# 1 FERC - 75 FERC, 16 FERC ¶62,004, South Sutter Water District, Project No. 2997-001, Federal Energy Regulatory Commission, (Jul. 2, 1981)

Click to open document in a browser

South Sutter Water District, Project No. 2997-001 [63,010]

# [**¶62,004**]

South Sutter Water District, Project No. 2997-001 Order Issuing License (Major)

# (Issued July 2, 1981)

#### William W. Lindsay, Director, Office of Electric Power Regulation.

The South Sutter Water District (Applicant) has filed an application for a license under Part I of the Federal

Power Act (Act) to construct, operate, and maintain the Camp Far West Project No. **2997**.<sup>1</sup> The project would be located on the Bear River in the counties of Placer and Yuba, California, and would affect the interests of interstate commerce.

Notice of the application has been published and comments have been received from interested Federal, State, and local agencies. The Pacific Gas and Electric Company (PG&E) and the California Department of Fish and Game petitioned and were granted intervention. None of the agencies that commented objected to the issuance of the license. The significant concerns of the intervenors and commenting agencies are discussed below.

#### Project Description:

The proposed Camp Far West Dam and Reservoir Project would consist of: (1) an existing reservoir with a gross storage capacity of 141,000 acre-feet; (2) an existing zoned earth-filled dam; (3) a proposed reinforced concrete intake structure; (4) a proposed reinforced concrete tunnel through the left abutment; (5) a new powerhouse at the terminus of the tunnel containing one generating unit with a rated capacity of 6,800 kW; and (6) a proposed 60-kV transmission line. The proposed hydroelectric power project would add a non-conflicting use of water released for current irrigation use, and utilize uncontrolled spillway flows during wet periods. A more detailed project description is contained in ordering paragraph (B).

#### Safety and Adequacy:

Staff has evaluated the Camp Far West Dam and dikes and concluded: 1) that the spillway is adequate to pass the Probable Maximum Flood and 2) that the dam is stable against normal loadings and against severe earthquake loadings if the alluvial foundation material does not undergo liquefaction. Article 24 requires the Licensee to submit for approval, a report on the liquefaction potential of the dam foundation material and a plan to ensure the safety of the dam, if the dam is subject to failure.

The U.S. Bureau of Reclamation (USBR) commented that the Camp Far West Dam was constructed with a Federal loan under the Small Reclamation Projects Act of 1956 (PL 84-984), and that USBR has the responsibility to protect the Federal investment in the dam until the loan is repaid. USBR requested that design drawings should be submitted to USBR for review and also suggested that Licensee could retain a board of consultants to review the design and construction of the project works. It would be a duplication to retain a board of consultants and require review by USBR. Therefore, Article 32 provides that a board of consultants or USBR may review the proposed design. In accordance with standard Commission practice, this license includes a condition that requires the filing of contract drawings and specifications prior to start of construction.

It is concluded that the project, under the conditions of this license, is safe and adequate.

#### Flow Releases:

The California Department of Fish and Game (DFG) and the U.S. Department of the Interior (Interior) requested that the Applicant study the feasibility of re-establishing a salmon run on the Bear River by providing a minimum 100 cfs release from November 1 of each year and continuing until the reservoir is spilling 100 cfs. Applicant has conducted the study and the study results indicate that: 1) the Bear River water temperatures are too warm for spawning; 2) the Bear River contains few suitable spawning

## [63,011]

areas; and 3) the Feather River, to which the Bear River is a tributary, is historically more attractive for salmon runs. Further, the Applicant has stated that the 100 cfs release would deprive the Applicant of water developed solely for irrigation usage by preventing the reservoir from filling, and would cause economic hardship among the farm owners. After receiving the study results, DFG and Interior have withdrawn their position regarding the establishment of a Bear River salmon run.

In light of the above comments, Article 29 requires the Licensee to continue to release the existing minimum flows as stipulated by the water rights permits issued to it by the State of California.

