

STATE OF OREGON  
COUNTY OF JEFFERSON

CERTIFICATE OF WATER RIGHT  
REAUTHORIZING HYDROELECTRIC PROJECTS  
UNDER HE 217 AND HE 222

THIS CERTIFICATE ISSUED TO  
CONFEDERATED TRIBES OF THE WARM SPRINGS RESERVATION OF OREGON &  
PORTLAND GENERAL ELECTRIC CO.  
121 SW SALMON ST.  
PORTLAND, OR 97204

for the right to use the waters of the DESCHUTES RIVER, LAKE BILLY CHINOOK, AND LAKE SIMTUSTUS, TRIBUTARY OF COLUMBIA RIVER for DEVELOPMENT OF 591,818 THEORETICAL HORSEPOWER FROM THE ROUND BUTTE PROJECT, 241,818 THEORETICAL HORSEPOWER FROM THE PELTON PROJECT, AND 28,636 THEORETICAL HORSEPOWER FROM THE REREGULATING PROJECT for hydroelectric power generation, and for incidental lawn watering of parks and public areas in the Lake Billy Chinook and Lake Simtustus areas.

The date of priority is NOVEMBER 26, 1958 for HE 217, Round Butte Project, and JULY 26, 1961 for HE 222, Pelton Project, and JULY 26, 1961 for the Reregulating Facility. The date of priority for lawn watering is August 13, 1997.

1. ROUND BUTTE PROJECT: The amount of water to which this right is entitled is limited to an amount actually beneficially used. The amount of water to be used shall not exceed 11,700 CUBIC FEET PER SECOND (cfs) of direct flow from the Deschutes River for power production. In addition, the right includes storage of 500,000 acre-feet in Lake Billy Chinook, of which 76,000 acre-feet is useable for power generation and up to 250,000 acre-feet is useable in extraordinary circumstances. Extraordinary circumstances include a) flood events in which drawdown is needed for safe passage of flood flows to minimize damage to life and property; b) unforeseen occurrences in which drawdown is required to complete emergency repairs on project facilities; c) periodic scheduled maintenance activities that require drawdown to complete normal repairs on project facilities (including spillway gates, the intake structure, or dam structures); and d) regional power system emergencies. The quantity of water used at any time from the direct flow of the Deschutes River and from storage for power generation shall not exceed 14,000 cfs.

This is a final order in other than contested case. This order is subject to judicial review under ORS 183.484. Any petition for judicial review of the order must be filed within the 60 days of the date of service.

2. PELTON PROJECT: The amount of water to which this right is entitled is limited to an amount actually beneficially used and shall not exceed 11,700 cfs from the Deschutes River for development of hydroelectric power. In addition, the right includes storage of 31,000 acre-feet in Lake Simtustus, of which 3700 acre-feet is useable for power generation. The quantity of water used at any time from the direct flow of the Deschutes River and from storage for power generation shall not exceed 14,000 cfs. Stored water only may be used from Lake Simtustus for lawn watering for 1.3 acres of parks and public areas from May through September. as long as the total use of water for power generation and lawn watering does not exceed 11,700 cfs.
3. REREGULATING FACILITY: The right is also granted to use 6,000 cfs from the Deschutes River for development of power at the Reregulating Dam.

The points of diversion and location of powerhouses are as follows:

ROUND BUTTE PROJECT  
S 1/2 NE 1/4  
N 1/2 SE 1/4  
SECTION 22  
TOWNSHIP 11 SOUTH, RANGE 12 EAST, W.M.

PELTON PROJECT  
LOT 4  
SECTION 18  
NW 1/4 NW 1/4  
SECTION 19  
TOWNSHIP 10 SOUTH, RANGE 13 EAST, W.M.

REREGULATING FACILITY  
SE 1/4 SW 1/4  
SECTION 1  
TOWNSHIP 10 SOUTH, RANGE 12 EAST, W.M.

The Director finds that the projects are well adapted to the development and utilization of the water power involved, that no application in conflict with these projects has been filed by any municipality or utility district, and that the certificate holders has paid to the Water Resources Department (Department) all fees required prior to the issuance of this certificate.

## DESCRIPTION OF PROJECTS

The word "project" as used in this certificate means the complete unit, improvement or development. It includes, among other things, powerhouses, waterwheels, conduits or pipes, pumps, dams and appurtenant works and structures, storage or diverting reservoirs connected therewith, and primary lines transmitting power to the point of junction with a distributing system, or with any interconnected primary system, miscellaneous works and structures used in connection with the unit or any part thereof, rights of way, lands, flowage rights and all other properties, rights and structures necessary or appropriate in the use, operation, and maintenance of any such unit.

