

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

PacifiCorp

Project No. 597-003

ORDER ISSUING SUBSEQUENT LICENSE
(Minor Project)

(September 30, 1999)

On June 24, 1998, PacifiCorp filed, pursuant to Part I of the Federal Power Act (FPA),¹ an application for a subsequent license to continue to operate and maintain the 1,200 kilowatt (kW) run-of-river Stairs Hydroelectric Project (Stairs) No. 597, located on Big Cottonwood Creek in Big Cottonwood Canyon, Salt Lake County, near the town of Sandy, about 15 miles southeast of downtown Salt Lake City, Utah. The project occupies about 8.7 acres of land within the Wasatch-Cache National Forest, administered by the Salt Lake Ranger District of the U.S. Forest Service.²

* The Commission issued an original license for the project on March 21, 1977. The original license expires on June 30, 2000. The project will continue to operate under the existing license until June 30, 2000. On July 1, 2000, the terms and conditions set forth in the following order for a subsequent license will take affect.

BACKGROUND

The Commission issued a public notice soliciting motions to intervene for the project on June 24, 1998. No motions to intervene were filed. The Commission then issued a public notice on January 21, 1999, indicating the project was ready for environmental analysis (REA) and soliciting comments, recommendations, and terms and conditions. No agencies filed a response to the REA notice.

¹16 U.S.C. §§ 791a - 825r.

²Portions of the project are located within the Wasatch-Cache National Forest. Therefore, Section 23 (b) (1) of the FPA, 16 U.S.C. § 817 (1), requires the project to be licensed.

*The license is issued
to PacifiCorp, for
30 yrs, effective
July 1, 2000*

Project No. 597-003

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On August 16, 1999, the Commission's staff made available for public comment a draft environmental assessment (DEA). The DEA recommended that the project be licensed and found that licensing the project would not constitute a major federal action significantly affecting the quality of the human environment. The Utah Department of Natural Resources (UDNR) responded by letter dated August 20, 1999, in which they stated that they had no comments on the DEA and supported PacifiCorp's proposal to operate the project run-of-river and to release a minimum flow of 4 cubic feet per second (cfs). Staff acknowledged UDNR's response in the final environmental assessment (FEA), issued on September 17, 1999. The FEA is incorporated by reference in this license.

II. PROJECT DESCRIPTION

The existing unmanned run-of-river³ project consists of: (1) a 150-foot-long and 35-foot-high earth-fill diversion dam; (2) a reinforced concrete spillway; (3) a reinforced concrete intake structure; (4) a 2,850-foot-long penstock; (5) a 100-foot-wide by 35-foot-long masonry powerhouse; (6) one Francis turbine generator with a rated capacity of 1,200 kilowatts; (7) a 7-foot-wide by 5.3-foot-deep reinforced concrete tailrace; and (8) other appurtenances.

III. APPLICANT'S PLANS AND CAPABILITIES

The staff evaluated PacifiCorp's record as a licensee for these areas: (1) conservation efforts; (2) compliance history and ability to comply with the new license; (3) safe management, operation, and maintenance of the project; (4) ability to provide efficient and reliable electric service; (5) need for power; (6) transmission line improvements; (7) project modifications; and (8) actions affecting the public. I accept the staff's findings in each of these areas.

1. Conservation Efforts

PacifiCorp has a long record of encouraging and assisting its customers to conserve electricity. To carry out this objective, the applicant devised a demand-side management (DSM) program.

³Run-of-river, as defined in this proceeding, is operation of the project such that inflow into the project penstock is about equal to outflow from the project powerhouse. There is no storage of water.

The DSM's goal is to achieve a total of 76 MW of cost effective reductions. The principal components of the program are:

- a) commercial, industrial and irrigation retrofitting offering services and implementing measures meant to help save about 52 MW of capacity;
- b) the Energy FinAnswer, a program for providing financing to new commercial customers that contribute to a reduction in the peak loads. The target for this program is 16.2 MW;
- c) increasing the use of fluorescent lamps in the residential sector thus achieving another 2.6 MW of savings; and
- d) the water savings measures program contributing about 2 MW to the savings.

We conclude that the applicant is making a good faith effort to conserve electricity and promote energy conservation by its customers.

2. Compliance History and Ability to Comply with the Requirements of the New License

PacifiCorp's overall record of making timely filings and compliance with its license is satisfactory. Therefore, we believe that the applicant can satisfy the conditions of a new license.

3. Safe Management, Operation, and Maintenance of the Project

The Stairs Project, due to a lack of downstream development, is designated as a "low" hazard potential and therefore has been granted an exemption from filing an Emergency Action Plan in concordance with 18 C.F.R. § 12.21 (a). The project is not subject to Part 12 of the Commission's Regulations.

Although public access to the project is limited, PacifiCorp developed a Public Safety Plan featuring fencing around the powerhouse, substation, intake, and spillway areas. To protect boaters, floating safety booms were installed across the spillway and before the dam.

Under normal conditions, the project is operated unmanned with the generating unit loaded according to the seasonal water availability.

Under low flows, the station's load control system shuts off inflow to the turbine and the System Dispatch Center is notified by telephone modem. To restart the project, an operator is dispatched to reset the generator and synchronize it to the system.

During flood events, the project continues to operate by passing water through the conveyance system while excess water overflows at the spillway.

For the five-year period preceding the application for a new license, there have been no lost-time accidents and no deaths involving the project personnel or the general public.

We reviewed the project files and contacted the Regional Office concerning project safety issues. We conclude that the project works are safe and that PacifiCorp's record of managing, operating, and maintaining these facilities is satisfactory.

4. Efficient and Reliable Electric Service

To evaluate PacifiCorp's ability to provide efficient and reliable service, we reviewed: (1) its operating plan; (2) its program to upgrade the project's equipment; and (3) its unscheduled outages.

Currently, the Stairs Project is operated unmanned and in a run-of-river mode. The applicant proposes to continue this operation as it has been demonstrated to be both efficient and reliable.

After reviewing the operation and maintenance record, we find that PacifiCorp has made numerous repairs and replacements to the equipment. For instance, in 1994 a new load controller and the related computer were installed. In 1995 PacifiCorp replaced the turbine/generator and wicket gates, the generator circuit breaker and the step-up transformer. A flowline monitoring system was installed in 1997.

