



US Army Corps
of Engineers

Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Public Notice

Public Notice Number: 200100710

Date: July 1, 2003

Comments Due: July 31, 2003

In reply, please refer to the Public Notice Number

TO WHOM IT MAY CONCERN:

SUBJECT: Application for a Department of the Army permit under authority of Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors act, to construct a gas supply pipeline under a navigable waterway and to discharge dredged or fill material into waters of the United States, including wetlands, (waters) for the construction of the Cosumnes Power Plant project, as shown in the attached drawings.

APPLICANT: Colin Taylor, Sacramento Municipal Utilities District (SMUD), 6201 S Street, Sacramento California 95817-1818

LOCATION: The plant site is located in Sections 29 and 32, Township 6 North, Range 8 East, and the pipeline extends from the plant site to Section 20, Township 7 North, Range 5 East, MDB&M, in Sacramento County, California. See Figures 1 through 5 for the proposed plant site and pipeline location.

PROJECT DESCRIPTION: SMUD is proposing to construct the Cosumnes Power Plant (CPP) project, a natural gas-fired generating facility on a 30-acre parcel within their 2,480-acre property where the Rancho Seco (RS) nuclear power plant is located. Other project features include; a 0.2-mile water supply pipeline from existing RS pump station, a 0.3-mile overhead transmission line to existing RS 230 kV switchyard, 0.62-mile access road from eastern end of Clay East Road, 26-mile natural gas supply pipeline from Carlson Cogen Facility, and a 20-acre laydown area immediately south of the proposed CPP site. Figure 15 depicts the general appearance of the site after construction. See Figures 2 through 5 for a map index of the pipeline and Figures 6 through 8 for detailed drawings of the plant site. Please note, indexed drawings for the pipeline may be viewed or downloaded through our web-site at the address below.

The CCP site and laydown area would result in the permanent loss of approximately 1.3 acres of waters. Additionally, the pipeline and CPP portion of this project would temporarily impact approximately 3.0 acres of waters, 1.8 and 1.2 acres of waters respectively. For a detailed list of impacts, see the attached itemized table (Figures 16 through 19).

The proposed power plant would be a 1,000-megawatt (MW) natural gas-fired combined cycle electric generating facility. SMUD is proposing to build the project in two 500 MW phases, with the first phase commencing construction in 2003 and commercial operation in 2005. SMUD will decide in 2003 whether to proceed with Phase 2, or defer construction of Phase 2 to a later date. The following description is for both Phases of the power plant. The power plant would consist of four General Electric 7FA combustion turbine generators equipped with dry low nitrogen oxide combustors, four heat recovery steam generators, two condensing steam turbine generators, deaerating surface condensers, two 9-cell mechanical-draft evaporative cooling towers, and a zero-liquid discharge system.

A construction road would also be built along the east side of Rancho Seco Plant (Figure 9) to allow construction workers and equipment to access the CPP site. Vehicles would be brought to the CPP site by traveling east along Twin Cities Road, then turning south into the joint entrance to Rancho Seco Plant and Rancho Seco Park. Once past the park entrance, vehicles would then turn south and follow the proposed road to Clay East Road to access the CPP site. The road would be 24 feet wide (two lanes) and composed of asphaltic concrete on a raised gravel base, with drainages to accommodate naturally occurring seasonal flows.

Natural gas for Phase 1 of the project would be supplied to the project site by extending a natural gas pipeline 26 miles that would originate at the Carson Ice-Gen cogeneration facility, in Sacramento County. Gas pipeline construction methods include trenching (e.g. open-cut or soil excavation), boring (e.g. jack and bore), and horizontal direction drilling (HDD). Construction would be limited to a designated construction corridor, generally less than 75 feet in width. The HDD method, potentially using bentonite lubricant, would be used to install the natural gas pipeline under the Cosumnes River and Badger Creek. The jack and bore method would be used for crossing under small obstacles, such as roads and railroad tracks.

Two new natural gas compressor stations would be required to fuel Phase 2 of the project. One compressor would be located at the existing connection of SMUD's pipeline to Pacific Gas & Electric's backbone pipeline on County Road 29 near County Road 88, in Yolo County (Figure 12). The other compressor would be located near SMUD's existing valve 190 station in Elk Grove, within the Buffer area of the Sacramento Regional Wastewater Treatment Plant (Figure 13). These compressors would be electric-driven natural gas compressors surrounded by acoustical noise attenuators.

