighters available from the County (CDF/San Luis Obispo County, 2004).

Currently, police protection and security for DCPD are provided by local jurisdictions and by DCPD security. The number of security personnel at DCPD may not be released because of security safeguards; however, DCPD has sufficient security personnel to meet all NRC-mandated security requirements (PG&E, 2004c). Due to the sensitive security nature of the Proposed Project site, specifics of these requirements are not publicly accessible. NRC responsibilities include regulating licensees' security programs and contingency plans for dealing with threats, thefts, and sabotage (see Section A.4.5, DCPD Security, for general NRC-mandated security requirements, including those imposed after September 11, 2001). The San Luis Obispo County Sheriff's Department, California Highway Patrol, U.S. Coast Guard, and other police stations within the County also serve the area (San Luis Obispo County Sheriff's Department, 2004; PG&E, 2004c).

Additionally, DCPD and State and local governments have developed a number of fire suppression plans and procedures and emergency response plans including the following:

- DCPD Fire Protection Program;
- DCPD Fire Loss Prevention Program;
- DCPD Fire System Impairment Procedure;
- DCPD Control of Combustibles Procedure;
- DCPD Wildlands Fuel Management Plan;
- DCPD Emergency Response Plan State of California Nuclear Power Plant Emergency Response Plan; and
- San Luis Obispo County/Cities Nuclear Power Plant Emergency Response Plan.

With the Proposed Project potentially landing the RSGs at Port San Luis, the Port San Luis Harbor District is another service provider that would be affected by the project. In addition to providing restaurants, markets, recreation and boating suppliers, and public and commercial recreation opportunities, the Harbor District also provides a drydock, boatyard, mooring, water taxi services, boat storage, and a uniformed harbor patrol. The Harbor District employs a staff of approximately 25 to provide services and maintain the Port (Port San Luis Harbor District, 2005). SLO County Office of Emergency Services Emergency Response Plan has assigned Harbor District employees to the role of emergency workers who would respond to an emergency event at DCPP (Port San Luis Harbor District, 2003)

D.10.2 Applicable Regulations, Plans, and Standards

The following section presents the federal, State, regional, and local utility and service system regulations, plans, and standards that are directly applicable to the Proposed Project and its alternatives.

Federal and State Standards

Protection of Underground Infrastructure

The responsibilities of utility operators working in the vicinity of utilities are detailed in Section 1, Chapter 3.1 “Protection of Underground Infrastructure,” Article 2 of California Government Code 4216-4216.9. This law requires that an excavator must contact a regional notification center at least two days prior to excavation of any subsurface installation. Any utility provider seeking to begin a project that may damage underground infrastructure can call Underground Service Alert, the regional notification center. Underground Service Alert will notify the utilities that may have buried lines within 1,000 feet of the project. Representatives of the utilities are required to mark the specific location of their facilities within the work area prior to the start of project activities in the area.

Fire and Emergency Plans, Procedures, and Programs

A number of State and federally approved plans, procedures, and programs describe the manner in which government agencies and the Applicant would respond to an emergency at DCPP. The Applicant has several emergency and fire plans and programs that would be implemented as a part of the Proposed Project, including the Stranded Plant Plan, Wildlands Fuel Management Plan, Fire Danger Precautions in Hazardous Fire Areas procedures, Control of Flammable and Combustible Materials procedures, Fire System Impairment procedures, Fire Loss Prevention procedures, the Fire Prevention Program, and the Emergency Response Plan. These plans and procedures are implemented under the provisions of NRC regulations, 10 CFR 50, Appendix E¹ regarding emergency planning and preparedness, and they are reviewed and approved by FEMA and NRC (NRC, 2003).

¹ Appendix E to Part 50 – Emergency Planning and Preparedness for Production and Utilization Facilities.

Each applicant for a construction permit is required by § 50.34(a) to include in the preliminary safety analysis report a discussion of preliminary plans for coping with emergencies. Each applicant for an operating license is required by § 50.34(b) to include in the final safety analysis report plans for coping with emergencies.

Appendix E establishes minimum requirements for emergency plans for use in attaining an acceptable state of emergency preparedness.