Lost generation due to unscheduled outages at the project for the period 1993 - 1997 was not significant - an average of 115 megawatt-hours (Mwh) per year when compared to the average annual generation of 4,720 MWh.

We conclude that PacifiCorp has demonstrated the ability and shows commitment to continued efficient and reliable electric service.

5. Need for Power

PacifiCorp provides electricity and related energy services to about 1.3 million customers in 7 western states. About half of PacifiCorp's retail sales are to industrial customers, the rest are divided equally among commercial and residential customers.

Each year, PacifiCorp analyzes future load growth, the capability of the existing power system, and the need for new resources—including both new power plants and customer efficiency programs. Based on their latest planning results, PacifiCorp will need to add about 1,154 MW of baseload resources in the next 10 years 1996-2005.

The PacifiCorp system is part of the Northwest Power Pool area of the Western Systems Coordinating Council region (WSCC). This area includes the entire states of Washington, Oregon, Idaho, and Utah, parts of California, Montana, Wyoming, and Nevada, and the Canadian provinces of Alberta and British Columbia.

In their 1997 report, WSCC projects a regional peak demand growth rate of 2.2 percent and a regional energy growth rate of 1.9 percent. For the Northwest Power Pool Area, the report shows 2,770 MW of proposed capacity being added during the forecast period, which extends to 2007.

Power from the project, if licensed, would continue to be useful in meeting part of the need for power projected by both PacifiCorp and the Northwest Power Pool Area. The project displaces some fossil-fueled electric power generation, and thereby conserves nonrenewable fossil fuels and reduces the emission of noxious byproducts caused by the combustion of fossil fuels.

6. Transmission Services

If PacifiCorp were to be denied a new license for the Stairs Hydroelectric Project, any new licensee would undoubtedly use the existing PacifiCorp transmission system to transmit the project power and operation characteristics would likely remain unchanged. This would certainly be true if the new licensee sold the project's power to PacifiCorp.

PacifiCorp states that, if the project were not relicensed, or transferred to another licensee, additional costs would be incurred from replacement energy and decommissioning of the project. By removing the transmission line, PacifiCorp states that there would be one less source of voltage control and system stability for the area.

7. Project Modifications

PacifiCorp doesn't propose any additional capacity. We have examined the design of the plant and agree that the project, as presently constructed and as PacifiCorp proposes to operate it, fully develops and uses the hydropower potential of the site.

8. Actions Affecting the Public

Issuing a new license for the project would insure that low cost electricity will continue to be available to neighboring communities. The project provides opportunities for fishing, picnicking, rock climbing, and water play.

I concur with the Staff that continued operation of the project would benefit the public.

IV. WATER QUALITY CERTIFICATION

Under Section 401 (a) of the Clean Water Act,⁴ the Commission may not issue a license for a hydroelectric project unless the state certifying agency has either issued water quality certification for the project or has waived certification by failing to act on a request for certification within a reasonable period of time, not to exceed one year.⁵

PacifiCorp applied for water quality certification (WQC) for the project on March 20, 1996. The State of Utah Department of Environmental Quality (UDEQ) issued water quality certification on April 3, 1996, with the condition that appropriate Best Management Practices (BMP's) be incorporated to minimize erosion-sediment load to any adjacent waters during project activities and that appropriate water quality parameters of the adjacent waters be monitored for effectiveness. The WQC conditions are included in this license as Appendix A.

⁴33 U.S.C. § 1341 (a) (1).

⁵Section 401 (a) (1) requires an applicant for a federal license or permit to conduct any activity that may result in any discharge into navigable waters to obtain from the state in which the discharge originates certification that any such discharge would comply with applicable water quality standards.

V. THREATENED AND ENDANGERED SPECIES

Section 7 (a) of the Endangered Species Act of 1973 (ESA)⁶ requires federal agencies to ensure that their actions are not likely to jeopardize the continued existence of federally listed threatened and endangered species, or result in the destruction or adverse modifications of designated critical habitat. Federally listed species that may occur in the project area include the threatened bald eagle (*Haliaeetus leucocephalus*), and the Ute ladies'-tresses (*spirathes diluvialis*).⁷

In the FEA, Commission staff concluded that proposed continued operation and maintenance, with staff's recommended measures, would not affect any threatened or endangered species.⁸

VI. SECTION 4(e) FINDINGS AND CONDITIONS

Section 4(e) of the FPA⁹ states the Commission may issue a license only after finding that the license will not interfere or be inconsistent with the purpose for which the reservation was created or acquired. Section 3 (2) of the FPA¹⁰ defines reservations as including national forests. Section 4 (e) also requires that licenses issued for hydroelectric projects located within United States reservations must include all conditions that the secretary of the department under whose supervision the reservation falls (in the proceeding, the Secretary of the U.S. Department of Agriculture) shall deem necessary for the adequate protection and utilization of the reservation.

The Forest Service did file terms and conditions under Section 4 (e) of the FPA (See Appendix B). Further, there is no evidence or allegations in this proceeding to indicate that the relicensing of the project will interfere with the purpose of the Wasatch-Cache National Forest. I therefore find that this license will not interfere or be inconsistent with the purpose for which the reservation was created.

⁶16 U.S.C. § 1536 (a).

⁷Federal Register: August 25, 1999, (Volume 64, Number 164), the peregrine falcon was removed from the Threatened & Endangered Species list.

⁸ Section V.C.3 of the FEA.

⁹16 U.S.C. § 797 (e).

¹⁰16 U.S.C. § 796 (2).

VII. RECOMMENDATION OF FEDERAL AND STATE FISH AND WILDLIFE AGENCIES

Under the provisions of Section 10 (j) (1) of the FPA,¹¹ the Commission is required to include license conditions, based upon recommendations of state and federal fish and wildlife agencies submitted pursuant to the Fish and Wildlife Coordination Act, for the protection of, mitigation of adverse impacts to, and enhancement of fish and wildlife resources affected by the project. If the Commission believes that any such recommendations may be inconsistent with the purpose and requirements of Part I of the FPA, or other applicable law, Section 10(j)(2) of the FPA requires the Commission and the agencies to attempt to resolve such inconsistencies, giving due weight to the recommendations, expertise, and statutory responsibilities of such agencies. If the Commission still does not adopt a recommendation, it must explain how the recommendation is inconsistent with Part I of the FPA or other applicable law and how the conditions imposed by the Commission adequately and equitably protect, mitigate damages to, and enhance fish and wildlife resources.