### HE 217 - ROUND BUTTE PROJECT

The Dam: Round Butte is a rock-fill dam with central earth core 440 feet high and 1,382 feet crest length. It is located approximately one-half mile downstream from the confluence of the Deschutes and Metolius rivers.

The Reservoir: Lake Billy Chinook, has a normal pool elevation of 1,945 feet mean sea level (m.s.l.) and extends approximately 9 miles up the Deschutes River, 7 miles up the Crooked River and 13 miles up the Metolius River. It has a surface area of 4,000 acres and a maximum storage capacity of 535,000 acre-feet of which 250,000 acre-feet will be useable for power generation under maximum draw down. It is situated on basalts and cemented sediments. Grouted cutoffs extend into both abutments and the foundation. The tail water is overlapped about 50 feet by the Pelton project.

Water Conduits: The power tunnel is located on the left bank of the river approximately 1,320 feet long and steel lined to 21 feet 6-inches diameter. The intake is submerged 200 feet with a full reservoir and the lower end branches into 3 short penstock tunnels, 13' 6" in diameter, leading to the turbines with pressure relief valves for each turbine. The power tunnel is extended to two high-pressure outlets controlled by bulkheads and one controlled by a 96-inch valve. The center line of the distributor is at elevation 1,564 feet m.s.l. and the center line of the intake is at elevation 1,722 feet m.s.l.. The spillway is a sloping tunnel, designed to run part full, and connected into the diversion tunnel. The spillway tunnel intake is controlled by two 26 x 17 foot fixed wheel gates.

Power Plant: The powerhouse is an outdoor structure located at the base of the dam. The project has a capacity of 591,818 theoretical horsepower, using 14,000 cfs of water under a head of 372 feet. (THP = cfs \* head / 8.8) The power plant consists of 3 vertical-shaft turbine generating units of 82.35 MW capacity and one 70 KW generating unit with a total installed capacity of 247.12 MW. Power is transmitted at 230 kv to the Round Butte Switchyard and interconnected with the Pelton project, the 230 kv line to Redmond, and the 230 kv line to Salem.

Fish Facilities: Upstream and downstream fish passage facilities were constructed when the Round Butte facility was developed. Between 1968 and 1973 those facilities were taken out of service. A hatchery facility was built adjacent to the Round Butte Powerhouse in the early 1970's.

The fish facilities that were first constructed lifted migrant fish over the dam in an automatically actuated transfer tank. The fish collection channel was located on the downstream side of the powerhouse immediately above the draft tubes. The downstream facilities consisted of an intake structure, collection chamber, and outlet pipe in which the migrants were lowered to the base of the dam. The intake structure provided for flows of 400 cfs, which were returned to the reservoir at a minimum depth of 150 feet. Separation of downstream migrants from the return flow was by means of a traveling screen.

These fish facilities may be reactivated, reconstructed and otherwise altered during the life of this certificate to accommodate the joint applicants' fish management plan, if the plan is approved by the Oregon Department of Fish and Wildlife (ODFW) or any other successor agency.

### **HE 222 - PELTON PROJECT**

Dam and Reservoir: Pelton dam is a concrete arch dam 204 feet high with a crest length of 636 feet. A concrete spillway surmounted by two tainter gates 34 feet wide by 22 feet high is located on the left abutment. The reservoir, Lake Simtustus, has a normal pool elevation of 1,580 feet m.s.l., a maximum surface area of 540 acres and a maximum storage capacity of 31,000 acre-feet, of which 3,700 acre-feet are usable as daily pondage.

Fish Facilities: A fish ladder approximately three miles long was constructed and operated in conjunction with the Pelton project and downstream reregulating development to provide upstream fish passage from below the reregulating dam to above Pelton Dam. Several different collection devices with inclined screens were constructed in stages to provide downstream fish passage. Operation of these upstream and downstream passage facilities was discontinued in 1968. Sections of the upstream ladder were converted in the mid-1980's for fish rearing in conjunction with the Round Butte Hatchery. In November 1992, the Department amended the Pelton project license to allow water to be used for fish and wildlife enhancement or mitigation projects associated with the Pelton project.

This certificate allows the certificate holders to continue operation of the ladder or to modify it to accommodate future enhancement or mitigation activities in cooperation with the ODFW or any successor agency.

