Roseburg Lumber Company

Project No. **5931-002**
Order Issuing License (Major)
(Issued May 9, 1985)

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

Roseburg Lumber Company (Applicant) has filed an application for a license under Part I of the Federal Power Act (Act) to construct, operate, and maintain the Hatchet Creek Project No. **5931**. The project would be located on Hatchet Creek, a navigable waterway of the United States, in Shasta County, California.

Notice of the application has been published and comments have been received from interested Federal, state, and local agencies. On November 18, 1984, the California Department of Fish and Game (DFG) filed a timely petition to intervene to become a party to the proceeding and requested that the Applicant be required to consult with DFG. The significant concerns of the protestors, intervenor DFG, and commenting agencies are discussed later in this order.

**Project Description**

The proposed project would consist of: (a) a 6-foot-high, 50-foot-long diversion weir at *elevation 3,487 feet m.s.l.*; (b) a 39-inch-diameter, 18,600-foot-long pipe; (c) a powerhouse containing a single generating unit with a rated capacity of 6,890 kilowatts (kW), operating under a head of 1,025 feet; (d) a switch gear; (e) a power transformer stepping voltage from 4,160 volts to 13.8 kV; (f) a 4,800-foot-long, 13.8-kV transmission line; (g) a substation, increasing voltage to 230-kV; and (h) interconnection with Pacific Gas and Electric Company’s (PG&E) transmission line existing at the proposed substation site.

A more detailed project description is contained in Ordering Paragraph (B).

**Jurisdiction**

The proposed project is located on Hatchet Creek, a navigable waterway of the United States. Therefore, Section 23(b) of the Act requires that the project be licensed.

**Safety and Adequacy**

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

In accordance with standard Commission practice, this license includes conditions that require the filing of an emergency action plan for the project and the installation of any necessary safety devices to protect the public in its use of project lands and waters. It is concluded that the project, under the conditions of this license, will be safe and adequate.

**Need and Economic Feasibility**

According to the 1983 Electricity Report of the California Energy Commission (CEC), utilities will need to add 8,129 megawatts (MW) and 43,622 gigawatt-hours (GWh) to meet the load based on the adopted forecast. In addition, the utilities will need to add 19,767 GWh of new non-oil and non-gas resources to achieve the goals of the fuel displacement policy established by CEC in their third Biennial Report. The CEC estimates that small hydro projects in California will provide 713 GWh between 1981 and 1994 of which the proposed project will contribute a small amount.
The proposed project would be economically feasible based on the sale of power at the avoided cost in the State of California, adjusted for escalation.

**Wildlife**

The 4,800-foot-long, 13-kilovolt transmission line has the potential to cause electrocutions of large raptors. The Applicant proposes to design the transmission line to minimize electrocution hazards, but has not provided a specific design plan. Article 29 requires the Licensee to design and construct the transmission line according to accepted raptor protection practices and to file a specific design plan.

The project would result in the loss of 10 acres of wildlife habitat as a result of construction of access roads, above-ground portions of the penstock, and the powerhouse. An additional 11 acres would be cleared for construction of the transmission line and belowground portions of the penstock. Applicant’s proposal to revegetate disturbed areas would reduce the long-term impacts of the project on wildlife. The Applicant, however, has not provided specific details of its proposal. Article 30 requires the Licensee to revegetate disturbed areas with plant species beneficial to wildlife.

**Erosion, Sediment, and Slope Stability Control**

Excavation on steep slopes during construction and burial of the pipeline and penstock, and construction of the diversion dam, powerhouse, tailrace, access roads, and transmission line, will cause increases in erosion, sedimentation, and slope failure. In anticipation of these impacts, the Applicant proposes several general erosion and sediment control measures, in addition to general design measures and construction and restoration techniques to either preclude or minimize existing slope failure and unstable slope conditions.

Standard techniques and design standards are available that, if utilized at the project, will ensure that erosion, slope stability, and sedimentation are adequately controlled at the project. Article 31 requires the Licensee to consult with appropriate resource agencies in preparing a detailed erosion, sediment, and erosion control plan for the project. Article 31 also requires that an automatic shut-off device be installed to operate in the event of a pipeline or penstock rupture to minimize any subsequent erosion, sedimentation, or slope failure.