No fish and wildlife agency submitted recommendations that fall within the scope of Section 10(j) of the FPA.

VIII. OTHER ISSUES

A. Administrative Conditions

The Commission collects annual charges from licensees for administration of the FPA, and to reimburse the United States for the occupancy and use of any federal lands at projects. Article 201 provides for the collection of such funds.

The Commission requires licensees to file sets of approved project drawings on microfilm. Article 202 provides for the filing of these drawings.

Some projects directly benefitted from headwater improvements that were constructed by other licensees, the United States, or permittees. Article 501 requires the licensee to reimburse such entities for these benefits if they were not previously assessed and reimbursed.

¹¹16 U.S.C. § 803 (j) (1).

B. Aquatic Resources

PacifiCorp proposes to release 4 cfs into the bypassed reach of Big Cottonwood Creek to protect the aquatic resources present. Based on habitat conditions (steep gradient) and limited aquatic resources staff concluded in Section V.C.1 of the FEA that requiring PacifiCorp to release a 4-cfs minimum flow would adequately protect aquatic resources in the Big Cottonwood Creek bypassed reach. Fisheries biologists from Forest Service and the Utah Department of Wildlife also agreed, based on habitat measurements and professional judgement, that a 4-cfs minimum flow would sufficiently protect the resource. Therefore, I am including Article 401 which requires a 4-cfs minimum flow for the bypassed reach.

PacifiCorp proposes to continue to operate the project run-of-river. No resource agencies, groups, or individuals commented or recommended that PacifiCorp change the way the project is operated. Therefore, as concluded in Section V.C.1 of the FEA, requiring PacifiCorp to operate the project run-of-river would benefit aquatic life and water quality in Big Cottonwood Creek. Article 402 requires PacifiCorp to continue operating the project run-of-river. Article 403 requires PacifiCorp to prepare and implement a plan to monitor compliance with the minimum flow requirement of Article 401 and the run-of-river requirement of Article 402.

C. Cultural Resources

On April 20, 1989, the Stairs Station Hydroelectric Power Plant Historic District in Salt Lake County, Utah, was listed on the National Register of Historic Places as part of the Electric Power Plants of Utah Multiple Property listing. PacifiCorp provided the Utah State Historic Preservation Officer (SHPO) with a report concerning the Stairs Project. PacifiCorp determined that the continued operation of the Stairs Project would have no effect on the historic district. This determination was made because no changes to the project facilities or its operation are being proposed. The SHPO and Commission staff concur with PacifiCorp, that continued operation of the project would have no effect on this historic property.

Commission staff recommends and I concur that if archeological or historic sites are discovered during project operation, or if the licensee plans to modify any previously discovered archeological or historic sites, steps should be taken to protect the discovered archeological or historic sites. Article 404 requires PacifiCorp to implement appropriate measures.

D. Use and Occupancy of Project Lands and Waters

Requiring a licensee to obtain prior Commission approval for every use or occupancy of land would be unduly burdensome. Article 405 allows PacifiCorp to grant permission, without prior Commission approval, for the use and occupancy of project lands for minor activities, such as landscape planting. Such uses must be consistent with the purpose of protecting and enhancing the scenic, recreational, and environmental values of the project.

IX. COMPREHENSIVE PLANS

Section 10(a)(2) of the FPA requires the Commission to consider the extent to which a project is consistent with federal and state comprehensive plans for improving, developing, or conserving a waterway or waterways affected by the project. Among the comprehensive plans that have been filed (9 federal and 8 state plans), we found and reviewed two plans which were relevant to this project.¹² Staff concluded and I concur that the proposed project would not conflict with either of these plans and would be consistent with the purpose for which the plans were developed.

X. COMPREHENSIVE DEVELOPMENT

In determining whether a proposed hydroelectric power project will be best adapted to a comprehensive plan for developing a waterway for beneficial public uses, pursuant to Section 10(a)(1), the Commission considers a number of public interest factors, including the projected economic benefits of project power.

Under the Commission's current approach to evaluating the economics of hydropower projects, as articulated in Mead Corp.,¹³ the Commission employs an analysis that uses current costs to compare the costs of the project and likely alternative power without incorporating forecasts concerning the effects of potential future inflation, escalation, or deflation. The purpose of the Commission's economic analysis is to provide a general estimate of the potential power benefits and the costs of a project, and reasonable alternatives to project power. In making its decision, the Commission

¹²Forest Service. Undated. Wasatch-Cache National Forest Land and Resource Management Plan. Department of Agriculture, Salt Lake City, Utah. 482 pages and appendices; Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American Waterfowl Management Plan. Department of the Interior. May 1986. 19 pp.

¹³72 FERC ¶ 61,027 (1995).

considers the project power benefits both with the applicant's proposed mitigation and enhancement measures and with the Commission's modifications and additions to the applicant's proposal.

As proposed by PacifiCorp, the project would produce an average of 4,720 MWh of energy annually at an annual cost of \$236,000 or 50 mills per kilowatt-hour (mills/kWh). The current annual value of the project's power is about \$117,980 or 25 mills/kWh. To determine whether the proposed project is currently economically beneficial, we subtract the project's cost from the value of the project's power. Thus, based on current cost, the project as currently operating would cost about \$118,860 (25.0 mills/kWh) more than the current cost of alternative power.

Sections 4(e) and 10(a)(1) of the FPA¹⁴ require the Commission, in acting on applications for license, to give equal consideration to developmental and environmental values. Any license issued shall be in the Commission's judgment best adapted to a comprehensive plan for improving or developing the waterways for beneficial public uses. The decision to license this project, and the terms and conditions included herein, reflect such consideration.