Water diverted from the Pelton Fish Ladder for wildlife enhancements will be in addition to and subordinate to any present and future water needed to operate the ladder as a fish passage facility or a fish rearing facility. Access may be restricted during specific times of the year in order to protect fish and wildlife in areas of habitat enhancement, in cooperation with ODFW or any successor agency.

Water Conduits: Three penstocks of all welded 1/2-inch steel plate, 16 feet inside diameter, run from the intake gates to the turbines with an approximate length of 110 feet. Intake gates are wheel-type 19 feet 6-inch by 23 feet with the center line of the penstock intakes located at elevation 1,430 feet m.s.l.

Power Plant: The project has a capacity of 241,818 theoretical horsepower, using 14,000 cfs of water under a head of 152 feet. An outdoor-type powerhouse, located immediately downstream from the dam, contains three turbines and three generators with total installed capacity of 100.8 MW.

Transmission Line: Four main power transformers (one spare) each rated 40,000 kva single phase 241.5/13.2 kv and 7.8 miles of 230 kv three phase transmission line of wood pole "H" frame construction connects with the Bonneville Power Administration Round Butte-Redmond transmission line.

## **HE 222 - REREGULATING FACILITY**

The Reregulating Facility was originally constructed without power generating facilities as part of the Pelton project. Its primary function is to redistribute the Pelton water discharges to provide near-constant flows into the Deschutes River below the project. In 1982, the Confederated Tribes of the Warm Springs Reservation of Oregon (CTWS) constructed a powerhouse containing a single generating unit adjacent to the reregulating dam spillway. License HE 222 was amended by order of the Department in December 1982, to grant CTWS the right to generate power at the Reregulating Facility.

Dam and Reservoir: The regulating dam is a combined concrete gravity and rock fill dam with central clay core with a combined crest length of 1,067 feet. It is located approximately 2.5 miles downstream from the Pelton power dam tailrace. The regulating dam is 88 feet high with maximum water surface elevation of 1,435 feet, and a storage capacity of 3,500 acre-feet. The concrete gravity-type section is 250 feet long and located near the right side of the structure. This section includes the spillway and powerhouse, the spillway located to the right of the powerhouse. The rock fill sections on either side of the gravity section are 15 feet wide at the crest with a 1.4:1 slope on the right side and a 1.5:1 slope on the left side. The rock-fill sections include an impervious central core with six-foot thick filter zones between the rock face and the core on both the upstream and downstream sides. A layer of riprap approximately three feet thick is located on the upstream face of both rock-fill sections.

Water Conduits/Spillway: The intake is located on the left side of the gravity section of dam and incorporates two 14-foot wide by 50-foot high intake openings separated by an entrance pier. This intake leads directly to the water passage around a bulb turbine. Trash racks, 34 feet wide by 55 feet high, cover the upstream face of the intake opening and stop logs are inserted in the intake gate guides on either side of the entrance pier to seal off the forebay during maintenance. The mean 24-hour inflow to the project is released from the regulating reservoir at a constant rate by adjustment of the turbine control gates. The forebay drafts from Lake Simtustus are limited by the capacity of the regulating reservoir to store water for uniform releases corresponding to the project inflow.

The spillway located in the concrete gravity section of the dam includes four gates each measuring approximately 14 feet high by 20 feet wide. The spillway has an ogee crest elevation of 1,402 feet. Vertical concrete walls extend from the tops of the gate openings at elevation 1,416 feet to

elevation 1,435 feet, with the clear openings extending from this elevation to the underside of the spillway deck at elevation 1,443 feet. With the four gates in the open position, the spillway passes 39,200 cfs at a forebay elevation of 1,440 feet and 45,000 cfs at a forebay elevation of 1,444 feet. The top deck includes a roadway and the frames for the four 50-ton gate hoists.

Power Plant: The power plant was added to the concrete gravity section of the dam in 1982. This was accomplished by replacing a portion of the original rock-filled structure with an additional structure on the left side of the spillgates. The turbine, on the downstream side of the bulb, is 80.5 feet downstream of the face of the dam with a centerline elevation of 1,370 feet. Both the turbine and the generator, which is located in the upstream portion of the bulb, are accessed by vertical shafts that extend through the power house roof deck at elevation 1,402 feet. The capacity of this unit is 28,636 theoretical horsepower using 6000 cfs of water under a head of 42 feet. The nominal generating capability is 19.5 MW.