**Intake Screening**

The California Department of Fish and Game (DFG) states that the Applicant’s proposal for fish screens does not meet the standards developed by DFG for small hydroelectric projects. The Applicant’s design provided for a maximum approach velocity to the screens of 1.0 feet per second (fps) and screen openings of 1/4 inch in the narrow direction. DFG standards require a maximum **63262** approach velocity of 0.33 fps and a maximum screen opening of 3/32 inch (slotted) or 5/32 inch (round). As a result, the Applicant has redesigned the intake structure to comply with DFG’s fish screening criteria and has provided conceptual drawings of the screen to the DFG for review. Article 32 requires the Licensee to file functional design drawings of the fish screen facility for Commission approval, prepared after consultation with DFG and the U.S. Fish and Wildlife Service (FWS).

**Instream Flows**

The Applicant performed an instream flow study for the bypassed reach of Hatchet Creek for various life-history stages of brook, brown, and rainbow trout, utilizing the FWS’s Instream Flow Incremental Methodology (IFIM). Based on the results of the study, the Applicant has proposed a minimum in stream flow of 15 cubic feet per second (cfs) year round below the diversion structure.

**3** The Applicant’s IFIM study included two study sites within the project area—an upper site and a lower site. Study results show that, for the upper site, adult rainbow trout habitat at 15 cfs would be about 33 percent of the maximum possible habitat, adult brown trout habitat would be 60 percent of maximum, and adult brook trout habitat would be 99 percent of maximum. In the lower study reach, habitat for adult rainbow, brown, and brook trout at 15 cfs would be 64, 76, and 100 percent of maximum, respectively. For rainbow trout spawning, a 15-cfs flow would provide 20 to 25 percent of maximum
possible habitat in the bypassed reach. A minimum flow of 15 cfs would provide adequate habitat for fry and juveniles of each trout species.

DFG believes that the Applicant’s proposed 15-cfs flow would reduce the available fish habitat during most years, according to Applicant’s synthesized flow data. DFG further states that the flow study shows substantial increases in adult rainbow trout habitat with flow up to 50 cfs, increases in spawning habitat with flow up to about 45 cfs at the lower study site, and up to 65 cfs at the upper site. During the March to May rainbow trout spawning periods, flows in excess of 15 cfs would occur less than half the time. Therefore in order to ensure that the project results in no detrimental effects to the fish resources of Hatchet Creek, DFG recommends that the following minimum instream flow regime for the bypassed reach be provided:

Period Flow

June-September 25 cfs
October-December 35 cfs
January-February 25 cfs
March-May 65 cfs

Further, DFG states that the required bypass flow should be monitored, with the flow records provided to the DFG annually to ensure compliance with the flow requirements.

The Applicant states that the proposed minimum flow release of 15 cfs plus the minimum turbine capacity of about 19 cfs will preclude project operation when natural flows are below 34 cfs. Based on the Applicant’s flow data, the project would not operate, on an average basis, during much of June and November, and during the months of July through October. During those months, natural flows would occur below the diversion facility. Further, the Applicant argues that the low-flow period is a controlling factor for trout density. The Applicant cites several investigators that conclude that the carrying capacity of a stream is limited to the biomass that can be supported during the period of least available habitat, i.e., the late summer low-flow period. The Applicant defends the proposed 15-cfs flow by stating that in the winter months, habitat conditions should improve for fry and juvenile trout by reducing water velocities detrimental to smaller fish as shown by the IFIM study. With respect to spawning, the Applicant states that spawning gravels are still available under a 15-cfs release and that sufficient spawning habitat would be available to replace yearly mortality and maintain pre-project fish populations, even assuming that no fish are planted by DFG. The Applicant believes that its proposed flow release, which would improve fry and juvenile habitat and would provide enough natural reproduction to maintain the fishery, would not result in detrimental impact to the fish resources of Hatchet Creek. The Applicant is prepared to monitor the fish populations in the creek and would attempt to mitigate any adverse effect based on monitoring results.

**4 As stated previously, the project would not operate when natural flows are less than 34 cfs. During these periods, natural streamflows would be delivered to the bypassed reach up to 34 cfs. During the remainder of the year, the 15-cfs flow would be adequate for rearing of fry and juvenile. Although the contribution of naturally spawned trout to the fishery in Hatchet Creek is unknown, and is probably adversely impacted by the DFG stocking program, the Applicant’s proposed flow to include accretion flows of 5 to 10 cfs should maintain spawning at levels to provide adequate recruitment to the existing fishery. Article 33 requires a continuous minimum instream flow of 15 cfs to be released below the proposed diversion structure. Article 33 also requires the Licensee to cease operation of the project when inflow to the project is less than \*63263 34 cfs to protect the fishery. To ensure that the recommended minimum flow is sufficient to protect the fishery resources, Article 34 requires the Licensee to monitor the effects of the flow release on the fishery of Hatchet Creek, and to take corrective measures if necessary. Article 35 requires the Licensee to operate the streamflow gage required by standard 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 and to make available to the DFG data obtained from the gage.