Based on the record in this proceeding, and for the reasons discussed herein, I conclude that the proposed project with our additional measure to protect cultural resources in the project area will be best adapted to a comprehensive plan for developing the waterway for beneficial public uses. The 4,720 MWh of clean, domestic, and reliable energy that would be produced by the project would displace fossil-fueled electric generation, thereby conserving nonrenewable fossil fuels and avoiding the emission of additional noxious gases caused by the combustion of those fuels. The environmental measures – operate the project run-of-river, provide 4 cfs of minimum flow into the bypassed reach, and take appropriate steps to protect discovered archeological or historic sites during any future project modifications and during project operation and maintenance – would reduce adverse effects on water quality and fisheries and protect cultural resources in the project area.

¹⁴16 U.S.C. §§ 797(e) and 803(a)(1).

XI. LICENSE TERM

Section 15 (e) of the FPA¹⁵ specifies that any license issued shall be for a term that the Commission determines to be in the public interest, but not less than 30 years or more than 50 years from the date on which the license is issued. The Commission's policy establishes 30-year terms for projects with little or no proposed redevelopment, new construction, new capacity, or environmental mitigation and enhancement measures; 40-year terms for projects with moderate amount thereof; and 50-year terms for projects with extensive amount thereof. Because relicensing the project would require no new construction and only minor enhancement measures, I am providing a license term of 30 years for the project.

XII. SUMMARY OF FINDINGS

The FEA contains background information, analysis of impacts, support for related license articles, and the basis for a finding of no significant impact on the environment.

The project works are safe and PacifiCorp's record of managing, operating, and maintaining these facilities presents no reason not to issue a license.

The Director Orders:

(A) This license is issued to PacifiCorp (licensee) for the Stairs Hydroelectric Project, for a period of 30 years, effective July 1, 2000. The existing license expires on June 30, 2000. The license is subject to the terms and conditions of the FPA, which is incorporated by reference as part of this license, and subject to regulations the Commission issues under the provisions of the FPA.

(B) The project consists of :

(1) All lands, to the extent of the licensee's interest in those lands, enclosed by the project boundary as shown in the following exhibit G figure:

<u>Exhibit</u>	<u>FERC No. 597-</u>	<u>Showing</u>
G-1	1002	Project boundary map

¹⁵16 U.S.C. § 808 (e).

(2) Project works consisting of: (1) a 150-foot-long and 35-foot-high earth-fill diversion dam; (2) a reinforced concrete spillway; (3) a reinforced concrete intake structure; (4) a 2,850-foot-long penstock; (5) a 100-foot-wide by 35-foot-long masonry powerhouse; (6) one Francis turbine generator with a rated capacity of 1,200 kilowatts; (7) a 7-foot-wide by 5.3-foot-deep reinforced concrete tailrace; and (8) other appurtenances.

These project works are more specifically described in Table A-1 of exhibit A of the license application and the following exhibit f drawing:

<u>Exhibit</u>	<u>FERC No. 597-</u>	<u>Showing</u>
F-1	1001	General design drawing

(3) All of the structures, fixtures, equipment or facilities used to operate or maintain the project, all portable property that may be employed in connection with the project, all riparian or other rights that are necessary or appropriate in the operation or maintenance of the project.

(C) The exhibits A, F, and G as designated in ordering paragraph (B) above, are approved and made part of this license.

(D) The following sections of the FPA are waived and excluded from the license for this minor project:

4(b), except the second sentence; 4(e), insofar as it relates to approval of plans by the Chief of Engineers and the Secretary of the Army; 6, insofar as it relates to public notice and to the acceptance and expression in the license of terms and conditions of the FPA that are waived here; 10(c), insofar as it relates to depreciation reserves; 10(d); 10(f); 14, except insofar as the power of condemnation is reserved; 15; 16; 19; 20; and 22.

(E) This license is subject to the articles set forth in Form L-16 (October 1975), entitled "Terms and Conditions of License for Constructed Minor Project Affecting Lands of the United States", 54 F.P.C. 1792, 1888-1896, and the following additional articles:

Article 201. The licensee shall pay the United States annual charges, effective July 1, 2000:

(a) For the purpose of reimbursing the United States for the costs of administering Part I of the Federal Power 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 1,200 kilowatts. Under regulations currently in effect, projects with authorized installed capacity of less than or equal to 1,500 kilowatts are not assessed an annual administrative charge.

(b) For the purpose of recompensing the United States for the use, occupancy, and enjoyment of 8.7 acres of its lands, other than transmission line right-of-way, a reasonable amount as determined in accordance with the provisions of the Commission's regulations in effect from time to time.

Article 202. Within 45 days of the effective date of the license, the licensee shall file three sets of aperture cards of the approved exhibit drawings. The sets must be reproduced on silver or gelatin microfilm and mounted on type D (3 1/4" X 7 3/8") aperture cards.

Prior to microfilming, the FERC drawing number (597-1001) shall be shown in the margin below the title block of the approved drawing. The exhibit number shall be revised to agree with the exhibit number assigned in ordering paragraph (B) above. Additionally the project number, FERC exhibit (e.g., F-1, G-1, etc.), drawing title, and date of this license must be typed on the upper left corner of each aperture card.

Two sets of aperture cards must be filed with the Secretary of the Commission. The remaining set of aperture cards shall be filed with the Commission's San Francisco Regional Office.

Article 401. Within 60 days from the date the Commission approves the gaging plan required by Article 403, the licensee shall release from the Stairs Hydroelectric Project into Big Cottonwood Creek a minimum flow of 4 cubic feet per second, as measured at the bypass structure, or inflow to the project, whichever is less, for protection and enhancement of fish and wildlife resources, aesthetic resources, and water quality in the bypassed reach of Big Cottonwood Creek.

This flow requirement may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon agreement between the licensee and the U.S. Forest Service, the U.S. Fish and Wildlife Service, and Utah Division of Wildlife Resources. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 402. Within 60 days from the date the Commission approves the gaging plan required by Article 403, the licensee shall operate the project in a run-of-river mode for the protection of aquatic resources in Big Cottonwood Creek downstream of the

project tailrace. The licensee shall operate the project so that, at any point in time, flows, as measured immediately downstream from the project tailrace, approximate the sum of inflows into the project's forebay.