Tailrace: The tailrace channel extends approximately 100 feet downstream, increasing in elevation from the bottom at 1,359 feet to the normal river bottom elevation of 1,385 feet at a 25 percent grade. The bottom of the channel is approximately 32 feet wide and both sides extend upward on a 50 percent slope. The bottom and sides are protected by a three-foot layer of riprap. The tailrace water elevation is approximately 1,393 feet at 4,000 cfs. This elevation increases approximately 0.1 foot with changes in flow of 275 cfs for normal-low to normal-high flows, respectively.

Transmission Lines: Power is delivered via a 3.2 mile-long, 69 kv transmission line to the Warm Springs Substation and to the Round Butte Switchyard via a 10.5 mile-long, 69 kv transmission line.

Fish Passage Facilities: The fish ladder, which runs from the tailrace at the Reregulating Dam to the forebay at Pelton Dam, was constructed as part of the Pelton project but is no longer used. Currently, a portion of the fish ladder at the Reregulating Dam is used to rear juvenile Chinook salmon originating at the Round Butte Fish Hatchery.

The Reregulating Dam has five entrances to the fish ladder. Entrances are located on each side of the spillway, two on the west side and another on the east side of the powerhouse tailrace channel. Upstream migrating adult fish are taken at a fish trap located adjacent to the ladder just upstream from the tailrace. The section of the ladder immediately upstream of the fish trap is used for the rearing program.

The location and character of the Project and the measures to protect, mitigate or enhance environmental resources are more specifically shown and described by the following exhibits filed with the Department.

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|-----------|--|
| Exhibit 1 | Final Joint Application Amendment for the Project, June 2001   |
| Exhibit 2 | Settlement Agreement Concerning Relicensing of the Pelton Round Butte Hydroelectric Project, FERC Project No 2030, July 13, 2004 |
| Exhibit 3 | FERC Order Approving Settlement and Issuing New License, June 21, 2005   |

### SETTLEMENT AGREEMENT

On July 13, 2004, the parties to the FERC relicensing proceeding, including Oregon Department of Environmental Quality (ODEQ), Oregon Department of Fish and Wildlife (ODFW), Oregon Water Resources Department (OWRD), and Oregon Parks and Recreation Department (OPRD), executed a comprehensive Settlement Agreement resolving all issues raised by all parties to this proceeding. On July 29, 2004, Portland General Electric Co. (PGE) and Confederated Tribes of the Warm Springs Reservation of Oregon (CTWS) filed the Settlement Agreement and all supporting exhibits and appendices with the Federal Energy Regulatory Commission (FERC). The Settlement Agreement includes a number of exhibits, which reflect the specific substantive agreements of all Parties and which are incorporated into and made a part of the agreement itself. These are as follows:

- Exhibit A: Proposed License Articles.
- Exhibit B: Interim measures that PGE and CTWS will implement prior to issuance of a new license.
- Exhibit C: Project Operating Plan describing in detail the operating rules for the Pelton Round Butte Project which are incorporated into the terms of the Settlement Agreement through the proposed license articles.
- Exhibit D: Fish Passage Plan for the restoration of fish passage at the Project.
- Exhibit E: Terrestrial Resources Management Plan (detailed outline) to minimize and mitigate Project-related impacts to terrestrial wildlife and vegetation.
- Exhibit F: Description of Trout Creek Habitat Improvement Project describing a channel enhancement project on Trout Creek, a tributary to the lower Deschutes River.
- Exhibit G: List of Measures to be included in the Recreational Resources

Implementation Plan to implement a comprehensive package of improvements at the recreational developments at the Project.

- Exhibit H: Pelton Round Butte Fund Implementation Plan providing for the establishment of a \$21.5 million fund to support resource projects in the Deschutes Basin and to acquire or lease instream water rights, or participate in water conservation projects, each of which would result in increased instream flows that benefit aquatic habitat.
- Exhibit I: Lower River Gravel Study Design, describing a study and experimental gravel augmentation program to evaluate gravel mobility, supply, and use by spawning salmonids in the lower Deschutes River.
- Exhibit J: Cultural Resources Management Plan describing cultural resource protection techniques and consultation procedures that will be incorporated into Project operation and maintenance practices.
- Exhibit K: Implementation Committees to be consulted in the development of the various monitoring and adaptive-management plans.

By order dated June 21, 2005, (the FERC License) FERC approved the Settlement Agreement and issued a new 50-year license that modified in part the proposed license articles. The Settlement Agreement and FERC License are on file at the Department.