Available: <http://www.nrc.gov/reading-rm/doc-collections/cfr/part050/part050-app.html>.

Emergency warning procedures are partially established by State law. As a part of the State Nuclear Power Plant Emergency Plan under the Office of Emergency Services (OES) 1998 State of California Emergency Plan, the Diablo Canyon Power Plant is required to contact the San Luis Obispo County Sheriff's Department, the Santa Barbara County Communications Dispatch Center, and the State Warning Center in Sacramento should an emergency develop at the plant. The State Warning Center in turn notifies FEMA, OES, and the Department of Health Services. Additionally, State Mutual Aid Agreements have been implemented to ensure that sufficient emergency aid is made available in case of an emergency.

Local Ordinances and Policies

The County of San Luis Obispo Coastal Plan Policies, Coastal Zone Land Use Ordinance, and San Luis Bay Area Plan have a variety of policies and ordinances related to utilities and public service systems. These documents generally describe the County's provision and management of public service systems, define fire areas, and describe requirements for fire safety plans and fire safety standards. Although the descriptions and definitions of utilities and service systems in these documents do not yet directly address all issues that may arise with the Proposed Project, any land use permit approval issued by the County would be subject to the provisions of the fire safety plans and fire safety standards.

D.10.3 Environmental Impacts and Mitigation Measures for the Proposed Project

D.10.3.1 Definition and Use of Significance Criteria

Significant impacts to public services and utilities would occur if any of the following were to occur:

- The Proposed Project would disrupt the existing utility systems or would cause a collocation accident;
- The Proposed Project would preclude emergency access or access to public facilities, or would increase the need for police, fire, or school services such that specific new facilities need to be constructed to serve the Project; or
- The Proposed Project would require water, or would generate solid waste or wastewater, that exceeds the ability of existing facilities to accommodate the new capacities and would require the expansion or construction of new facilities.

D.10.3.2 Replacement Steam Generator Transport

Three basic types of impacts for public services and utilities have been identified for the Proposed Project based on the significance criteria listed above.

Impact U-1: Project would disrupt utility systems

The size and weight of the combined RSGs and transporter being offloaded at Port San Luis and moving along Avila Beach Drive and the DCPP Access Road could potentially result in disruptions to utility systems (e.g., domestic water or natural gas pipelines, telecommunications lines, etc.). As described in Section B.3.1.3, Replacement Steam Generator Transport on Land, the total weight of the RSGs and transporter is expected to be approximately 500 tons. The width of the transporter is expected to be approximately 11 to 16 feet, and the total length would be approximately 68 feet, although dimensions of the transporter would not be known until after a final transport vendor is selected.

As described in Section B.3.1.3, the DCPP Access Road and the paved roads at the facility were all designed during original construction to support heavy equipment and loads, such as the OSGs and other equipment used at the power plant. According to the Applicant, the transport contractor likely would perform a complete load path analysis prior to movement of the RSGs in Port San Luis parking lot and the section of Avila Beach Drive between the Port and DCPP Access Road (PG&E, 2004b). With this analysis, the transportation equipment provided by the contractor should be capable of spreading the load over a larger area, thereby decreasing the axle loads to prevent damage to subsurface structures (PG&E, 2004a). The transportation route would not be blocked or obstructed by any overhead lines or aboveground utilities.

In addition, for Impact G-1, extremely heavy loads could mobilize unstable ground along the RSG transport route (Section D.5.3.2). Mitigation Measure G-1a (Prevent overload of unstable ground along transport route) would require review and/or commissioning of studies to establish that the load-bearing capacity of soils and geologic features along the transport route would support the loads. Implementation of this mitigation measure would reduce the potential for impacts to buried utilities to a less than significant level (Class II).