Run-of-river operation may be temporarily modified if required by operating emergencies beyond the control of the licensee, and for short periods upon mutual agreement between the licensee and the U.S. Forest Service, the U.S. Fish and Wildlife Service, and Utah Division of Wildlife Resources. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

Article 403. Within six months of the effective date of this license, the licensee shall file with the Commission, for approval, a plan to monitor compliance with the minimum flow requirement of Article 401 and the run-of-river requirement of Article 402. At a minimum, the plan shall include:

- (1) a description of how the project would be operated to maintain compliance with the minimum flow and run-of-river requirements;
- (2) a monitoring schedule;
- (3) a provision to maintain a log of project operation and generation that includes documentation of all unusual circumstances such as load rejections; and
- (4) an implementation schedule for the plan.

The licensee shall prepare the plan after consultation with the U.S. Geological Survey, the U.S. Fish and Wildlife Service, U.S. Forest Service, Utah Division of Wildlife Resources, and Utah Department of Environmental Quality. The licensee shall include with the plan, documentation of consultation, copies of comments and recommendations on the completed plan after it has been prepared and provided to the agencies, and specific descriptions of how the agencies' comments are accommodated by the plan. The licensee shall allow a minimum of 30 days for the agencies to comment and to make recommendations before filing the plan with the Commission. If the licensee does not adopt a recommendation, the filing shall include the licensee's reasons, based on project-specific information.

A courtesy copy of the plan shall be filed with the Commission's San Francisco Regional Office. The Commission reserves the right to require changes to the plan.

Upon Commission approval, the licensee shall implement the plan, including any changes required by the Commission.

Article 404. If archeological or historic sites are discovered during any future project modifications or construction that require land-disturbing activities, or during project operation or maintenance, or if the licensee plans any future modifications, other than routine maintenance, to already discovered archeological or historic sites, the licensee shall: (1) consult with the Utah State Historic Preservation Officer (SHPO) and the Forest Service (FS) about the discovered sites; (2) prepare a site-specific plan, including a schedule, to evaluate the significance of the sites and to avoid or mitigate any impacts to sites found eligible for inclusion in the National Register of Historic Places; (3) base the site-specific plan on recommendations of the SHPO and the FS, and the Secretary of the Interior's Standards and Guidelines for Archeology and Historic Preservation; (4) file the site-specific plan for Commission approval, together with the written comments of the SHPO and the FS; and (5) take the necessary steps to protect the discovered archeological or historic sites from further impact until notified by the Commission that all of these requirements have been satisfied.

The Commission may require cultural resources surveys and changes to the site-specific plans based on the filings. The licensee shall not implement a cultural resources management plan, begin any land-clearing or land-disturbing activities in the vicinity of any discovered sites, or modify previously discovered sites until informed by the Commission that the requirements of this article have been fulfilled.

Article 405. (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 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 use 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, canceling 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 watercraft at a time and where said facility is intended to serve single-family type dwellings; (3) embankments, bulkheads, retaining walls, or similar structures for erosion control to protect the existing shoreline; and (4) food plots and other wildlife enhancement. 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 use 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.

(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 or roads where 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 certification 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 (measured over project waters) 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 project waters at normal 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 60 days before conveying any interest in project lands under this paragraph (d), the licensee must submit 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.

(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 the following covenants running with the land: (i) the use of the lands conveyed shall not endanger health, create a nuisance, or otherwise be incompatible with overall project recreational use; (ii) the grantee shall take all reasonable precautions to insure 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; and (iii) the grantee shall not unduly restrict public access to project waters.

(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.

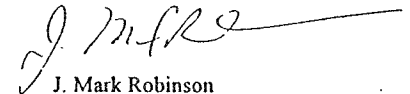
(g) The authority granted to the licensee under this article shall not apply to any part of the public lands and reservations of the United States included within the project boundary.

Article 501. If the licensee's project was directly benefitted by the construction work of another licensee, a permittee, or the United States on a storage reservoir or other headwater improvement during the term of the original license (including extensions of that term by annual licenses), and if those headwater benefits were not previously assessed and reimbursed to the owner of the headwater improvement, the licensee shall reimburse the owner of the headwater improvement for those benefits, at such time as they are assessed, in the same manner as for benefits received during the term of this new license.

(F) The licensee shall serve copies of any Commission filing required by this order on any entity specified in this order to be consulted on matters related to that filing. Proof of service on these entities must accompany the filing with the Commission.

(G) This order is issued under authority delegated to the Director and is final unless a request for a rehearing by the Commission is filed within 30 days from its issuance, as provided in Section 313(a) of the Federal Power Act. The filing of a request for rehearing 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. The

licensee's failure to file a request for rehearing of this order shall constitute acceptance of the license.



J. Mark Robinson
Director
Division of Licensing and Compliance

APPENDIX A

STATE OF UTAH DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY CERTIFICATION CONDITIONS

1. The certificate holder shall incorporate appropriate Best Management Practices (BMPs) to minimize erosion-sedimentation load to any adjacent waters during project activities.
2. Appropriate water quality parameters of adjacent waters shall be monitored for effectiveness.

date of issue 9/30/99 - MAR 30 2001
license begins 7/1/2000 - Jan 1/2001

4(E) No. 1
6/26/00 FILED FOR
AMENDMENT TO LICENSE.

APPENDIX B

UNITED STATES DEPARTMENT OF AGRICULTURE
UNITED STATES FOREST SERVICE

FOREST SERVICE SECTION 4 (E) CONDITIONS

I. GENERAL

License articles contained in the Commission's Standard Form L-16 (Terms and Conditions of License for Constructed Minor Project Affecting Lands of the United States, revised October 1975), issued by Order No. 540, dated October 31, 1975, cover general requirements that the Secretary of Agriculture, acting by and through the Forest Service, considers necessary for adequate protection and utilization of the land and resources of the Wasatch-Cache National Forest. For the purpose of section 4 (e) of the Federal Power Act (16 U.S.C. 797 (e)), the purpose for which National Forest System lands were created or acquired shall be the protection and utilization of those resources enumerated in the Organic Administration Act of 1897 (30 Stat. 11), the Multiple-Use Sustained Yield Act of 1960 (74 Stat. 215), and the National Forest Management Act of 1976 (90 Stat. 2949), and any other law specifically establishing a unit of the National Forest System or prescribing the management thereof (such as the Wilderness Act or Wild and Scenic Rivers Act), as such laws may be amended from time to time, and as implemented by regulations and approved forest plans prepared in accordance with the National Forest Management Act. Therefore, pursuant to said section 4 (e) of the Federal Power Act, the following conditions covering specific requirements for protection and utilization of National Forest System lands shall also be included in any license issued.