**Cultural Resources**

Several waterfalls and plant gathering areas of religious and traditional economic significance to the Madesi band of the Achumawi Indians are located in the project vicinity. These locations will not be impacted by project construction or
operation if a plan agreed to by the Applicant and representatives of the band (the Legitimate Pit River Tribe) is implemented, and includes measures to protect plant gathering areas (in addition to the waterfalls). The plan should be implemented after consultation with the Pit River Tribal Council, as recommended by the California Native American Heritage Commission, in addition to the Legitimate Pit River Tribe. Article 36 requires implementation of such a plan.

An archeological survey of the project impact areas determined that no archeological or historic sites listed, determined eligible, or potentially eligible for inclusion in the National Register of Historic Places would be affected by the project. Article 37 requires the protection of archeological or historic sites in the event that such sites are discovered during construction, and in the event of any future construction at the project.

**Water Quality Certificate**

A water quality certificate for the project was issued on December 19, 1984, by the California Regional Water Quality Control Board, pursuant to Section 401 of the Clean Water Act.

**Comprehensive Development**

The proposed run-of-river project is not in conflict with any planned development in the Hatchet Creek basin and would be best adapted to the comprehensive development of the basin under present conditions and upon compliance with the terms and conditions of the license.

**Finding of No Significant Impact**

The project would result in minor, short-term increases in noise levels, dust, and exhaust emissions from construction activities, and in minor increases in sedimentation and erosion from the disturbance of creekbed and land surfaces. Fishing activities in the project area would be reduced during the construction period and fish would experience short-term impacts. Approximately 21 acres of wildlife habitat would be disturbed.

No Federally listed threatened or endangered species would be affected by the project. Similarly, no sites or structures listed or eligible for listing in the National Register of Historic Places would be affected.

In accordance with the National Environmental Policy Act of 1969, an Environmental Assessment was prepared for the Hatchet Creek Project (FERC No. 5931-002). On the basis of the record and on the basis of Staff’s independent environmental analysis, 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.

**It is ordered that:**

(A) This license is issued to Roseburg Lumber Company (Licensee), of Anderson, California, 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 order is issued, for the construction, operation, and maintenance of the Hatchet Creek Project No. 5931, located in Shasta County, California, on Hatchet Creek, a navigable water of the United States. 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 Hatchet Creek Project No. 5931 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:

<table>
<thead>
<tr>
<th>Exhibit</th>
<th>FERC Drawing No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>5931-4</td>
<td>Project Map</td>
</tr>
</tbody>
</table>
(2) Project works consisting of: (a) a 6-foot-high, 50-foot-long diversion weir at elevation 3,487 feet m.s.l.; (b) a 39-inch-diameter, 18,600-foot-long pipe; (c) a powerhouse containing a single generating unit with a rated capacity of 6,890 kW, operating under a head of 1,025 feet; (d) a switch gear; (e) a power transformer stepping voltage from 4,160 volts to 13.8 kV; (f) a 4,800-foot-long, 13.8-kV transmission line; (g) a substation increasing voltage to 230-kV; (h) interconnection with Pacific Gas and Electric Company’s (PG&E) transmission line existing at the proposed substation site, and (i) 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:

**6 Exhibit A—Page A-3, entitled “Primary Transmission Lines” and “Appurtenant Mechanical, Electrical and Transmission Equipment” and;

<table>
<thead>
<tr>
<th>Exhibit F</th>
<th>FERC No.</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>F-1</td>
<td>5931-1</td>
<td>Plan—Profile</td>
</tr>
<tr>
<td>F-2</td>
<td>5931-2</td>
<td>Diversion/Intake Structure</td>
</tr>
<tr>
<td>F-3</td>
<td>5931-3</td>
<td>Powerhouse Plan and Section</td>
</tr>
</tbody>
</table>

(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, F, and G, 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 nature of the project.

(D) The license for the Hatchet Creek Project is issued, subject to the “Terms and Conditions of License for Unconstructed Major Project Affecting Navigable Waters of the United States” (FERC Form L-4, revised October 1975) (reported at 54 FPC 1824), designated as Articles 1 through 28 of this license. The license is also subject to the following additional articles.