Impact U-2: Project would impede emergency access

Fire protection or other emergency service providers could be required at a site along the transportation route in the event of an accident or emergency, or could require access to the DCPP facility along the DCPP Access Road, or access to Port San Luis Harbor along Avila Beach Drive. Although the potential for this occurrence during transport activities is low, portions of the DCPP Access Road could become temporarily blocked by the transporter, and the transporter could inhibit access to DCPP or portions of the DCPP Access Road. The route planned for the transporter complies with the 2004 CDF/San Luis Obispo County Fire Department Road Standards. Roads need to be greater than 20 feet wide to accommodate CDF/San Luis Obispo County Fire Department equipment transportation (CDF/San Luis Obispo County Fire Department, 2004a). The transporter moving down Avila Beach Drive between DCPP Access Road and Port San Luis would take up more than a full lane of traffic, which could restrict through-access, but the road and shoulder are currently wide enough to allow access of emergency vehicles even with the transporter on the road. The DCPP Access Road is approximately 25 feet wide with no shoulder, and the transporter used to carry the RSGs would be between 11 and 16 feet wide. Although most portions of the DCPP Access Road would be wide enough to allow emergency access, at two locations along Diablo Canyon Road the transporter would potentially entirely block the road as it maneuvers around the sharp bends.

As part of the Proposed Project, the Applicant would modify its existing Stranded Plant Plan, which is part of the existing DCPP Emergency Response Plan, to ensure that any situations that might occur during a lapse in emergency access to the plant could be managed by onsite resources (PG&E, 2004b). Additionally, the transport contractor would be required to submit an access plan prior to the initiation of any transportation activities in order to maintain emergency access to the greatest extent feasible and have emergency contingencies prepared in case access cannot be maintained (PG&E, 2004b). If access cannot be maintained, however, the access restriction could result in disruption of emergency services, which would be a potentially significant impact. Although potentially significant (Class II), this impact could be reduced to a less than significant level with the implementation of Mitigation Measure U-2a.

Mitigation Measure for Impact U-2, Project would impede emergency access

U-2a Pre-position emergency responders during road blockages. The access plan submitted to PG&E by the transportation contractor shall include provisions for the pre-positioning of emergency vehicles and personnel prepared to respond to an emergency ~~at DCP~~ if access cannot be maintained along the transportation route for the RSGs. The Applicant shall coordinate with County emergency service providers and the Port San Luis Harbor District to determine the appropriate resources to be pre-positioned in case of an emergency. A copy of the access plan shall be provided to the CPUC for review and approval prior to any transport activities.

Impact U-3: Project's utility and public service demands would exceed the capabilities of existing service providers

During transport of the RSGs, utility and public service requirements would be relatively minor due to the short duration of activity and the limited number of personnel required for transportation activities. As described in the Project Description in Section B.4.2 (Equipment and Personnel Requirements), RSG transportation activities are expected to take between two and four days, once between September and November of 2007 and once between September and November of 2008, at night, and at the end of peak tourist season during each year of RSG delivery and would require approximately 30 workers. Port San Luis Harbor Patrol and Facilities Department staff would also assist in the RSG delivery and offloading activities. As the transport would occur on paved roads, water is not expected to be necessary for dust suppression during transport activities, but drinking water would be required for personnel. Light towers and other devices requiring electricity during offloading activities would be powered by diesel- or gasoline-powered generators. Solid waste and wastewater generated under this portion of the Proposed Project would be limited to that generated by project personnel and would be accommodated by DCP and Port San Luis Harbor facilities or chemical toilets. As addressed in Section D.11, Socioeconomics, transportation of the RSGs would not result in a permanent increase to the local population. While some workers may temporarily relocate to the area, it is not expected that an additional 30 people would increase demands on schools or disrupt fire or police protection. Due to the short time period required for offloading activities, the scheduling of activities at the end of peak tourist season, and only 30 additional temporary DCP employees required for transportation, demands on Port San Luis Harbor District staff and facilities could be substantial, but would be less than a busy period during the summer months of the peak tourist season. It is not expected that the Proposed Project activities would require Harbor District services beyond what the District is capable to provide. No construction of temporary or permanent structures would occur under this phase, which could increase the demand for fire protection, law enforcement, or other public services. Any impacts resulting from demands on utility and public service systems could be adverse, but would be less than significant (Class III).