STANDARD FOREST SERVICE PROVISIONS

Condition No. 1 - Requirement to Obtain a Forest Service Special-Use Authorization

Within 6 months following the date of issuance of this license and before starting any activities the Forest Service determines to be of a land-disturbing nature, the Licensee shall obtain from the Forest Service a special-use authorization for the occupancy and use of National Forest System lands, and that authorization shall be filed with the Director, Office of Hydropower Licensing.

The Licensee may commence land-disturbing activities authorized by the license and special-use authorization 60 days following the filing date of such authorization, unless the Director, Office of Hydropower Licensing, prescribes a different commencement schedule.

Notwithstanding the authorization granted under the Federal Power Act, National Forest System lands within the project boundaries shall be managed by the Forest Service under the laws, and regulations applicable to the National Forest System. The terms and conditions of the Forest Service special-use authorization are enforceable by the Forest Service under the laws, rules, and regulations applicable to the National Forest System. The violation of such terms and conditions also shall be subject to applicable sanctions and enforcement procedures of the Commission at the request of the Forest Service. In the event there is a conflict between any provisions of the license and Forest Service special-use authorization, the special-use authorization shall prevail on matters which the Forest Service deems to affect National Forest System resources.

Condition No. 2 - Forest Service Approval of Final Design

Before any construction of the project occurs on National Forest System land, the Licensee shall obtain the prior written approval of the Forest Service for all final design plans for project components which the Forest Service deems as affecting or potentially affecting National Forest System resources. The Licensee shall follow the schedules and procedures for design review and approval specified in the Forest Service special-use authorization. As part of such prior written approval, the Forest Service may require adjustments in final plans and facility locations to preclude or mitigate impacts and to issue that the project is compatible with on-the-ground conditions. Should such necessary adjustments be deemed by the Forest Service, the Commission, or the licensee to be substantial change, the licensee shall follow the procedures of Article 2 of the license. Any changes to the license made for any reason pursuant to Article 2 or Article 3 shall be made subject to any new terms and conditions of the Secretary of Agriculture made pursuant to section 4(e) of the Federal Power.

Condition No. 3 - Approval of Changes After Initial Construction

Notwithstanding any license authorization to make changes to the project, the Licensee shall get written approval from the Forest Service prior to making any changes in the location of any constructed project feature or facilities, or in the use of project lands and waters, or any departure from the requirements of any approved exhibits filed with the Commission. Following receipt of such approval from the Forest Service, and at least 60 days prior to initiating any such changes or departure, the Licensee shall file a report with the Commission describing the changes, the reasons for the changes, and showing the approval of the Forest Service for such changes. The Licensee shall file an exact copy of this report with the Forest Service at the same time it is filed with the Commission. This article

does not relieve the Licensee from the amendment or other requirements of Article 2 or Article 3 of this License.

Condition No. 4 - Consultation

Each year during the 60 days preceding the anniversary date of the license, the Licensee shall consult with the Forest Service with regard to measures needed to ensure protection and development of the natural resource values of the project area. Within 60 days following such consultation, the Licensee shall file with the Commission evidence of the consultation with any recommendations made by the Forest Service. The Commission reserves the right, after notice and opportunity for hearing, to require changes in the project and its operation that may be necessary to accomplish natural resource protection.

FEDERAL ENERGY REGULATORY COMMISSION

TERMS AND CONDITIONS OF LICENSE
FOR CONSTRUCTED MINOR PROJECT AFFECTING
LANDS OF THE UNITED STATES

Article 1. The entire project, as described in this order of the Commission, shall be subject to all of the provisions, terms, and conditions of the license.

Article 2. No substantial change shall be made in the maps, plans, specifications, and statements described and designated as exhibits and approved by the Commission in its order as a part of the license until such change shall have been approved by the Commission: Provided, however, That if the Licensee or the Commission deems it necessary or desirable that said approved exhibits, or any of them, be changed, there shall be submitted to the Commission for approval a revised, or additional exhibit or exhibits covering the proposed changes which, upon approval by the Commission, shall become a part of the license and shall supersede, in whole or in part, such exhibit or exhibits theretofore made a part of the license as may be specified by the Commission.

Article 3. The project area and project works shall be in substantial conformity with the approved exhibits referred to in Article 2 herein or as changed in accordance with the provisions of said article. Except when emergency shall require for the protection of navigation, life, health, or property, there shall not be made without prior approval of the Commission any substantial alteration or addition not in conformity with the approved plans to any dam or other project works under the license or any substantial use of project lands and waters not authorized herein; and any emergency alteration, addition, or use so made shall thereafter be subject to such modification and change as the Commission may direct. Minor changes in project works, or in uses of project lands and waters, or divergence from such approved exhibits may be made if such changes will not result in a decrease in efficiency, in a material increase in cost, in an adverse environmental impact, or in impairment of the general scheme of development; but any of such minor changes made without the prior approval of the Commission, which in its judgment have produced or will produce any of such results, shall be subject to such alteration as the Commission may direct.

Article 4. The project, including its operation and maintenance and any work incidental to additions or alterations authorized by the Commission, whether or not conducted upon lands of the United States, shall be subject to the inspection and supervision of the Regional Engineer, Federal Energy Regulatory Commission, in the region wherein the project is located, or of such other officer or agent as the Commission may designate, who shall be the authorized representative of the Commission for such purposes. The Licensee shall cooperate fully with said representative and shall furnish him such information as he may require concerning the operation and maintenance of the project, and any such alterations thereto, and shall notify him of the date upon which work with respect to any alteration will begin, as far in advance thereof as said representative may reasonably specify, and shall notify him promptly in writing of any suspension of work for a period of more than one week, and of its resumption and completion. The Licensee shall submit to said representative a detailed program of inspection by the Licensee that will provide for an adequate and qualified inspection force for construction of any such alterations to the project. Construction of said alterations or any feature thereof shall not be initiated until the program of inspection for the alterations or any feature thereof has been approved by said representative. The Licensee shall allow said representative and other officers or employees of the United States, showing proper credentials, free and unrestricted access to, through, and across the project lands and project works in the performance of their official duties. The Licensee shall comply with such rules and regulations of general or special applicability as the Commission may prescribe from time to time for the protection of life, health, or property.