As noted, Exhibit A to the Settlement Agreement sets out proposed license articles, which are an integral part of the Settlement Agreement. They implement the substantive agreements of the Parties and were intended to be included in the license and to become license obligations enforceable by FERC. In the event of any inconsistency between the terms of the FERC License and the Settlement Agreement, the terms of the FERC License control. However, pursuant to the Settlement Agreement, any provisions of the Settlement Agreement that are not addressed in the FERC License and are not otherwise inconsistent with the License remain in effect as agreements of the Parties that are not enforceable by FERC.

The Settlement Agreement also includes a number of Appendices. The Appendices reflect obligations imposed on the Joint Licensees by Governmental Parties or to be assumed by the Joint Licensees pursuant to agreements that will not be entered into by all Parties. The appendices are as follows:

- Appendix A: Water Quality Certificates issued on June 24, and June 25, 2002, respectively, by the ODEQ and CTWS WCB, and to be included as conditions of the new license.
- Appendix B: Draft Hatchery Contract with ODFW, pursuant to which the Joint Licensees will fund the operation of the Round Butte Hatchery for the term of the new license.
- Appendix C: Draft Law Enforcement Agreement, pursuant to which the Joint Licensees will fund Jefferson County to increase law enforcement in the



Project area to ensure that certain of the PME measures implemented pursuant to the terms of the Settlement Agreement are effective.

- Appendix D: Road Maintenance Agreement Term Sheet, pursuant to which the Joint Licensees will provide funds to Jefferson County maintain and upgrade identified roads adjacent to the Project.
- Appendix E: Revised Wild and Scenic Rivers Determinations issued by USFS and BLM.
- Appendix F: NOAA Fisheries Best Management Practices.

This certificate authorizes reconstruction of the facilities or the construction of other facilities to accommodate future fish enhancement and mitigation measures as provided in the Settlement Agreement.

### **CERTIFICATE CONDITIONS**

1. **Water Quality:** The certificate holders shall comply with all terms and conditions established in the Clean Water Act Section 401 water quality certificate (401 certificate) issued by the ODEQ.

As required by the Settlement Agreement, the certificate holders shall evaluate any future proposals for modification to the Pelton project, Round Butte project or Reregulating Facility operations (1) to address fish passage that may affect water quality within or down river of the reservoirs; and (2) to develop alternatives to modify project operations or facilities to improve water quality where necessary to meet state water quality standards and 401 certificate conditions.

2. **Fish and Wildlife Conditions:** The certificate holders shall construct, maintain and operate, or shall arrange for the construction, maintenance and operation of such facilities and equipment for fish migration, propagation or conservation as shall be set forth in the Fish Passage Plan (Exhibit D to the Settlement Agreement) as incorporated into the FERC License.
  - a. **Emergency Conditions:** If at any time, unanticipated circumstances or emergency situations arise where fish or wildlife are being killed, harmed, or endangered by any of the project facilities or as the result of project operation, the certificate holders or operators shall take such action as required by the FERC License and the Settlement Agreement.
  - b. **Maintenance:** As required by the FERC License and the Settlement Agreement, all fish and wildlife mitigation features shall be properly maintained for the project duration.

c. Evaluation of Mitigation Effectiveness: The certificate holders shall, during the operational lifetime of the project, conduct such testing and verification studies and long-term monitoring as is required by the FERC License and the Settlement Agreement.

d. Fish Passage Alternatives and Feasibility Analysis: The certificate holders shall implement the Fish Passage Plan (Exhibit D to the Settlement Agreement) as incorporated into the FERC license. If fish passage is determined not to be feasible, the certificate holders shall take such actions as are specified in the FERC License and the Settlement Agreement.

Entrainment: The certificate holders shall take such measures as are specified in the FERC License and the Settlement Agreement to prevent turbine mortality.

e. Ramping Rates in the lower Deschutes River below the Reregulating Dam: As required by the FERC License and the Settlement Agreement, the project shall be operated to limit changes to lower river stage to 0.05 ft/hr and 0.2 ft/day from May 15 through October 15 and to 0.1 ft/hr and .4 ft/day from October 16 through May 14, except during specific extraordinary circumstances. These extraordinary conditions are: (1) flood events; (2) any event that triggers the Project Emergency Action Plan; (3) rapid changes in project inflow, when the rate of inflow change exceeds the proposed stage change limits; and (4) equipment failures or emergencies at the Reregulating Facility. The compliance point for measuring ramping rates shall be the USGS Madras Gage No. 14092500.