D.10.3.3 Replacement Steam Generator Staging and Preparation

Impact U-1: Disruption of Utility Systems

Staging and preparation activities would occur within the DCP site on the terrace south of the DCP Access Road or adjacent to the containment facilities. Although most activities associated with staging and preparation (e.g., processing RSG personnel, training, and management activities) would not disrupt utility systems, construction of the temporary structures required for this phase could potentially result in utility system impacts (as described in Impact U-1). As described in Section B.3.2, a number of temporary structures would be constructed for use in this phase of the Proposed Project, including a RSG storage facility, temporary warehouse and laydown area, personnel training and mock-up facilities, office

and subcontractor facilities, a containment access facility, and possibly a decontamination facility. The containment access and decontamination facilities would be constructed adjacent to the power plant, while the other temporary facilities would be constructed south of the DCPP Access Road. Although no major excavation is planned for construction of these facilities, trenching and excavation to run utilities to these temporary buildings could accidentally damage other subsurface utilities such as telecommunications lines or buried pipelines on the DCPP site. Damage to these systems could result in telecommunications, water, or gas outages for users onsite. As described above in Section D.10.2, the Applicant is required by State law to manually probe for existing utilities prior to excavation. Compliance with State law would ensure that subsurface utility disruption impacts would be less than significant (Class III).

Most temporary structures would be at least 75 feet or more from any overhead lines. The containment access facility (CAF), however, on the north side of the power plant near the Unit 1 fuel handling building, would be partially beneath high-voltage power lines. The CAF would be a maximum of 30 feet tall, less than a third the height of the power lines above it. It is not anticipated that activities associated with the construction of this facility would damage or disrupt the power lines overhead. Impacts would be less than significant (Class III).

Impact U-2: Obstruction of Emergency Access

Fire protection or other emergency services could be required at staging and preparation sites in the event of an accident (similar to Impact U-2). Because staging and preparation activities would comply with the Applicant's existing safety procedures, programs, and plans, as described above in Section D.10.2, the likelihood of an accident requiring such a response would be low. Access roads to the temporary facilities used in staging and preparation would comply with CDF/San Luis Obispo County Fire Department Road Standards. With the implementation of these procedures and programs, staging and preparation is not expected to restrict access to fire, security/police, other emergency services, or any other public service systems. Any impacts resulting from disruptions to public service systems by staging and preparation activities would be less than significant (Class III).

Staging and preparation would require between 100 and 700 temporary workers. Traffic would be substantially increased with these additional workers, but with the implementation of best management practices (BMPs) for traffic and transportation (see Section D.13, Traffic and Circulation for further description of traffic BMPs), it is not anticipated that this increase would be great enough to create conditions which would restrict access to emergency vehicles either within the DCPP site or surrounding communities. It is not expected that the temporary population increase in nearby towns due to the influx of out-of-area workers for the project would disrupt fire or police protection services, or other public services such as schools. Any impacts would be less than significant (Class III).

Impact U-3: Utility and Public Service Demand

The utility and public service requirements for staging and preparation activities on the DCPP site would be within the capacities of DCPP's existing service providers. During construction of the temporary facilities, approximately 15,000 gallons of water per day would be required for dust suppression during trenching and excavation or other earth-moving activities. Other staging and preparation activities would require water for cleaning equipment and drinking water for crews. With over 1.2 million gallons of water per day available to DCPP, these requirements would be well within the capacities of DCPP water supplies. Waste from staging and preparation activities would largely be generated in the form of scrap wood and metal, packing crates and packing material, construction debris, and other general trash. These materials would be disposed of by South County Sanitation and Coastal Roll-Off and deposited at one of the landfills listed