#### Fish and Wildlife:

Interior commented that the project should be operated according to operational criteria that will not adversely affect fish and wildlife resources in either the reservoir area or downstream areas. Interior further recommended that these fish and wildlife resources be protected from adverse effects of construction by: 1) utilizing sediment control measures; 2) placing spoil materials so as to improve fish spawning; and 3) curtailing blasting during spring months to prevent disruption of bird nesting.

Applicant stated that the reservoir pool level is a function of runoff originating in the upstream watershed and that it cannot control the inflow to the reservoir. On the other hand, Applicant's control of reservoir outflow is limited because water can only be released or withdrawn in accordance with a schedule dictated by Applicant's water rights permits. However, Applicant does propose, in the Exhibit E, to implement measures to protect water quality during construction. To ensure that any adverse impacts on fish and wildlife resources are minimized, Article 30 requires the Licensee to consult with DFG and Interior during construction and subsequent operation of the project.

Under Article 19 of the license, the Commission may prescribe any water and air pollution measures necessary to protect fish and wildlife resources.

Paragraph (v) of Section 2, entitled "Report on Water Use and Quality", in the Exhibit E provides for the protection of water quality and is being approved herein.

#### Recreation:

Recreational facilities at the project include the 253-acre North Recreational Site and the 110-acre South Recreational Site, both operated by concessionaires. Both sites provide facilities for camping, picnicking, swimming, boating, water skiing, and fishing. Drinking water and sanitary facilities are also provided. The "Recreational Resources" report of the Exhibit E indicates that there were 134,464 visitor-days in 1978.

Interior commented that the "Recreation Resources" report in the Exhibit E did not quantify present and future recreation needs in the project area. The Applicant responded that a recreation plan was developed in 1964 and according to the recreation plan formulation study, the actual current usage is below the earlier projection. Staff has evaluated the "Recreation Resources" report, and it is concluded that the recreational facilities described in that report adequately provide for current recreational needs at the project. The report is being approved herein. Under Article 17 of the license, the Commission may require the Licensee to provide additional recreational facilities at the project in the future when a need is demonstrated.

Cultural Resources:

Staff has reviewed the National Register of Historic Places and has not identified any archeological or historic sites listed or eligible for inclusion in the Register that would be affected by the project.

The State Historic Preservation Officer (SHPO) recommended that the Applicant conduct a field survey to identify the presence of any cultural resources in all proposed construction areas, including the transmission line right-of-way. The Applicant replied that it would comply with the recommendations of the SHPO.

In accordance with standard Commission practice, <sup>2</sup> Article 28 of this license requires the Licensee to consult with the SHPO to ensure the protection of cultural resources. The Licensee shall also consult with the SHPO in the event of any future construction or development at the project, other than the project development authorized here.

#### Other Environmental Conditions:

The Camp Far West Dam was originally constructed in 1927 and enlarged to its current size in 1963. Any adverse environmental effects associated with its construction have generally stabilized. Approval of the proposed action would result in an increase in the amount of dust, exhaust emission, and noise during the construction period. No threatened or endangered plant or animal species listed by Interior are known to occur at the project site.

The California Water Quality Control Board, Central Valley Region, has waived the

#### [63,012]

requirement for water quality certification for the project.

On the basis of the record, including agency and intervenor comments and staff's independent analysis, it is determined that issuance of a license for this project, as conditioned, is not a major Federal action significantly affecting the quality of the human environment.

#### Comprehensive Development:

The proposed project will generate an estimated average 26.9 GWh annually.<sup>3</sup> This energy would be used to displace energy that would otherwise be generated by nuclear or fossil fuel consuming powerplants. The proposed project will be able to utilize 65% of the total annual river flow at the project site. The plant would not utilize flood flows in excess of the project's hydraulic capacity. It would not be economical to install additional capacity to utilize more of the river flow at this time. The project would make good use of the irrigation releases and head provided by the Camp Far West Dam and Reservoir and is not in conflict with any known plan of development.

Staff's analysis indicates that the project is economically feasible.