A stormwater discharge outfall structure to Clay Creek will be located in the northwest corner of the CPP site (Figures 10 and 11). The outfall would be designed to incorporate measures to reduce contamination of the creek, consistent with California stormwater requirements, and with a flow dissipater structure or equivalent, to reduce velocity and potential scouring from the outfall. Rip-rap slope protection below the outfall is also proposed. Construction of the 200-foot stormwater discharge pipeline would result in temporary disturbance to 0.3 acre of pasture, annual grassland, and seasonal wetland swale within the 30 acres. Open-cut trench method would be used to construct the stormwater discharge pipeline.

Water for cooling will be supplied by a new 0.3-mile pipeline connection to the existing 66-inch diameter water line that already conveys water from the Folsom-South Canal (FSC), which originates from Lake Natoma on the American River. Phase 1 of the plant would use approximately 220 acre-feet per month. The pipeline connection will require a 65-foot wide construction corridor resulting in temporary impacts to 1.3 acres of pasture, annual grassland, and seasonal wetland swales.

A zero-liquid discharge (ZLD) system would process all of the wastewater produced by the plant, returning a relatively high quality distillate stream for reuse in the plant and producing a solids waste stream suitable for disposal in a landfill. Wastewater will be processed in two steps; first a rine concentrator will concentrate the wastewater to approximately 15 percent salt concentration and produce a clean distillate stream. The second step will further process the remaining wastewater, producing a clean distillate stream and salt cake. ZLD systems will be used for both Phase 1 and 2 of the CPP. Domestic water and process makeup water will be supplied by diverting a portion of the cooling water from the FSC to a package treatment plant. Stormwater runoff from the CPP would discharge into Clay Creek.

A temporary 20-acre construction laydown area would be located in seasonal wetland swales and annual grassland immediately south of the CPP site (Figures 7 and 8). Two swales that run through the laydown area will be permanently rerouted to connect with the realigned swales at the CPP site. The laydown area will be restored to annual grassland after construction is complete.

The applicant is proposing to implement one or more of the following measures to mitigate for permanent and temporary losses of waters and habitat for special status species. The applicant's mitigation measures are as follows: revegetate temporarily impacted laydown area, preserve approximately 29.5 acres and create 5.9 acres of vernal pool habitat, provide an endowment for the third-party costs of management and monitoring of preserved habitats, provide title of preserved lands to the Sacramento Trust for Open Lands or similar third-party, funds to U.S. Fish and Wildlife Service account equivalent to 41 acres of giant garter snake (GGS) habitat or purchase GGS habitat credits or create a GGS mitigation area, acquire 30 acres of Swainson's hawk foraging habitat. The applicant has also stated that for any adverse impacts to waters, the applicant would obtain and comply with the applicable conditions of permits issued from this office and the California Department of Fish and Game, Streambed Alteration Agreement, including in-lieu fees to be used towards the purchase or restoration of waters.

AREA DESCRIPTION: The project area is adjacent to the RS power plant and within the Cosumnes River watershed and the Sacramento County portion of the Central Valley. The project would use water diverted from the American River via the FSC. Portions of the natural gas pipeline alignment from the Sacramento Regional Wastewater Treatment Plant to the town of Franklin are within residential and commercial areas in the cities of Sacramento and Elk Grove.

The gas pipeline route goes through annual grassland in the Sacramento Regional Wastewater Treatment Plant bufferlands, and then ruderal grassland paralleling the Union Pacific railroad tracks on the west side. The alignment follows the railroad tracks through an agricultural area to Core Road and heads east to Bruceville Road. It then continues east through irrigated pasture to Eschinger Road and follows that to an unimproved farm road. It then turns south and crosses the Cosumnes River, Badger Creek, and a riparian area using HDD methods, and through the Cosumnes River Preserve. After crossing under State Route (SR) 99, the pipeline alignment continues east along Arno Road to Valensin Road, crosses Laguna Creek (using HDD methods), continues along Laguna Road to Twin Cities Road, and then to Clay East Road before ending at the plant site.

Most of the area east of SR 99 consists of agricultural areas that include irrigation canals and other wetland features. Crops include corn, alfalfa, vineyards, and irrigated pasture. Nine elderberry bushes (*Sambucus* spp.), the host plant for the valley elderberry longhorn beetle, were identified within 100 feet of the proposed gas pipeline route. Elderberry plants were also reported along the Cosumnes River approximately 70 feet from the HDD laydown area. No elderberry shrubs near the Cosumnes River were found to contain exit holes characteristic of beetles.