in Table D.10-2. Recyclable materials would be disposed of by R&R Roll-Off and Sims Metal. The Applicant has estimated that during the peak period of 900 workers, the Proposed Project would generate an additional 30 tons of trash per month (PG&E, 2004c). With a maximum of 700 workers during staging and preparation, approximately 23 additional tons of trash would be generated per month. The volume of solid waste generated in this phase would have little effect on the total capacity of local landfills listed in Table D.10-2 which can accommodate approximately 58,500 tons of solid waste per month. Staging and construction preparation activities would not be anticipated to substantially increase stormwater runoff as all new temporary facilities would be placed on existing developed or disturbed land. Any increases in the area of impervious surfaces onsite would be relatively minor. Wastewater and sewage generated by crews could increase between 3,000 and 11,000 gallons per day, which would be well within the DCPP wastewater plant's designed capacity of approximately 40,000 gallons per day (PG&E, 2004a). The remaining sludge would be removed and taken offsite by Speeds, Inc. (PG&E, 2004c). Construction activities, particularly with the implementation of existing safety plans and programs, are not anticipated to include any activities that would exceed the capacities or capabilities of emergency service providers for DCPP. Temporary structures would be built according to all applicable codes and standards, including those requiring appropriate sprinklers, alarms, fire flow, and hydrant systems where necessary. Staging and preparation activities would have a less than significant impact (Class III) on the capabilities and capacities of existing utility and public service providers.

While some of the temporary employees required for staging and preparation would commute from their permanent residences to the project, many workers would stay in temporary accommodations in nearby cities and towns. As discussed in Section D.10, Socioeconomics, it is not anticipated that the temporary population increase associated with staging and preparation would require the addition of any new housing. As workers would be staying in existing accommodations, the existing utilities and public service systems have the capacity to accommodate the demands of this temporary population increase. Due to the temporary nature of the work, it is not anticipated that many, if any, workers would relocate their families and children to the area for the duration of the project. It is not expected that the project would increase the demands on schools in the surrounding area. Although the temporary increase in population would result in a greater demand for fire or police protection services, it is not anticipated that a temporary population increase of 700 or fewer residents would substantially increase demand. Any impacts to utilities or public services due to increased demand from the temporary workers could be adverse, but would be less than significant (Class III).

D.10.3.4 Original Steam Generator Removal, Transport, and Storage

Original Steam Generator Removal, Transportation, and Storage could include a number of activities with the potential to disrupt utility systems, including the removal of a portion of the biological shield wall; the removal, replacement, and installation of new permanent structures, piping, and steam generator appurtenances within the steam generator compartments; and the construction of the OSG Storage Facility. Any pipelines, telecommunications lines, or power lines in or on the section of the biological shield wall or permanent structures to be removed would be shut off and/or redirected for the duration of the activities. Similarly, any utilities to or from the OSGs would be shut off or redirected prior to the disconnection and removal of the OSG. As described above in Section D.10.3.3, excavation and trenching for the installation of utility systems could accidentally damage subsurface utility systems (Impact U-1). However, as described above in Section D.10.3.3, the Applicant is required by State law to contact Underground Service Alert and manually probe for existing utilities prior to excavation. Compliance with State law would ensure that subsurface utility disruption impacts would be less than significant (Impact U-1, Class III).

Construction and operation of the OSG Storage Facility would comply with all applicable codes and regulations, including NRC standards. Due to the location of the OSG Storage Facility outside of the radiological area of the DCPP, access to the construction site, as well as to the completed OSG Storage Facility, would comply with 2004 CDF/San Luis Obispo County Fire Department standards (CDF/San Luis Obispo County Fire Department, 2004a) and with the implementation of the construction access plan and emergency response plan, emergency access during construction would be maintained to the greatest extent feasible.

The potential emergency access and utility service capability impacts for this phase of the project would be very similar to the impacts discussed in Section D.10.3.3. Issues associated with emergency access would be adverse, but less than significant (Impact U-2, Class III) with the implementation of Mitigation Measure U-2a (Pre-position emergency responders during road blockages) DCPP's emergency response plan. In addition, impacts associated with water supply, wastewater generated, utility and public service systems would all be less than significant (Impact U-3, Class III).

D.10.3.5 Replacement Steam Generator Installation

No excavation or ground disturbance activities would occur under the Proposed Project, and therefore no utility disruptions would occur during the RSG installation activities. The potential emergency access and utility service capability impacts for this phase of the project would be very similar to the impacts discussed in Section 10.3.4. Issues associated with emergency access would be less than significant (Impact U-2, Class III) with the implementation of DCPP's emergency response plan Mitigation Measure U-2a. In addition, impacts associated with water supply, wastewater generated, utility and public service systems would all be less than significant (Impact U-3, Class III).