#### Headwater Benefits:

PG&E requested that any license issued to the Applicant be conditioned to require payment of headwater benefits that may be derived from the operation of PG&E's upstream Project No. 2310 and Nevada Irrigation District's Project No. 2266. Section 10(f) of the Act and Article 10 of the license adequately provide for PG&E's concern.

#### It is ordered that:

(A) This license is issued to South Sutter Water District (Licensee) of California, under Part I of the Federal

Power Act (Act), for a period of 40 years, <sup>4</sup> effective the first day of the month in which this order is issued, for the construction, operation, and maintenance of the Camp Far West Dam Project No. **2997**, located in the Counties of Yuba and Placer, California, on the Bear River, and affecting the interests of interstate or foreign commerce. This license is subject to the terms and conditions of the Act, which is incorporated by reference as part of this license, and subject to the regulations the Commission issues under the provisions of the Act.

(B) The Camp Far West Dam Project No. **2997** consists of:

(1) All lands, to the extent of the Licensee's interests in those lands, constituting the project area and enclosed by the project boundary. The project area and boundary are shown and described by certain exhibits that form part of the application for license and that are designated and described as:

Exhibit	FERC No.	Showing
G Sheet 1	<b>2997</b> -3	General Map of Project Area
G Sheet 2	<mark>2997</mark> -4	Detail of Project Area

(2) Project works consisting of: (a) the existing zoned earthfill Camp Far West Dam, approximately 170 feet high, 2,100 feet long, and 40 feet wide at the crest, and having outlet works comprising a 48-inch diameter, concrete encased steel pipe, terminating in a 38-foot long and 12.7-foot wide concrete outlet structure, and impounding (b) a 2,020-acre reservoir with a gross storage capacity of 141,000 acre-feet; (c) an ungated ogee concrete overflow spillway with a crest width of 300 feet; (d) an intake structure comprising a reinforced concrete tower with two openings, 10 feet wide by 14 feet long, and one opening, 10 feet square; (e) a 760-foot long and 84-inch diameter reinforced concrete tunnel through the left abutment; (f) a 45-foot wide and 60-foot long concrete powerhouse containing one vertical Kaplan 9,000-HP turbine and one generator rated at 6,800 kW, 0.9 power factor, 60 Hertz, 13.8 kV; (g) 15-kV, three-phase, 1,200 ampere generator leads; (h) switchyard and a6/8 MVA, OA/FA, three-phase, 13.8 kV--60kV, delta grounded wye power step-up transformer; and (i) a 1.92-mile long, 60-kV transmission line.

The location, nature, and character of these project works are generally shown and described by the exhibits cited above and more specifically shown and described by certain other exhibits and reports that also form a part of the application for license and that are designated and described as:

Exhibit	FERC No.	Showing
F Sheet 1	<b>2997</b> -1	Existing and Proposed Facilities
F Sheet 2	<b>2997</b> -2	Powerhouse Plan and

Sections

## [63,013]

Exhibit A--Project Description, consisting of four pages of text, filed June 20, 1980.

Exhibit E--Environmental Report, filed June 20, 1980, consisting of:

1) Section 2, Report on Water Use and Quality, consisting of eight pages of text (pp. E-13 to E-20);

2) Section 3, Description of Aquatic and Terrestrial Resources, consisting of 7 pages of text (pp. E-26 to E-40) and 5 tables;

3) Section 4, Description of Historical and Archeological Resources, consisting of 2 pages of text (pp. E-45 to E-46);

4) Section 5, Recreation Resources, consisting of 7 pages of text (pp. E-49 to E-55) and a map (FERC No. **2997**-5); and

5) Section 6, Land Management and Aesthetics.

(3) All of the structures, fixtures, equipment, or facilities used or useful in the operation or maintenance of the project and located within the project boundary, all portable property that may be employed in connection with

the project, located within or outside the project boundary, as approved by the Commission, and all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) Exhibits A and F and Section 2 of Exhibit E, consisting of three pages of text (E-16 to E-18), entitled, "Report on Water Use and Quality" and Section 5 of Exhibit E, consisting of 7 pages of text (E-49 to E-55) entitled, "Recreation Resources", and one drawing, Exhibit E Sheet 1 (FERC No. **2997**-5), designated in ordering paragraph (B) above, are approved and made a part of the license. Exhibit G is approved only to the extent that it shows the general location and nature of the project.