The Central Valley contains a wide variety of vegetation communities that support special status plants and wildlife. Vegetation communities in the project area include annual grasslands, seasonal and perennial wetlands including vernal pools, grazed pastures, cultivated agricultural land, and riparian habitats along several streams and creeks. Waters within the project area include vernal pools, and ephemeral, intermittent and perennial streams.

A portion of the project area includes the Cosumnes River and Cosumnes River Preserve. The preserve maintains one of the last remaining valley oak riparian forests in California. The Cosumnes River is one of the last undamed rivers in California and it routinely overflows its banks and provides sediments and nutrients to adjacent flood plains, riparian habitats, and wetlands.

The CPP project will result in direct and indirect impacts to biological resources within the project area. These impacts include temporary and permanent disturbance to Central Valley habitats and wildlife. The CPP project will temporarily affect approximately 240 acres for pipeline construction and laydown areas, and permanently convert 30 acres of habitat in the Central Valley.

ADDITIONAL INFORMATION:

Alternatives Analysis: The applicant has provided the Corps with an alternatives analysis for approval under Section 404(b)(1) of 40 CFR, Part 230. This document may be viewed or downloaded from our web-site mentioned below. Additionally, the applicant has evaluated some pipeline and site alternatives, including the no project alternative, in their application for certification (AFC) with the California Energy Commission. Subsequent to the AFC alternatives, the applicant has supplemented the AFC due to a modified pipeline alignment (Figure 14) in the Franklin Blvd. area. This modified alignment segment avoids impacts to vernal pools within an existing wetland preserve west of Franklin Blvd. However, a quantification of potential impacts to waters for each alternative has not been provided.

Endangered or Threatened Species: The Corps has initiated Section 7 consultation, pursuant to the Endangered Species Act, with the U.S. Fish and Wildlife Service and NOAA Fisheries for potential impacts to federally-listed threatened or endangered species. The project may affect the following federally-listed species: vernal pool tadpole shrimp (*Lepidurus packardii*), vernal pool fairy shrimp (*Branchinecta lynchii*), Sacramento orcutt grass (*Orcuttia viscida*), Valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), Sacramento splittail (*Pogonichthys macrolepidotus*), delta smelt (*Hypomesus transpacificus*), giant garter snake (*Thamnophis gigas*), Bald Eagle (*Haliaeetus leucocephalus*), proposed vernal pool critical habitat. NOAA Fisheries has concluded consultation by stating that the project as proposed is not likely to adversely affect (*Oncorhynchus mykiss*), Central Valley spring and winter-run Chinook Salmon (*O. tshawytscha*), or critical habitat, and the project would not adversely affect Essential Fish Habitat for Pacific Salmon.

Cultural Resources: Known cultural resources exist within the project area and may be affected by project construction.

Other federal, state, and local permits: The applicant has stated that California Energy Commission's AFC is pending approval and a Streambed Alteration Agreement was obtained from the California Department of Fish and Game on October 2002.

Related Documents: March 10, 2003, Revised Draft Biological Assessment for the Cosumnes Power Plant, Sacramento County, California

February 2003, California Energy Commission, Final Staff Assessment, Cosumnes Power Plant Project, Application for Certification (01-AFC-19), Sacramento County

February 7, 2003, Jurisdictional Waters of the U.S. Report for the Cosumnes Power Plant, Sacramento County, California

September 1, 2001, Cosumnes Power Plant, Application for Certification (AFC)

The District Engineer has made these determinations based on information provided by the applicant and on the Corps' preliminary investigation.

Consideration of Comments: Interested parties are invited to submit written comments on or before **July 31, 2003**. Any person may request, in writing, within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact including cumulative impacts of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be

expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof; among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and in general, the needs and welfare of the people.

The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

This public notice may be obtained through our web-site at www.spk.usace.army.mil/cespk-co/regulatory/PNs. If additional information is required, please contact the applicant Colin Taylor with SMUD, at (916) 732-6724, their consultant, Terry Huffman, with Kleinschmidt Huffman-Broadway, at (415) 925-2000, or Justin Cutler, Room 1480 at the letterhead address, e-mail: justin.cutler@usace.army.mil, or telephone (916) 557-5258.

Michael J. Conrad, Jr.
Colonel, Corps of Engineers
District Engineer

Attachments: (19 Figures)