f. Run-of-River Operations: As required by the FERC License and the Settlement Agreement, the certificate holders will hold river flows below the Reregulating Facility to within +/-10 percent of the measured project inflow except under the following conditions: 1) days with measured inflow in excess of 6,000 cfs; 2) any event that triggers the Project Emergency Action Plan; 3) power emergencies, as defined in the Western States Coordinating Council Minimum Operating Reliability Criteria (March 8, 1999) as such criteria may be amended during the term of the FERC license; 4) equipment failures or emergencies at one of the project dams or powerplants; and (5) reservoir drawdowns needed for safe passage of anticipated flood flows to minimize damage to life and property.

g. Water Allocation for Fish Enhancement: Water allocated to the certificate holders may be used for fish and wildlife enhancement or mitigation projects associated with the Pelton project, Round Butte project or the Reregulating Facility. The certificate holders shall undertake any such enhancement or mitigation activities in cooperation with ODFW or any successor agency.

Water diverted from the Pelton Fish Ladder for wildlife enhancements will be in addition to and subordinate to any present and future water needed to operate the ladder as a fish passage facility or a fish rearing facility.

3. **Recreation:** The certificate holders shall cooperate with the Oregon Parks and Recreation Department (OPRD) in providing recreation facilities, operations and maintenance at The Cove Palisades State Park (Park) in compliance with the FERC License and the Settlement Agreement.

All of the project area except the Reregulating Dam project area, including access roads, shall be open to the general public as provided in the FERC License and the FERC policies governing access for recreational purposes, except those closures necessary for public safety, protection of wildlife and wildlife habitat, and the safe and economical operation of the project. Access also may be restricted during specific times of the year in order to protect fish and wildlife in areas of habitat enhancement in cooperation with the ODFW or any successor agency.

4. **Water Resources:**

- a. **Minimum Streamflows:** The certificate holders shall operate the project to maintain target flows, calculated as provided in the FERC License and the Settlement Agreement, as measured at the USGS Madras Gage No. 14092500. The monthly target flows are as follows: January 4,500 cfs, February 4,500 cfs, March 4,571 cfs, April 4,170 cfs, May 4,000 cfs, June 4,000 cfs, July 4,000 cfs, August 3,500 cfs, September 3,800 cfs, October 3,800 cfs, November 4,049 cfs and December 4,500 cfs.

As provided in the Settlement Agreement, the certificate holders may reduce flows between November 15 and June 15 by up to 150 cfs to ensure that Lake Billy Chinook is refilled to its summer operating level (minimum elevation 1944.0 feet) by June 15. This "refill allowance" modifies target outflows for the project when inflows are at or below the minimum target flows. At these times, the allowed minimum outflow is based on the lowest daily inflow recorded over the past 7 days. The allowed minimum outflows may be 150 cfs less than the lowest daily inflow recorded over the past 7 days, except under certain flow conditions as specified in the Settlement Agreement.

- b. **Reservoir Levels:** As provided in the FERC License and the Settlement Agreement, the certificate holders shall operate the Round Butte project to maintain a minimum surface elevation of 1944.0 feet and a stable pool level with a fluctuation of not to exceed 1.0 foot during the period June 15 to September 15 of each year. If the reservoir has not been filled to normal operating pool level by June 15 of any year, this provision shall not prevent filling if water is available for storage while maintaining the minimum flow. The certificate holders will restrict the drawdown of Lake Billy Chinook to a maximum of 20 feet (El. 1925 feet m.s.l.) with a target of 10 feet during normal winter operations, except in extraordinary circumstances. Such extraordinary situations include a) flood events in which drawdown is needed for safe passage of flood flows to minimize damage to life and property; b) unforeseen occurrences in which drawdown is required to complete emergency repairs on project facilities; c) periodic scheduled

maintenance activities that require drawdown to complete normal repairs on project facilities (including spillway gates, the intake structure, or dam structures); and d) regional power system emergencies as defined in the Western States Coordinating Council Minimum Operating Reliability Criteria (March 8, 1999), as such criteria may be amended during the term of the FERC license. The certificate holders shall restrict the drawdown of Lake Simtustus with a maximum dropdown limit of elevation of 1,576 feet m.s.l. between June 1 and August 31, and elevation 1,573 m.s.l. feet between September 1 and May 31. The certificate holders shall restrict the drawdown of the Reregulating Reservoir to 1,414 feet m.s.l.