(D) This license is also subject to the terms and conditions set forth as Articles 1 through 23 in Form L-11 (revised October, 1975), entitled "Terms and Conditions of License for Unconstructed Major Project Affecting the Interests of Interstate or Foreign Commerce", attached to (See 54 FPC 1864) and made a part of this license. The license is also subject to the following additional articles:

*Article 24:* Licensee shall submit, to the Director, Office of Electric Power Regulation, a report on the liquefaction potential of the dam foundation material within one year from the date of issuance of this order. If the dam is subject to failure by liquefaction of the foundation, Licensee shall submit for approval within two years from the date of this order, a plan and schedule to ensure the safety of the dam.

*Article 25.* Licensee shall commence construction of the project within two years from the effective date of the license and shall thereafter in good faith and with due diligence prosecute such construction and shall complete construction of such project works within four years from the effective date of the license.

*Article 26.* Licensee shall file with the Commission's Regional Engineer and Director, Office of Electric Power Regulation, one copy each of the contract drawings and specifications for pertinent features of the project such as water retention structures, powerhouses, and water conveyance structures, 60 days prior to start of construction. The Director, Office of Electric Power Regulation may require changes in the plans and specifications to assure a safe and adequate project.

*Article 27.* Within one year from the date of commencement of operation of the project, the Licensee shall file for approval, revised "as-built" Exhibits F and G to show the project as finally constructed and located and conforming to §4.51 of the Commission's regulations.

*Article 28.* Prior to commencement of any construction or development of any project works or other facilities at the project, the Licensee shall consult and cooperate with the California State Historic Preservation Officer (SHPO) to determine the need for, and extent of, any archeological or historic resource surveys and any mitigative measures that may be necessary. The Licensee shall make available funds in a reasonable amount for any such work as required. If any previously unrecorded archeological or historic sites are discovered during the course of construction, construction activity in the vicinity shall be halted, a qualified archeologist shall be consulted to determine the significance of the sites, and the Licensee shall consult with the SHPO to develop a mitigation plan for the protection of significant archeological or historic resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

*Article 29.* Licensee shall discharge from the Camp Far West Dam, a continuous minimum flow of 25 cubic feet per second from April 1 to June 30 and a continuous minimum flow of 10 cubic feet per second from July 1 to March 31 of the succeeding year or the inflow to the reservoir, whichever is less during these respective periods of time, for the purpose of protecting and enhancing fish resources in the Bear River. The flows may be temporarily

## [63,014]

modified, if required by operating emergencies beyond the control of the Licensee, or for short periods for fishery management purposes, upon mutual agreement between the Licensee and the California Department of Fish and Game.

*Article 30.* The Licensee shall during construction and operation of the project, consult with the California Department of Fish and Game, and the U.S. Fish and Wildlife Service of the Department of the Interior to ensure that any adverse impacts on fish and wildlife resources are minimized. Results of consultation with the above agencies on fish and wildlife matters shall be filed with the Commission. The Commission reserves the right to require changes in the project works or operations that may be necessary to protect and enhance the environment.

*Article 31.* The Licensee shall pay the United States the following annual charge, effective the first day of the month in which this license is issued:

(a) For the purpose of reimbursing the United States for the cost of administration of Part I of the Act, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time. The authorized installed capacity for that purpose is 9,070 horsepower.

Article 32. The Licensee shall retain a board of three or more qualified, engineering consultants (USBR could be accepted as the Board of Consultants for the purposes of this article) to review the design, specifications, and construction of the project for safety and adequacy. The names and qualifications of the board members shall be submitted to the Director, Office of Electric Power Regulation, for approval. Among other things, the Board shall assess the geology of the project site, with particular attention to any problems that may complicate the safe construction of the intake facilities and the tunnel passing under the existing dam. The Board shall assess the design, specifications and construction of the powerhouse, tunnel, intake works, electrical and mechanical equipment, the construction inspection program, construction procedures, and progress. The Licensee shall submit to the Commission copies of the Board's report on each meeting. The Licensee shall also submit a final report of the Board upon completion of the Project. The final report shall contain a statement by the Board indicating the Board's satisfaction with the construction, safety, and adequacy of the project structures.

