

29 FERC P 62400 (F.E.R.C.), 1984 WL 59265

\*\*1 Office Director **Orders**

Roaring Creek Ranch

Project No. **7282**-001

**Order** Issuing License (Major)

(Issued December 28, **1984**)

\***63612** Quentin A. Edson, Director, Office of Hydropower Licensing.

Roaring Creek Ranch (Applicant) filed on July 14, 1983, an application for a license under Part I of the Federal Power Act (Act) for the construction, operation, and maintenance of the Roaring Creek Water Power Project No. **7282**.<sup>1</sup> The proposed project would be located on Roaring Creek, in Shasta County, California. The proposed project would consist of a diversion structure, a penstock, a powerhouse containing a 2,000 kW generating unit, and appurtenant facilities.<sup>2</sup>

Notice of the application has been published and comments have been received from interested Federal, State and local agencies. California Department of Fish and Game filed a protest and motion to intervene. Ms. Patricia Schneider also filed a motion to intervene. The significant concerns expressed in the protest, interventions, and agency comments are discussed under appropriate headings.

#### *Erosion, Slope Stability, and Sedimentation*

The California Department of Fish and Game (CFG), the California Regional Water Quality Control Board (WQC) and Ms. Schneider expressed concern regarding impacts to water quality from erosion and sedimentation due to project construction. The WQC also expressed concern regarding accumulation of bottom sediment from reduced flushing flows. The WQC recommended an erosion control plan which would include dewatering instream construction areas, using barriers to reduce discharges of turbid water, placing spoil materials where they will not erode into the stream, surfacing permanent roads to maintain stability, designing surface drainage structures to minimize erosion from runoff, stabilizing soil and fill slopes, minimizing removal of riparian vegetation; and emplacing erosion control measures by October 15 of each year. The WQC recommended that sediment which accumulates behind the diversion be removed if necessary and disposed of on an acceptable site. They also recommended that the diversion structure include an emergency shutoff device which would operate automatically in the event of a pipeline/penstock rupture.

The Applicant agreed to the recommendations regarding the erosion control plan, but did not address recommendations regarding maintenance removal of accumulated sediment or use of an automatic shutoff device.

Construction of project features will cause erosion, sedimentation, possible landslip or mass movement of unconsolidated material, and produce spoil material. Operation of the project will cause sediment accumulation behind the diversion and in the bypass reach, and erosion and possible mass movement in the event of a pipeline/penstock rupture. Article 24 requires the Licensee, after consultation with appropriate agencies, to prepare a plan to control erosion, sedimentation, slope stability, and properly dispose of spoil materials.

#### *Right-of-Way Management*

Construction of the proposed project penstock, access roads, and transmission line would cause the removal of approximately 36 acres of forested wildlife habitat. In **order** to minimize the impact of such habitat loss, Article 25 requires the Licensee to

develop a wildlife mitigative plan that considers the cleaning, revegetation, and maintenance of project penstock, access road, and transmission line right-of-way for the benefit of wildlife resources.

#### *Cultural Resources*

**\*\*2** Ms. Schneider expressed concern regarding possible disturbances to the archeological resources in the project area. There are no archeological or historical resources located within the proposed project area that are listed in, determined eligible for, or considered by the California State Historic Preservation Officer (SHPO) to be potentially eligible for listing in the National Register of Historic Places. However, construction activity should be halted if any previously unrecorded archeological resources are discovered and the SHPO should be notified. Article 26 requires the Licensee to consult with the SHPO to determine the need for additional survey work in the project area.

#### *Instream Flows*

Ms. Schneider expressed concern regarding potential damage to Roaring Creek and its habitats. Operation of the project would reduce **\*63613** flows in the 0.4-mile-long bypass reach of Roaring Creek. The CFG had recommended that the application be denied because the Applicant had not completed an instream flow study to determine the minimum flow needed to maintain aquatic habitat and resources in the bypass. The CFG also recommended in a letter dated August 31, 1981, that the following minimum flows should be released into the bypass reach: February 1 to June 15—20 cubic feet per second (cfs) or the natural flow whichever is less; and, June 16 to January 31—10 cfs or the natural flow, whichever is less. The Applicant states in a letter dated July 18, 1984, that they are presently conducting an instream flow study. Analysis of the study results may be completed by early 1985. The Applicant states that at no time will stream flows in the bypass reach be reduced to less than those levels set by CFG for the protection of aquatic life.