Article 29. Licensee shall design and construct the transmission line in accordance with guidelines set forth in “Suggested Practices for Raptor Protection on Power Lines—the State of the Art In 1981,” Raptor Research Foundation, Inc., 1981. Further, Licensee, after consultation with the U.S. Fish and Wildlife Service and the California Department of Fish and Game, and within 1 year from the date of issuance of the license, shall file a transmission line design plan that will consider adequate separation of energized conductors, groundwires, and other metal hardware, adequate insulation, and any other measures necessary to protect raptors from electrocution hazards. Agency comments on the adequacy of the design plan shall be included in the filing. Unless the Director, Office of Hydropower Licensing, within 60 days following the filing instructs otherwise, Licensee may commence transmission line construction at the end of the 60-day period.

Article 30. Licensee shall, after consultation with the California Department of Fish and Game, and within 1 year from the date of issuance of the license, file for Commission approval a wildlife mitigative plan that would provide for the
revegetation of disturbed areas with plant species beneficial to wildlife, as soon as practicable after construction. Agency comments on the adequacy of the plan and an implementation schedule shall be included in the filing. The Commission reserves the authority to require changes to the plan.

**Article 31.** Licensee shall, after consultation with the California Department of Conservation, California Department of Fish and Game, U.S. Fish and Wildlife Service, California Regional Water Quality Control Board, and Soil Conservation Service, prepare and file with the Commission, within 1 year 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, including spoil disposal areas. The plan shall also include: functional design drawings and map locations of control measures, including an automatic shut-off device at the intake structure to operate in the event of a pipeline or penstock rupture; an implementation schedule; monitoring and maintenance programs for project construction and operation; and provisions for periodic review of the plan and provisions for making any necessary revisions to the plan. Documentation of agency consultation on the plan and copies of any agency comments or recommendations shall be included in the filing.

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. 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.

**Article 32.** Licensee shall, within 8 months following issuance of this license, file for Commission approval, functional design drawings of the fish screens for the diversion intake of the Hatchet Creek Project, prepared after consultation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service. Within 6 months of completion of construction, Licensee shall file as-built drawings.

**Article 33.** Licensee shall maintain in the bypassed reach of Hatchet Creek, a continuous minimum flow of 15 cubic feet per second (cfs) as measured immediately downstream from the project diversion structure, or inflow to the reservoir, whichever is less, and shall cease operation of the project when inflow to the project is 34 cfs or less for the protection of fish and wildlife resources of Hatchet Creek. This flow may be temporarily modified if required by operating emergencies beyond the control of Licensee, and for short periods upon mutual agreement between Licensee and the California Department of Fish and Game.

**Article 34.** Licensee shall, after consultation with the California Department of Fish and Game and the U.S. Fish and Wildlife Service, monitor the effects of the flow releases required by Article 33 on the populations of brook, brown, and rainbow trout in Hatchet Creek for a period of 3 years following commencement of project operation. Further, Licensee shall submit progress reports annually to the Commission and agencies consulted. Within 90 days after completing the monitoring program, Licensee shall file with the Commission a final summary report, and for approval, with copies to the agencies consulted, any recommendations for changes in project operations or facilities, including flow releases, that are necessary to ensure maintenance and protection of the fishery in Hatchet Creek. Documentation of agency consultation on the recommendations shall be included in the filing.

**Article 35.** The Licensee shall construct and operate the streamflow gage required by standard 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. Further, Licensee shall annually make available to the California Department of Fish and Game, data obtained from this gage.

**Article 36.** Licensee shall, within 2 years of the date of this license, implement its plan, filed with the Commission by letter dated November 6, 1984, to avoid impacts to the waterfalls that are of religious significance to the Madesi band of the Achumawi Indians. The plan shall also include measures to avoid impacts to any plant gathering areas of religious or traditional economic importance to the Madesi band, and shall be implemented after consultation with the Legitimate Pit River Tribe (Tribe) and the Pit River Tribal Council (Council). A report describing specific measures to avoid impacts to the waterfalls and plant gathering areas, and the results of consultation and the recommendations of the Tribe and Council shall be filed at least 60 days prior to any construction activity at the project. Licensee shall make available funds in a reasonable amount for implementation of the plan as required. If the Licensee, Tribe, and Council cannot agree on the nature and extent
of the measures to be implemented in the plan, the Commission reserves the right to require Licensee to conduct, at its own expense, any such work found necessary.