D.10.4 Environmental Impacts and Mitigation Measures for the Alternatives

D.10.4.1 Replacement Steam Generator Offloading Alternative

By delivering the RSGs directly to DCPP by way of the Intake Cove, this alternative would avoid any impacts along DCPP Access Road. The entire transport route from Intake Cove would be on DCPP roads designed and built to accommodate heavy loads. Although the transport contractor would still be required to perform a load path analysis, use of this route would reduce the potential to damage subsurface structures. No overhead lines would block or obstruct this transportation route. Any impacts resulting from utility disruptions (Impact U-1) under this alternative would be less than significant (Class III).

Additionally, by transporting the RSGs from the Intake Cove, public service access (Impact U-2) from outside the DCPP site would be maintained throughout transportation activities, allowing for full emergency access to the DCPP site at all times. This alternative would have less public service impacts than the Proposed Project as a result of having a reduced potential to impede emergency vehicle access to DCPP. Regardless, an access plan would still be required from the transport contractor to maintain emergency access between the Intake Cove and the RSG temporary storage area (Class III).

As this alternative would use the same number of workers and would include the same general activities as described for the Proposed Project, the Intake Cove Alternative would have the same demands on utilities and public services (Impact U-3) as the Proposed Project. Impacts could be adverse, but would be less than significant (Class III).

D.10.4.2 Temporary Staging Area Alternatives

Constructing and preparing each of the temporary staging area (TSA) alternatives would have similar utility and public service impacts as Proposed Project. The number of workers, duration, and types of activities would be the same as described for the Proposed Project. Trenching and excavation could accidentally damage or disrupt utilities (Impact U-1), but compliance with State law would ensure that subsurface utility disruption impacts would be less than significant (Class III). Implementation of existing safety procedures, plans, and programs and the use of traffic BMPs would ensure that disruptions to public services (Impact U-2), both within the DCPD site and in surrounding communities would result in less than significant impacts (Class III). Impacts to the capacities and capabilities of utility and public service providers would also be the same as described for the Proposed Project. Utility demands would be well within the capacities of DCPD supplies and service providers, and compliance with existing safety measures would ensure that demands on public services for DCPD are within the capabilities of those services. These impacts would be less than significant (Class III). Impacts to local communities due to temporary increases in population growth from the influx of out-of-area workers would also be the same as the Proposed Project and could be adverse, but would be less than significant (Class III).

D.10.4.3 Original Steam Generator Storage Facility Location Alternatives

Construction and use of the OSG Storage Facility at each alternative location would have largely the same utility and public service impacts as described for Proposed Project. Trenching and excavation could accidentally damage or disrupt utilities (Impact U-1), but compliance with State law would ensure that subsurface utility disruption impacts would be less than significant (Class III). As with the Proposed Project, compliance with existing safety measures would result in less than significant impacts from the disruption of overhead lines (Class III). Public service systems (Impact U-2) could also be potentially disrupted if construction equipment blocks access routes resulting in potentially significant impacts (Class III). Implementation of DCPP's emergency response plan Mitigation Measure U-2a would reduce these impacts to a less than significant level. Impacts resulting from utility or public service demands exceeding the capacities of DCPD's providers (Impact U-3) would also be the same as for the Proposed Project (Class III).

D.10.4.4 Original Steam Generator Offsite Disposal Alternative

Under this alternative, the OSGs would be transported offsite via barge to a licensed low-level radioactive waste disposal facility. The OSGs would be transported via barge from either the DCPD Intake Cove or Port San Luis directly to the disposal facility, or to a transfer point where they would be shifted to a different mode of transportation such as railway for ultimate delivery to the facility. Impacts associated with this alternative would be of a similar type as described for the Proposed Project during the offloading phase (see Section D.10.3.2). During OSG transport, the OSG transport equipment could impede emergency access (Impact U-2), which would warrant implementation of Mitigation Measure U-2a to avoid a potentially significant impact (Class II).