A study is required to gather the biological information necessary for a more permanent minimum flow determination. The results generated from the study being conducted by the Applicant should allow for a more definitive determination of minimum flows necessary to protect the aquatic resources of the bypass reach. Article 27 requires the Licensee to submit the results of its studies and its recommendations for a long-term minimum flow release, along with comments from relevant agencies, for Commission approval. Until the long-term recommendations are determined, an interim minimum flow as recommended by the CFG would adequately protect the aquatic resources of the bypass reach. Therefore, Article 28 requires the release of the interim flow proposed by CFG. Further, the Applicant proposes to operate the project in a run-of-river mode. The project should be operated in an instantaneous run-of-river mode so that water level fluctuations are minimized in Roaring Creek above the project dam and below the project powerhouse. Article 29 requires the Licensee to operate the project in an instantaneous run-of-river mode.

#### *Stream Flow Measurement*

The CFG recommended that the Applicant install a recording gage to provide for a record of the streamflow releases, and that the data obtained from the gage be submitted to the CFG on an annual basis. Standard license Article 8 requires the Licensee to install a gage in accordance with requirements set forth by the Commission; Article 30 requires the Licensee to provide such data to CFG.

#### *Fish Screen*

**\*\*3** The CFG recommended that the Applicant install and maintain a fish screen on the intake structure. The Applicant proposes to install a fish screen to prevent fish from entering the penstock and a fish bypass structure to prevent restrictions to downstream fish movement. Article 31 requires the Licensee to file, for approval, functional design drawings of the fish screen to be installed on the intake structure and the fish bypass structure.

*Other Environmental Concerns*

Water quality certification, as required by Section 401 of the Federal Water Pollution Control Act, was waived for the proposed project by the State of California, Central Valley Water Quality Control Board, on June 14, 1983.

No Federally listed threatened or endangered aquatic or terrestrial species or critical habitat will be affected by the project.

*Finding of no Significant Impact*

The project construction will result in temporary short-term increases in turbidity and sedimentation levels in Roaring Creek and minor, short-term impacts to the fishery, vegetation and wildlife resources. Project operation will reduce flows in a 0.4-mile reach of Roaring Creek between the proposed diversion dam and the powerhouse tailrace. The Applicant's proposed mitigative measures and FERC license articles will ensure that environmental impacts resulting from project construction and operation are minor.

In accordance with the National Environmental Policy Act of 1969, an Environmental Assessment was prepared for this Project. On the basis of the record and Staff's independent environmental analysis,<sup>3</sup> issuance of a license for the project, as conditioned herein, will not constitute a major Federal action significantly affecting the quality of the human environment.

*Safety of Structure*

The proposed project structures would impound an insignificant amount of water and their failure would not endanger downstream life or property. The project structures would be safe if constructed using sound engineering practices.

*Economic Analysis*

The project is economically feasible based on the sale of project power at the avoided cost \***63614** in the State of California, adjusted for escalation.

*Other Aspects of Comprehensive Development*

The proposed project, with its average annual generation of 9,110,000 kWh, will utilize a renewable resource that will save the equivalent of approximately 15,000 barrels of oil or 4,500 tons of coal per year.

The project does not conflict with any proposed or existing developments on Roaring Creek, makes good use of the flow and fall of the creek, and will be best adapted to the comprehensive development of the river basin upon compliance with the terms and conditions of the license.

It is **ordered** that:

(A) This license is issued to Roaring Creek Ranch (Licensee), under Part I of the Federal Power Act (Act) for a period of 50 years, effective the first day of the month in which this license is issued, for the construction, operation, and maintenance of the Roaring Creek Water Power Project No. **7282**, located in Shasta County, California, on Roaring Creek, a tributary of the Pit River. 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.