- c. Fall Flow Augmentation in Lower River for Fall Chinook: As provided in the FERC License and the Settlement Agreement, if project inflows fall below 3,000 cfs between September 16 and November 15, the certificate holders shall, after consultation with the Fish Committee regarding the amount of available water, rate of water release, and timing and duration of augmentation flows, release up to 200 cfs from storage in Lake Billy Chinook to maintain a daily release of 3,000 cfs. This augmentation flow is limited to a drawdown of 4 feet measured from the average Lake Billy Chinook water surface elevation recorded on September 15.

- d. Long-Term Low Flow (LTLF) Trigger Provision  
Within one year of license issuance, the Licensees shall file with the Commission (FERC) a plan to track indicators of predicted long-term low flow (LTLF) conditions in the lower Deschutes River throughout the license. The plan will provide that (i) an LTLF trigger or multiple LTLF triggers will be established, using the indicators, that signal predicted onset or realized onset of LTLF conditions in the river that are lower than historically observed at the US Geological Service Madras Gage; (ii) certain remedial actions will be initiated if an LTLF trigger is reached; (iii) these LTLF triggers will not be developed or implemented to address low flows of a non-long-term nature that may otherwise be addressed by the Fish Emergency Clause in the new license; and (iv) the LTLF trigger(s) will be reviewed and, if necessary, modified, at least every 10 years considering new information and changes in predictive capabilities. The Licensees shall develop the plan after consultation with the Fish Committee. Upon Commission (FERC) approval, the Licensees shall implement the plan.

If the LTLF trigger is reached, the Licensees shall consult with the Fish Committee, Oregon Department of Environmental Quality (ODEQ), and the Confederated Tribes of the Warm Springs Reservation Water Control Board (CTWS) WCB to identify any negative effects to aquatic resources and Federal Wild & Scenic River outstandingly remarkable values (ORVs) resulting from the lower river flows, to identify potential mitigation measures in the lower Deschutes River basin, and to determine if changes in Project operations should be implemented to ameliorate such

effects. The Licensees shall also consult with the Oregon Department of Parks and Recreation and, as appropriate, the Terrestrial Resources Working Group, the Recreation Resources Working Group, and the Shoreline Management Working Group regarding potential impacts to ORVs, scenic waterway values, lake recreation, cultural/archaeological resources, shoreline erosion and riparian habitat that may result from potential changes in project operations.

If changes in Project operations are identified to mitigate any negative effects to aquatic resources and ORVs, the Licensees shall, in consultation with the agencies identified in the above paragraph, prepare and file with FERC and OWRD a plan to implement such changes. OWRD will process an amendment to the certificate according to OAR 690-053. Upon Commission (FERC) approval, the Licensees shall implement the plan.

- e. Stream Gaging: As required by the FERC License and the Settlement Agreement, the certificate holders will (1) fund improvements at the existing USGS gaging stations on the Crooked (Gage No. 14087400), Deschutes (Gage No. 14076500) and Metolius (Gage No. 14091500) Rivers upstream of the project; (2) install lake level monitoring stations in Lake Billy Chinook to reduce level measurement errors; and (3) install data acquisition equipment, recording hardware and software as needed to calculate inflows on a timely basis and to document the inflow record.
  
- f. Compliance With Terms: In consideration of this certificate and of the benefits and advantages accruing hereunder to the certificate holders, it is expressly agreed by the certificate holders that the project, project area, and project works located within the State of Oregon as designated and described above whether or not upon the lands of the United States, shall be subject to all provisions, terms and conditions of this certificate. Should the certificate holders be prevented from compliance with any provisions of this certificate or of the Hydroelectric Act by the operation of any valid Federal law, or the lawful order, rule or regulation of any federal governmental agency exercising exclusive jurisdiction in the premises, or by *force majeure* as described in the Settlement Agreement, it shall not be deemed to be in default or under liability to the State of Oregon for failure to perform the same during the period of such disability.
  
- g. Extent of Water Right: The water right granted herein is expressly made inferior in right and subsequent in time to any past or future authorized appropriations of water from this source for domestic, municipal, irrigation or any other beneficial consumptive use.