D.10.5 Environmental Impacts of the No Project Alternative

The No Project Alternative would allow DCPD to continue operating until approximately 2013 or 2014, at which time it would be shutdown. Shutdown of DCPD would decrease the use of public services and utility systems in the area, including provision of electricity, natural gas, supplemental police and fire protection, and solid waste removal.

Under the No Project Alternative, new generation and/or transmission facilities would be required in San Luis Obispo County or other parts of Northern California or the Southern Central Valley to provide electricity and transmission capacity lost by the closure of DCPP. While these facilities would be required to compensate for the lost electrical generation of DCPP, the location and development schedules of these new facilities cannot be predicted.

Construction of these replacement facilities would require a few hundred workers for each facility and would require substantial construction activities for new power plants as well as transmission lines. Construction workers would likely come from the surrounding areas, so any impacts of temporary population growth on utility and public service demands would be minimal. Substantial amounts of excavation and trenching could be required for the construction of replacement power plants and installation of transmission lines. While this could potentially result in the damage or disruption of subsurface utilities, compliance with State law and mitigation measures such as the notification of utility users prior to planned outages would ensure that impacts would be less than significant. Construction activities could also result in access restrictions for emergency vehicles, but potential public service disruption impacts could be mitigated to less than significant levels with the implementation of traffic access and control plans to ensure emergency access is maintained.

Operation of the replacement facilities would have little demand on public services and utilities. Power generation facilities would create some demand for public services, but as many of the employees of these facilities would be drawn from the local areas, new demands on public services should not be substantial. New power plants could, however, require substantial water supplies for cooling. This potential impact could be mitigated through the use of recycled water. Solid waste generated by natural gas-fired power plants would likely have a relatively minor impact on nearby landfills. New power plants would have to be located in areas with wastewater and stormwater facilities able to accommodate flows generated from the plant and would need to be designed with these factors in mind.

Alternative energy and renewable technologies could be used to make up some of the replacement generation. Wind power, geothermal power, and biomass power are all feasible means of alternative generating strategies, and San Luis Obispo County is already utilizing geothermal resources. Construction and operation of these facilities would have similar impacts on utilities and public services as traditional power generation, although the requirements for water supplies and demands placed on wastewater and stormwater facilities during operation would be reduced, and in the case of water demand, by a substantial amount.

D.10.6 Mitigation Monitoring, Compliance, and Reporting Table

Table D.10-3 shows the mitigation monitoring, compliance, and reporting program for Public Services and Utilities.

Table D.10-3. Mitigation Monitoring Program – Public Services and Utilities

IMPACT U-1	Project would disrupt utility systems (Class II)
MITIGATION MEASURE	Implement Mitigation Measure G-1a (Prevent overloading of unstable ground along transport route).
Location	As in Mitigation Measure G-1a (see Table D.5-2)
Monitoring / Reporting Action	As in Mitigation Measure G-1a (see Table D.5-2)
Effectiveness Criteria	As in Mitigation Measure G-1a (see Table D.5-2)
Responsible Agency	As in Mitigation Measure G-1a (see Table D.5-2)
Timing	As in Mitigation Measure G-1a (see Table D.5-2)
IMPACT U-2	Project would impede emergency access (Class II)
MITIGATION MEASURE	U-2a: Pre-position emergency responders during road blockages. The access plan submitted to PG&E by the transportation contractor shall include provisions for the pre-positioning of emergency vehicles and personnel prepared to respond to an emergency at DCPP if access cannot be maintained along the transportation route for the RSGs. The Applicant shall coordinate with County emergency service providers <u>and the Port San Luis Harbor District</u> to determine the appropriate resources to be pre-positioned in case of an emergency. A copy of the access plan shall be provided to the CPUC for review and approval prior to any transport activities.
Location	Along RSG and OSG transportation routes
Monitoring / Reporting Action	Review of transportation contractor access plan and monitoring of transport activities by CPUC and safety monitor
Effectiveness Criteria	Appropriate placement of emergency resources with access to DCPP if emergency access cannot be maintained
Responsible Agency	CPUC, CDF/San Luis Obispo County Fire Department, <u>Port San Luis Harbor District</u>
Timing	Prior to and during transport activities

D.10.7 References

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