\*\*4 (B) The Roaring Creek Water Power Project No. **7282** 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.	title
G-1	7282-3	Project Location & Layout Map

(2) Project works consisting of: (1) a 6-foot-high, 35-foot-long diversion structure; (2) a 42-inch-diameter, 5,100-foot-long penstock; (3) a powerhouse with a single generating unit rated at 2.0 MW; (4) a 4.16-kV generator lead; (5) a 4.16/12.3-kV 3-phase step-up transformer; (6) a 0.25-mile-long, 12.3-kV transmission line; and (7) appurtenant facilities.

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 that also form a part of the application for license and that are designated and described as:

exhibit	fERC No.	titled
F-1	7282-1	Plan & Profile Diversion Structure
F-2	7282-2	Plan & Section of Powerhouse

(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 G-1, F-1 and F-2 designated in **Ordering** Paragraph (B) above, are approved and made a part of the license only to the extent that they show the general location, description, and layout of the project works.

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

*Article 24.* Licensee shall, after consultation with the California Department of Fish and Game, California Department of Conservation, and U. S. Fish and Wildlife Service, prepare and file with the Commission, within 6 months from the date of issuance of this license, a plan to control erosion, dust, and slope stability, and to minimize the quantity of sediment or other potential water pollutants resulting from construction and operation of the project. The plan shall address, among other things, grading of slopes, control of surface drainage, measures to contain sediment or minimize the amount of sediment that would be generated in the event of a break in the pipeline/penstock, storage and disposal of excavated materials, and maintenance removal of sediment.

The plan shall also include: provisions for identifying the mapping any erosive soils and potentially unstable slopes; an implementation schedule; monitoring and maintenance programs for project construction and operation; provisions for periodic review of the plan and for making any necessary revisions to the plan. In the event that the Licensee does not concur with any agency recommendations, Licensee shall provide a discussion of the reasons for not concurring based on actual site, geological, soil, and groundwater conditions. \*63615 The Commission reserves the right to require changes to the plan. Unless the

Director, Office of Hydropower Licensing, directs otherwise, the Licensee may commence ground disturbing or spoil activities at the project 90 days after filing the above plan.

**\*\*5 Article 25.** Licensee shall, after consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, develop a wildlife mitigative plan that will consider the clearing, revegetation, and maintenance of project penstock, and access road transmission line rights-of-way for the benefit of wildlife resources. Licensee shall file the plan for Commission approval within 1 year from date of issuance of this license. Agency comments on the plan shall be included in the filing.

*Article 26.* Licensee shall, prior to any construction activity or ground disturbance within the proposed project area, consult with the California State Historic Preservation Officer (SHPO) to review the final design plans for the transmission line right-of-way and determine the need for an archeological reconnaissance survey to be conducted. If it is determined that an archeological reconnaissance is necessary, Licensee shall consult with the SHPO to: (a) determine the scope of the survey; (b) conduct the survey; and (c) prepare a report to be filed with the Commission at least 60 days prior to the commencement of any construction activity, which assesses the significance of any sites discovered, and recommends future management plans for the avoidance or mitigation of adverse effects to the sites. If any previously unrecorded archeological or historical sites are discovered during the course of construction or development of any project works or other facilities at the project, 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 mitigative plan for the protection of significant archeological or historical resources. If the Licensee and the SHPO cannot agree on the amount of money to be expended on archeological or historical work related to the project, the Commission reserves the right to require the Licensee to conduct, at its own expense, any such work found necessary.

*Article 27.* Licensee shall, within 3 months from the issuance of this license, file the results of the minimum flow study identified by letter to the Commission dated July 18, 1984, for the Roaring Creek Project and, for Commission approval, recommending minimum flow releases from the project dam for the protection and enhancement of fish and wildlife resources between the dam and the tailrace. This filing shall include comments from the California Department of Fish and Game and the U.S. Fish and Wildlife Service on the study and recommended flows. The Commission reserves the right to require the Licensee to conduct additional studies if deemed necessary.

*Article 28.* Licensee shall discharge from the Roaring Creek Project diversion structure, an interim continuous minimum flow of 20 cubic feet per second (cfs) from February 1 to June 15, and 10 cfs, from June 16 to January 31, or the inflow to the reservoir, whichever is less, for the purpose of protecting fish and wildlife resources between the dam and tailrace. These flows may be temporarily modified, if required, by operating emergencies beyond the control of the Licensee, for the minimum flow study identified in Article 27, and for short periods upon mutual agreement between the Licensee and the California Department of Fish and Game.