*Article 33.* (A) In accordance with the provisions of this article, the Licensee shall have the authority to grant permission for certain types of use and occupancy of project lands and waters and to convey certain interests in project lands and waters for certain other types of use and occupancy, without prior Commission approval. The Licensee may exercise the authority only if the proposed use and occupancy is consistent with the purposes of protecting and enhancing the scenic, recreational, and other environmental values of the project. For those purposes, the Licensee shall also have continuing responsibility to supervise and control the uses and occupancies for which it grants permission, and to monitor the use of, and ensure compliance with the covenants of the instrument of conveyance for, any interests that it has conveyed, under this article. If a permitted use and occupancy violates any condition of this article or any other condition imposed by the Licensee for protection and enhancement of the project's scenic, recreational, or other environmental values, or if a conveyance made under the authority of this article is violated, the Licensee shall take any lawful action necessary to correct the violation. For a permitted use or occupancy, that action includes, if necessary, cancelling the permission to use and occupy the project lands and waters and requiring the removal of any non-complying structures and facilities.

(B) The types of use and occupancy of project lands and waters for which the Licensee may grant permission without prior Commission approval are: (1) landscape plantings; (2) non-commercial piers, landings, boat docks, or similar structures and facilities; and (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline. To the extent feasible and desirable to protect and enhance the project's scenic, recreational, and other environmental values, the Licensee shall require multiple use and occupancy of facilities for access to project lands or waters. The Licensee shall also ensure, to the satisfaction of the Commission's authorized representative, that the uses and occupancies for which it grants permission are maintained in good repair and comply with applicable State and local health and safety requirements. Before granting permission for construction of bulkheads or retaining walls, the Licensee shall: (1) inspect the site of the proposed construction, (2) consider whether the planting of vegetation or the use of riprap would be adequate to control erosion at the site, and (3) determine that the proposed construction is needed and would not change the basic contour of the reservoir shoreline. To implement this paragraph (B), the Licensee may, among other things, establish a program for issuing permits for the specified types of use and occupancy of

# [63,015]

project lands and waters, which may be subject to the payment of a reasonable fee to cover the Licensee's costs of administering the permit program. The Commission reserves the right to require the Licensee to file a description of its standards, guidelines, and procedures for implementing this paragraph (B) and to require modifications of those standards, guidelines, or procedures.

(C) The Licensee may convey easements or rights-of-way across, or leases of, project lands for: (1) replacement, expansion, realignment, or maintenance of bridges and roads for which all necessary State and Federal approvals have been obtained; (2) storm drains and water mains; (3) sewers that do not discharge into project waters; (4) minor access roads; (5) telephone, gas, and electric utility distribution lines; (6) non-project overhead electric transmission lines that do not require erection of support structures within the project boundary; (7) submarine, overhead, or underground major telephone distribution cables or major electric distribution lines (69-kV or less); and (8) water intake or pumping facilities that do not extract more than one million gallons per day from a project reservoir. No later than January 31 of each year, the Licensee shall file three copies of a report briefly describing for each conveyance made under this paragraph (C) during the prior calendar year, the type of interest conveyed, the location of the lands subject to the conveyance, and the nature of the use for which the interest was conveyed.