**8 Article 37. Licensee shall, prior to any future construction at the project, consult with the California State Historic Preservation Officer (SHPO) about the need for cultural resource survey and salvage work. Documentation of the nature and extent of consultation, including a cultural resources management plan and a schedule to conduct any necessary investigation prior to such construction, and a copy of a letter from the SHPO accepting the plan, shall be filed with the Commission within 6 months of any construction activity in the location of such investigations. 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 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 Licensee shall consult with the SHPO to develop a mitigative plan for the protection of significant archeological or historic resources. If 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 Licensee to conduct, at its own expense, any such work found necessary.

Article 38. 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 39. The Licensee shall provide the Commission’s Regional Engineer one copy and the Director, Division of Inspections two copies 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, Division of Inspections, may require changes in the plans and specifications to assure a safe and adequate project.

Article 40. The Licensee shall review and approve the design of contractor-designed cofferdams and deep excavations prior to the start of construction and shall ensure that construction of cofferdams and deep excavations is consistent with the approved design. At least 30 days prior to start of construction of the cofferdam, the Licensee shall provide the Commission’s Regional Engineer and Director, Division of Inspections, one copy of the approved cofferdam construction drawings and specifications and a copy of the letter(s) of approval.

Article 41. The Licensee shall within 90 days of completion of construction file with the Commission for approval by the Director, Division of Project Management revised Exhibit A and Exhibits F and G drawings to describe and show the project as-built.

Article 42. The Licensee shall pay the United States the following annual charge, effective the first day of the month in which this license is issued:

**9 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 9,190 horsepower.

Article 43. (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) noncommercial 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.

**10 (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 Hydropower Licensing, 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.

**11 (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.

**63268 Article 44.** Pursuant to Section 10(d) of the Act, after the first 20 years of operation of the project under license, a specified reasonable rate of return upon the net investment in the project shall be used for determining surplus earnings of the project for the establishment and maintenance of amortization reserves. One half of the project surplus earnings, if any, accumulated after the first 20 years of operation under the license, in excess of the specified rate of return per annum on the net investment, shall be set aside in a project amortization reserve account at the end of each fiscal year. To the extent that there is a deficiency of project earnings below the specified rate of return per annum for any fiscal year after the first 20 years of operation under the license, the amount of that deficiency shall be deducted from the amount of any surplus earnings subsequently accumulated, until absorbed. One-half of the remaining surplus earnings, if any, cumulatively computed, shall be set aside in the project amortization reserve account. The amounts established in the project amortization reserve account shall be maintained until further order of the Commission.

**12** The annual specified reasonable rate of return shall be the sum of the annual weighted costs of long-term debt, preferred stock, and common equity, as defined below. The annual weighted cost for each component of the reasonable rate of return is the product of its capital ratio and cost rate. The annual capital ratio for each component of the rate of return shall be calculated based on an average of 13 monthly balances of amounts properly includable in the Licensee’s long-term debt and proprietary capital accounts as listed in the Commission’s Uniform System of Accounts. The cost rates for long-term debt and preferred stock shall be their respective weighted average costs for the year, and the cost of common equity shall be the interest rate on 10-year government bonds (reported as the Treasury Department’s 10 year constant maturity series) computed on the monthly average for the year in question plus four percentage points (400 basis points).

(E) This order is final unless a petition appealing it to the Commission is filed within 30 days from the date of its regulations, 18 C.F.R. §385.1902 (1983). The Licensee’s failure to file a petition appealing this order to the Commission shall constitute acceptance of this order. In acknowledgment of acceptance of this order and its terms and conditions, it shall be signed by the Licensee and returned to the Commission within 60 days from the date this order is issued.

Federal Energy Regulatory Commission

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 action may be appealed to the Commission by any party within 30 days of the issuance date of this letter pursuant to Rule 1902, 18 C.F.R. § 385.1902 (1984). 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 The proposed project, with its average annual generation of 19.57 million kWh, will utilize a renewable resource that will save the equivalent of approximately 32,130 barrels of oil or 9,060 tons of coal per year.

3 Environmental Assessment, Hatchet Creek Project, FERC No. 5931—California, March 4, 1985, prepared by the Division of Environmental Analysis, Office of Hydropower Licensing, Federal Energy Regulatory Commission. This document is available in the Division of Public Information and in the Commission’s public file associated with the proceeding.

31 FERC P 62184 (F.E.R.C.), 1985 WL 65858