**\*\*6 Article 29.** Licensee shall operate the Roaring Creek Hydroelectric Project in an instantaneous run-of-river mode for the protection of fish and wildlife resources. Licensee, in operating the Roaring Creek Hydroelectric Project in an instantaneous run-of-river mode, shall at all times act to minimize fluctuations of reservoir surface elevation (i.e., maintain discharge from the project so that flow in Roaring Creek, as measured immediately downstream from the project tailrace, approximates the instantaneous sum of inflow to the project reservoir). Instantaneous run-of-river operation may be temporarily modified, if required by emergencies beyond the control of the Licensee, and for short periods upon mutual agreement between the Licensee and the California Department of Fish and Game.

*Article 30.* Licensee shall construct and operate the streamflow gage required by standard license Article 8 in a manner to generate data necessary to determine, on a continuous basis, the minimum flows that are released from the diversion structure. Licensee shall annually make data obtained from the gage available to the California Department of Fish and Game.

*Article 31.* Licensee shall, within 6 months following the issuance of this license, file for Commission approval, functional design drawings of a fish screen and a fish bypass structure, prepared after consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game. Agency comments on the design of the proposed fish screen and fish bypass structure \*63616 shall be included in the filing. Within 6 months after completion of construction of the fish screen and fish bypass structure, Licensee shall file as-built drawings with the Commission.

*Article 32.* The Licensee shall provide to the Commission's Regional Engineer and the Director, Office of Hydropower Licensing, one copy each of the final contract drawings and specifications for pertinent features of the project such as water retention structures, powerhouse and water conveyance structures, at least 60 days prior to start of construction. The Director, Office of Hydropower Licensing may require changes in the plans and specifications to ensure a safe and adequate project.

*Article 33.* Licensee shall, within 90 days of completion of construction, file for approval by the Director, Office of Hydropower Licensing revised Exhibits A, F, and G to describe and show the project as-built.

*Article 34.* The Licensee shall commence construction of project works within two years from the issuance date of the license and shall complete construction of the project within four years from the issuance date of the license.

*Article 35.* The Licensee, a private entity under the laws of the State of California, shall pay the United States the following annual charges:

- (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 2700 horsepower.

**\*\*7** *Article 36.* (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 covenant of 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 that can accommodate no more than 10 water craft at a time and where said facility is intended to serve single-family type dwellings; 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 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 modification of those standards, guidelines, or procedures.

**\*\*8** (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 **\*63617** 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 Regulation, 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.

**\*\*9** (e) The following additional conditions apply to any intended conveyance under paragraph (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 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.

**\*63618** (E) Failure of the Licensee to file a petition appealing this **order** to the Commission shall constitute acceptance of this license. In acknowledgment of acceptance of this license, it shall be signed for the Licensee and returned to the Commission within 60 days from the date of issuance of this **order**.

#### Footnotes

- 1 Authority to act on this matter is delegated to the Director, Office of Hydropower Licensing, under §375.314 of the Commission's regulations, 49 Fed. Reg. 29,369 (1984) (Errata issued July 27, 1984) (to be codified at 18 C.F.R. § 375.314). This **order** may be appealed to the Commission by any party within 30 days of the issuance date of this **order** pursuant to Rule 1902, 18 C.F.R. § 385.1902 (1983). Filing an appeal and final Commission action on that appeal are prerequisites for filing an application for rehearing as provided in Section 313(a) of the Act. Filing an appeal does not operate as a stay of the effective date of this **order** or of any other date specified in this **order**, except as specifically directed by the Commission.
- 2 A more detailed description of the project works is contained in **Ordering** Paragraph (B).
- 3 Environmental Assessment, Roaring Creek Hydroelectric Project, FERC Project No. 7282-001—California, Division of Environmental Analysis, Office of Hydropower Licensing, Federal Energy Regulatory Commission, August 13, 1984. This document is available in the Division of Public Information and in the Commission's public file associated with the proceeding.

29 FERC P 62400 (F.E.R.C.), 1984 WL 59265