The right to the use of the water for the above purpose is restricted to beneficial use on the lands or place of use described

- h. Period of Water Right: This certificate is effective as of the date of its issuance and will terminate simultaneously with the FERC license for the Project, June 1, 2055.
  - i. Instream Conversion: If water use for hydroelectric purposes ceases for a period of five years, the water right is subject to conversion to an instream water right as provided under ORS 543A.305(3).
  - j. Access: Subject to the applicable provisions of the Oregon Public Records Law, the certificate holders shall allow the OWRD Director and authorized agents and employees free and unrestricted access in, through, and across the project in the performance of their official duties, and shall allow free access to all reports, accounts, records, and other data relating to said project.
  - k. Altering Water Right Conditions: As allowed under ORS 543A. 145(4), the Department may amend the conditions and limitations of this certificate to conform with the federal license for the project. Further amendments may be made only with the written consent of the certificate holders. Condition Number 11, collection of fees, does not require written consent of the certificate holders.
  - l. Significant Threats to Public Health and Safety: The Director of the Department reserves the right to reopen this certificate if the Director makes a clear showing of significant threat to the public health, safety or the environment that was not identified and addressed during the project reauthorization proceeding. (ORS 543A. 145 (5).)
5. **Enforcement and Restrictions:** Except as provided under Condition 4.d., failure to comply with any of the provisions of this certificate may result in action including, but not limited to, restrictions on the use, civil penalties, or cancellation of the certificate.
6. **Waste:** This certificate is for the beneficial use of water without waste.
7. **Land use:** By law, the land use associated with this water use must be in compliance with statewide and-use goals and any local acknowledged land-use plan.
8. **Project ownership:** The certificate holders shall notify the Department of any change in ownership of the hydroelectric project.
9. **Public Health and Safety;** To assure public health and safety, the certificate holders shall take such measures as are required by the Settlement Agreement to keep roads and bridges within the project boundary in good repair and useable by the public. The certificate holders must protect the project from seismic and geologic hazards and meet all dam safety standards set by the FERC
10. **Project Maps;** The project facilities are more particularly described and shown on the map filed to accompany the application and designated as Exhibit A\_. This exhibit is

hereby approved by the Director and made a part of this certificate. No substantial change shall be made unless approved by the Director and incorporated into this certificate by appropriate amendment or special order.

11. **Annual Fees:** An annual license fee of \$74,188.65 (HE 217), plus \$33,213.00 (HE 222), plus \$0.405 per THP (with cost of living provisions per ORS 543.078) for 97,227 new theoretical horsepower at Round Butte shall be paid on or before January 1 of each calendar year for each of the calendar years 2007 to 2011.

Beginning January 1, 2012, the certificate holders shall pay to the Department in accordance with the provisions of ORS 543.078, on or before the first day of January of each year after issuance of this certificate an annual fee of \$0.405 per theoretical horsepower with adjustments for cost of living (ORS 543.078 through 543.085). Should the terms and conditions of this license be reauthorized after its expiration, the certificate holders shall pay such annual fees as the Director of the Department or its successor having jurisdiction in the matter at the time shall fix.

12. **Construction, Operations and Maintenance:** The certificate holders shall construct any additions or modifications to the Project according to maps, plans, and specifications filed with and approved by the FERC.

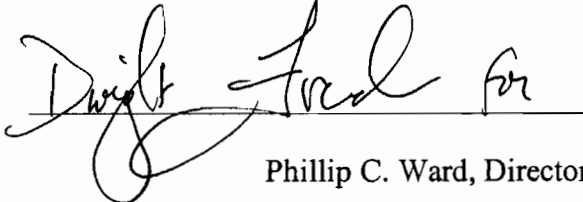
Operations of the Project, so far as they affect the use, storage, and discharge from storage of waters affected by the water right certificate, shall at all times be controlled by such reasonable rules as the Water Resources Commission may prescribe for the protection of life, health, and property, 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. The certificate holders shall release water from the Project reservoirs at such rate in cfs, or such volume in acre-feet per specified period of time, as the Water Resources Commission may prescribe.

The certificate holders shall maintain the Project, and each part thereof, in good order and repair and in efficient operation, for the development and transmission of electricity to its reasonable capacity; shall make all necessary renewals and replacements as required; and shall maintain and operate the Project, and all parts thereof, conformably to applicable FERC rules.

The Director finds that the proposed use(s) of water described by this certificate, as conditioned, will not impair or be detrimental to the public interest.

WITNESS the signature of the Water Resources Director,

affixed November 8, 2006

  
Phillip C. Ward, Director

Recorded in State Record of Water Right Certificates numbered 82826