Article 5. The Licensee, within five years from the date of issuance of the license, shall acquire title in fee or the right to use in perpetuity all lands, other than lands of the United States, necessary or appropriate for the construction maintenance, and operation of the project. The Licensee or its successors and assigns shall, during the period of the license, retain the possession of all project property covered by the license as issued or as later amended, including the project area, the project works, and all franchises, easements, water rights, and rights or occupancy and use; and none of such properties shall be voluntarily sold, leased, transferred, abandoned, or otherwise disposed of without the prior written approval of the Commission, except that the Licensee may lease or otherwise dispose of interests in project lands or property without specific written approval of the Commission pursuant to the then current regulations of the Commission. The provisions of this article are not intended to prevent the abandonment or the retirement from service of structures, equipment, or other project works in connection with replacements thereof when they become obsolete, inadequate, or inefficient for further service due to wear and tear; and mortgage or trust deeds or judicial sales made thereunder, or tax sales, shall not be deemed voluntary transfers within the meaning of this article.

Article 6. The Licensee shall install and thereafter maintain gages and stream-gaging stations for the purpose of determining the stage and flow of the stream or streams on which the project is located, the amount of water held in and withdrawn from storage, and the effective head on the turbines; shall provide for the required reading of such gages and for the adequate rating of such stations; and shall install and maintain standard meters adequate for the determination of the amount of electric energy generated by the project works. The number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, shall at all times be satisfactory to the Commission or its authorized representative. The Commission reserves the right, after notice and opportunity for hearing, to require such alterations in the number, character, and location of gages, meters, or other measuring devices, and the method of operation thereof, as are necessary to secure adequate determinations. The installation of gages, the rating of said stream or streams, and the determination of the flow thereof, shall be under the supervision of, or in cooperation with, the District Engineer of the United States Geological Survey having charge of stream-gaging operations in the region of the project, and the Licensee shall advance to the United States Geological Survey the amount of funds estimated to be necessary for such supervision, or cooperation for such periods as may be mutually agreed upon. The Licensee shall keep accurate and sufficient records of the foregoing determinations to the satisfaction of the Commission, and shall make return of such records annually at such time and in such form as the Commission may prescribe.

Article 7. The Licensee shall, after notice and opportunity for hearing, install additional capacity or make other changes in the project as directed by the Commission, to the extent that it is economically sound and in the public interest to do so.

Article 8. The Licensee shall, after notice and opportunity for hearing, coordinate the operation of the project, electrically and hydraulically, with such other projects or power systems and in such manner as the Commission may direct in the interest of power and other beneficial public uses of water resources, and on such conditions concerning the equitable sharing of benefits by the Licensee as the Commission may order.

Article 9. The operations of the Licensee, so far as they affect the use, storage and discharge from storage of waters affected by the license, shall at all times be controlled by such reasonable rules and regulations as the Commission may prescribe for the protection of life, health, and property, and in the interest of the fullest practicable conservation and utilization of such waters for power purposes and for other beneficial public uses, including recreational purposes, and the Licensee shall release water from the project reservoir at such rate in cubic feet per second, or such volume in acre-feet per specified period of time, as the Commission may prescribe for the purposes hereinbefore mentioned.

Article 10. On the application of any person, association, corporation, Federal agency, State or municipality, the Licensee shall permit such reasonable use of its reservoir or other project properties, including works, lands and water rights, or parts thereof, as may be ordered by the Commission, after notice and opportunity for hearing, in the interests of comprehensive development of the waterway or waterways involved and the conservation and utilization of the water resources of the region for water supply or for the purposes of steam-electric, irrigation, industrial, municipal or similar uses. The Licensee shall receive reasonable compensation for use of its reservoir or other project properties or parts thereof for such purposes, to include at least full reimbursement for any damages or expenses which the joint use causes the Licensee to incur. Any such compensation shall be fixed by the Commission either by approval of an agreement between the Licensee and the party or parties benefiting or after notice and opportunity for hearing. Applications shall contain information in sufficient detail to afford a full understanding of the proposed use, including satisfactory evidence that the applicant possesses necessary water rights pursuant to applicable State law, or a showing of cause why such evidence cannot concurrently be submitted, and a statement as to the relationship of the proposed use to any State or municipal plans or orders which may have been adopted with respect to the use of such waters.

Article 11. The Licensee shall, for the conservation and development of fish and wildlife resources, construct, maintain, and operate, or arrange for the construction, maintenance, and operation of such reasonable facilities, and comply with such reasonable modifications of the project structures and operation, as may be ordered by the Commission upon its own motion or upon the recommendation of the Secretary of the Interior or the fish and wildlife agency or agencies of any State in which the project or a part thereof is located, after notice and opportunity for hearing.

Article 12. Whenever the United States shall desire, in connection with the project, to construct fish and wildlife facilities or to improve the existing fish and wildlife facilities at its own expense, the Licensee shall permit the United States or its designated agency to use, free of cost, such of the Licensee's lands and interests in lands, reservoirs, waterways and project works as may be reasonably required to complete such facilities or such improvements thereof. In addition, after notice and opportunity for hearing, the Licensee shall modify the project operation as may be reasonably prescribed by the Commission in order to permit the maintenance and operation of the fish and wildlife facilities constructed or improved by the United States under the provisions of this article. This article shall not be interpreted to place any obligation on the United States to construct or improve fish and wildlife facilities or to relieve the Licensee of any obligation under this license.

Article 13. So far as is consistent with proper operation of the project, the Licensee shall allow the public free access, to a reasonable extent, to project waters and adjacent project lands owned by the Licensee for the purpose of full public utilization of such lands and waters for navigation and for outdoor recreational purposes, including fishing and hunting: Provided, That the Licensee may reserve from public access such portions of the project waters, adjacent lands, and project facilities as may be necessary for the protection of life, health, and property.