(D) The Licensee may convey fee title to, easements or rights-of-way across, or leases of project lands for: (1) construction of new bridges or roads for which all necessary State and Federal approvals have been obtained; (2) sewer or effluent lines that discharge into project waters, for which all necessary Federal and State water quality certificates or permits have been obtained; (3) other pipelines that cross project lands or waters but do not discharge into project waters; (4) non-project overhead electric transmission lines that require erection of support structures within the project boundary, for which all necessary Federal and State approvals have been obtained; (5) private or public marinas that can accommodate no more than 10 watercraft at a time and are located at least one-half mile from any other private or public marina; (6) recreational development consistent with an approved Exhibit R or approved report on recreational resources of an Exhibit E; and (7) other uses, if: (i) the amount of land conveyed for a particular use is five acres or less; (ii) all of the land conveyed is located at least 75 feet, measured horizontally from the edge of the project reservoir at normal maximum surface elevation; and (iii) no more than 50 total acres of project lands for each project development are conveyed under this clause (D)(7) in any calendar year. At least 45 days before conveying any interest in project lands under this paragraph (D), the Licensee must file a letter to the Director, Office of Electric Power Regulations, stating its intent to convey the interest and briefly describing the type of interest and location of the lands to be conveyed (a marked Exhibit G or K map may be used), the nature of the proposed use, the identity of any Federal or State agency official consulted, and any Federal or State approvals required for the proposed use. Unless the Director, within 45 days from the filing date, requires the Licensee to file an application for prior approval, the Licensee may convey the intended interest at the end of that period.

(E) The following additional conditions apply to any intended conveyance under paragraphs (C) or (D) of this article:

(1) Before conveying the interest, the Licensee shall consult with Federal and State fish and wildlife or recreation agencies, as appropriate, and the State Historic Preservation Officer.

(2) Before conveying the interest, the Licensee shall determine that the proposed use of the lands to be conveyed is not inconsistent with any approved Exhibit R or approved report on recreational resources of an Exhibit E; or, if the project does not have an approved Exhibit R or approved report on recreational resources, that the lands to be conveyed do not have recreational value.

(3) The instrument of conveyance must include covenants running with the land adequate to ensure that: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; and (ii) the grantee shall take all reasonable precautions to ensure that the construction, operation, and maintenance of structures or facilities on the conveyed lands will occur in a manner that will protect the scenic, recreational, and environmental values of the project.

(4) The Commission reserves the right to require the Licensee to take reasonable remedial action to correct any violation of the terms and conditions of this article, for the protection and enhancement of the project's scenic, recreational, and other environmental values.

(F) The conveyance of an interest in project lands under this article does not in itself change the project boundaries. The project boundaries may be changed to exclude land conveyed under this article only upon

# [63,016]

approval of revised Exhibit G or K drawings (project boundary maps) reflecting exclusion of that land. Lands conveyed under this article will be excluded from the project only upon a determination that the lands are not necessary for project purposes, such as operation and maintenance, flowage, recreation, public access, protection of environmental resources, and shoreline control, including shoreline aesthetic values. Absent extraordinary circumstances, proposals to exclude lands conveyed under this article from the project shall be consolidated for consideration when revised Exhibit G or K drawings would be filed for approval for other purposes.

(G) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its issuance, as provided in Section 1.7(d) of the Commission's regulations, 18 C.F.R. 1.7 (d) (1979), *as amended*, 44 Fed. Reg. 46449 (1979). The filing of a petition appealing this order to the Commission or an application for rehearing as provided in section 313(a) of the Act does not operate as a stay of the effective date of this license or of any other date specified in this order, except as specifically ordered by the Commission. Failure of the Licensee to file an application for rehearing shall constitute acceptance of this license. In acknowledgment of acceptance of this license, the license shall be signed for the Licensee and returned to the Commission within 60 days from the date of issuance of this order.

# -- Footnotes --

<sup>1</sup> Authority to act on this matter is delegated to the Director, Office of Electric Power Regulation, under <u>18 C.F.R.</u> <u>§375.308</u> (1980), *as amended by* 46 Fed. Reg. 14119 (1981).

<sup>2</sup> See S.D. Warren, Project No. 2897, Order Denying Rehearing (issued February 19, 1980).

<sup>3</sup> The proposed project, with its average annual generation of 26.9 million kWh, will utilize a renewable resource that will save the equivalent of approximately 47,000 barrels of oil or 12,500 tons of coal per year.

<sup>4</sup> See the Montana Power Company, Mystic Lake Project No. 2301, Order Issuing New License (Major) (Issued October 5, 1976).