Article 14. In the construction, maintenance, or operation of the project, the Licensee shall be responsible for, and shall take reasonable measures to prevent, soil erosion on lands adjacent to streams or other waters, stream sedimentation, and any form of water or air pollution. The Commission, upon the request or upon its own motion, may order the Licensee to take such measures as the Commission finds to be necessary for these purposes, after notice and opportunity for hearing.

Article 15. The Licensee shall clear and keep clear to an adequate width lands along open conduits and shall dispose of all temporary structures, unused timber, brush, refuse, or other material unnecessary for the purposes of the project which results from the clearing of lands or from the maintenance or alteration of the project works. In addition, all trees along the periphery of project reservoirs which may die during operations of the project shall be removed. All clearing of the lands and disposal of the unnecessary material shall be done with due diligence and to the satisfaction of the authorized representative of the Commission and in accordance with appropriate Federal, State, and local statutes and regulations.

Article 16. Timber on lands of the United State cut, used, or destroyed in the construction and maintenance of the project works, or in the clearing of said lands, shall be paid for, and the resulting slash and debris disposed of, in accordance with the requirements of the agency of the United States having jurisdiction over said lands. Payment for merchantable timber shall be at current stumpage rates, and payment for young growth timber below merchantable size shall be at current damage appraisal values. However, the agency of the United States having jurisdiction may sell or dispose of the merchantable timber to others than the Licensee: Provided, That timber so sold or disposed of shall be cut and removed from the area prior to, or without undue interference with, clearing operations of the Licensee and in coordination with the Licensee's project construction schedules. Such sale or disposal to others shall not relieve the Licensee of responsibility for the clearing and disposal of all slash and debris from project lands.

Article 17. The Licensee shall do everything reasonably within its power, and shall require its employees, contractors, and employees of contractors to do everything reasonably within their power, both independently and upon the request of officers of the agency concerned, to prevent, to make advance preparations for suppression of, and to suppress fires on the lands to be occupied or used under the license. The Licensee shall be liable for and shall pay the costs incurred by the United States in suppressing fires caused from the construction, operation, or maintenance of the project works or of the works appurtenant or accessory thereto under the license.

Article 18. The Licensee shall interpose no objection to, and shall in no way prevent, the use by the agency of the United States having jurisdiction over the lands of the United States affected, or by persons or corporations occupying lands of the United States under permit, of water for fire suppression from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license, or the use by said parties of water for sanitary and domestic purposes from any stream, conduit, or body of water, natural or artificial, used by the Licensee in the operation of the project works covered by the license.

Article 19. The Licensee shall be liable for injury to, or destruction of, any buildings, bridges, roads, trails, lands, or other property of the United States, occasioned by the construction, maintenance, or operation of the project works or of the works appurtenant or accessory thereto under the license. Arrangements to meet such liability, either by compensation for such injury or destruction, or by reconstruction or repair of damaged property, or otherwise, shall be made with the appropriate department or agency of the United States.

Article 20. The Licensee shall allow any agency of the United States, without charge, to construct or permit to be constructed on, through, and across those project lands which are lands of the United States such conduits, chutes, ditches, railroads, roads, trails, telephone and power lines, and other routes or means of transportation and communication as are not inconsistent with the enjoyment of said lands by the Licensee for the purposes of the license. This license shall not be construed as conferring upon the Licensee any right of use, occupancy, or enjoyment of the lands of the United States other than for the construction, operation, and maintenance of the project as stated in the license.

Article 21. In the construction and maintenance of the project, the location and standards of roads and trails on lands of the United States and other uses of lands of the United States, including the location and condition of quarries, borrow pits, and spoil

disposal areas, shall be subject to the approval of the department or agency of the United States having supervision over the lands involved.

Article 22. The Licensee shall make provision, or shall bear the reasonable cost, as determined by the agency of the United States affected, of making provision for avoiding inductive interference between any project transmission line or other project facility constructed, operated, or maintained under the license, and any radio installation, telephone line, or other communication facility installed or constructed before or after construction of such project transmission line or other project facility and owned, operated, or used by such agency of the United States in administering the lands under its jurisdiction.

Article 23. The Licensee shall make use of the Commission's guidelines and other recognized guidelines for treatment of transmission line rights-of-way, and shall clear such portions of transmission line rights-of-way across lands of the United States as are designated by the officer of the United States in charge of the lands; shall keep the areas so designated clear of new growth, all refuse, and inflammable material to the satisfaction of such officer; shall trim all branches of trees in contact with or liable to contact the transmission lines; shall cut and remove all dead or leaning trees which might fall in contact with the transmission lines; and shall take such other precautions against fire as may be required by such officer. No fires for the burning of waste material shall be set except with the prior written consent of the officer of the United States in charge of the lands as to time and place.

Article 24. If the Licensee shall cause or suffer essential project property to be removed or destroyed or to become unfit for use, without adequate replacement, or shall abandon or discontinue good faith operation of the project or refuse or neglect to comply with the terms of the license and the lawful orders of the Commission mailed to the record address of the Licensee or its agent, the Commission will deem it to be the intent of the Licensee to surrender the license. The Commission, after notice and opportunity for hearing, may require the Licensee to remove any or all structures, equipment and power lines within the project boundary and to take any such other action necessary to restore the project waters, lands, and facilities remaining within the project boundary to a condition satisfactory to the United States agency having jurisdiction over its lands or the Commission's authorized representative, as appropriate, or to provide for the continued operation and maintenance of nonpower facilities and fulfill such other obligations under the license as the Commission may prescribe. In addition, the Commission in its discretion, after notice and opportunity for hearing, may also agree to the surrender of the license when the Commission, for the reasons recited herein, deems it to be the intent of the Licensee to surrender the license.

Article 25. The right of the Licensee and of its successors and assigns to use or occupy waters over which the United States has jurisdiction, or lands of the United States under the license, for the purpose of maintaining the project works or otherwise, shall absolutely cease at the end of the license period, unless the Licensee has obtained a new license pursuant to the then existing laws and regulations, or an annual license under the terms and conditions of this license.

Article 26. The terms and conditions expressly set forth in the license shall not be construed as impairing any terms and conditions of the Federal Power Act which are not expressly set forth herein.