

WEBER HYDROELECTRIC PROJECT
(FERC No. 1744)

DRAFT APPLICATION FOR NEW LICENSE
FOR MAJOR CONSTRUCTED PROJECT LESS THAN 5MW

EXHIBIT H

DESCRIPTION OF PROJECT MANAGEMENT AND NEED FOR PROJECT POWER



DECEMBER 2017

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**EXHIBIT H § 5.18 (C)
DESCRIPTION OF PROJECT MANAGEMENT AND NEED FOR PROJECT POWER**

1.0 INTRODUCTION

The Weber Hydroelectric Project (Project) is an existing, ~~licensed~~ 3.85 megawatt (MW) generating facility owned and operated by PacifiCorp, and licensed by the Federal Energy Regulatory Commission (FERC No. 1744). The 18.8-acre ~~P~~project is located in Weber, Davis, and Morgan counties, Utah, on the Weber River, approximately ~~ten-nine~~ miles ~~from-southeast of~~ the City of Ogden, Utah. The powerhouse is located approximately 0.6 miles upstream of the mouth of Weber Canyon, and the diversion is located approximately 2.5 miles upstream of the canyon mouth. The plant facilities consist of the powerhouse, and several storage garages and former operator's cottages. Project works include a single 3,850 kW unit generator with a horizontal ~~reaction~~ Francis turbine, a concrete dam, intake and spill gates, a 1.7-mile flowline, a historic fish passage structure (referred to as the 'ice chute' as it is unusable for fish passage but used to move ice past the spill gates), a day-use recreation site, a powerhouse, and a 77-foot 46 kV electrical transmission line which carries electricity from the powerhouse to the adjacent (non-Project) PacifiCorp dba Rocky Mountain Power substation.

The current (1990 license) Exhibit G does not include several Project features, including the storage areas around the powerhouse and the Weber Recreation Site, but does include several non-Project features, such as a portion of the I-84 freeway and a downstream irrigation diversion; the proposed Exhibit G addresses those issues. The Weber Hydroelectric Project operates as a run-of-river facility controlled by water releases from upstream and unrelated non-FERC licensed U.S. Bureau of Reclamation (BOR) and irrigation storage facilities including Echo, Rockport, Lost Creek, and East Canyon Reservoirs, and inflows from tributaries of the Weber River basin.

2.0 INFORMATION TO BE SUPPLIED BY ALL APPLICANTS

2.1 PLANS AND ABILITY OF THE APPLICANT TO OPERATE AND MAINTAIN THE PROJECT §5.18 (C)(1)(I)(A)

PacifiCorp, a wholly-owned subsidiary of Berkshire Hathaway Energy Company (BHE), is a United States-regulated electric utility company headquartered in Oregon that serves 1.8 million retail electric customers in portions of Utah, Oregon, Wyoming, Washington, Idaho and California. PacifiCorp is principally engaged in the business of generating, transmitting, distributing and selling electricity. PacifiCorp's combined service territory covers approximately 143,000 square miles and includes diverse regional economies across six states. No single segment of the economy dominates the service territory, which helps mitigate PacifiCorp's exposure to economic fluctuations. In the western portion of the service territory, consisting of Oregon, southern Washington and northern California, the principal industries are agriculture, manufacturing, forest products, food processing, technology, government and primary metals. In the eastern portion of the service territory, consisting of Utah, Idaho, and Wyoming, the principal industries are agriculture, manufacturing, energy generation and mining, technology, and government industries. In addition to retail sales, PacifiCorp buys and sells electricity on the wholesale market with other utilities, energy marketing companies, financial institutions and other market participants to balance and optimize the economic benefits of electricity generation, retail customer loads and existing wholesale transactions.

PacifiCorp's operations are conducted under numerous franchise agreements, certificates, permits and licenses obtained from federal, state and local authorities. The average term of the franchise agreements is approximately 27 years, although their terms range from five years to indefinite. Several of these franchise agreements allow the municipality the right to seek amendment to the franchise agreement at a specified time during the term. PacifiCorp generally has an exclusive right to serve electric customers within its service territories and, in turn, has an obligation to provide electric service to those customers. In return, the state utility commissions have established rates on a cost-of-service basis, which are designed to allow PacifiCorp an opportunity to recover its costs of providing services and to earn a reasonable return on its investments.

PacifiCorp was initially incorporated in 1910 under the laws of the state of Maine under the name Pacific Power & Light Company. In 1984, Pacific Power & Light Company changed its name to PacifiCorp. In 1989, it merged with Utah Power and Light Company, a Utah corporation, in a transaction wherein both corporations merged into a newly formed Oregon corporation. The resulting Oregon corporation was re-named PacifiCorp, which is the operating entity today. PacifiCorp delivers electricity to customers in Utah, Wyoming and Idaho under the trade name Rocky Mountain Power and to customers in Oregon, Washington and California under the trade name Pacific Power.

PacifiCorp and its antecedent business entities have furnished electric service within Utah for over 100 years. Since the development of the Weber hydroelectric project (~~FERC Project No.~~

1744); in 1909-1910, PacifiCorp has modified and upgraded Project facilities and control equipment to provide reliable, efficient electricity supply for their customers.

2.1.1 Plans to Increase Capacity or Generation § 5.18 (c)(1) (i)(A)(1)

PacifiCorp has no plans to increase the capacity or generation of the Project.

2.1.2 Plans to Coordinate the Operation of the Project with Other Water Resource Projects §5.18 (c)(1)(i)(A)(2)

Although PacifiCorp owns and operates multiple hydroelectric projects in Utah (see Table 1) and Idaho, including the Weber Project, there are no other PacifiCorp or FERC projects located on the Weber River. All other Weber River diversions are owned and operated by the BOR, Weber Basin Water Conservancy District, or irrigation diversions such as the Davis and Weber Counties Canal Company (DWCCC) structure located immediately downstream of the Weber powerhouse. Although the Weber River flow volume is in large part determined by the status of the upstream BOR storage projects on the mainstem Weber River and its’ tributaries (e.g., Echo, Rockport, East Canyon, etc.) and the associated trans-basin diversion that takes water from the Weber River and delivers it to the Provo River system, the Weber Project is operated independently from all the other diversions on the Weber River and its’ tributaries in that there is no scheduling or coordination of flows. Weber generates with the water that is delivered in the system, minus the required Project minimum stream flows.

Table 1. Utah Hydroelectric Projects Owned by PacifiCorp in Utah

Project Name	FERC Status	Name of Waterway	Type of Operation and Interdependency status
Granite	Exempt (FERC No. 14293)	Big Cottonwood Creek	Conduit exemption Run-of-river; Independent
Santa Clara (Veyo, Sand Cove, Gunlock)	Exempt (FERC No. 9281)	Santa Clara River	Conduit exemption Run-of-river; Independent
Cutler	Licensed (FERC No. 2420)	Bear River	Run-of-river; Independent
Weber	Licensed (FERC No. 1744)	Weber River	Run-of-river; Independent
Pioneer	Licensed (FERC No. 2722)	Ogden River	Conduit Exemption Run-of-river; Independent
Stairs	Licensed (FERC No. 597)	Big Cottonwood Creek	Run-of-river; Independent
none	Non-Jurisdictional	n/a	n/a

2.1.3 Plans to Coordinate the Operation of the Project with Other Electrical Systems §5.18(c)(1)(i)(A)(3)

PacifiCorp operates and maintains the Project in accordance with guidelines established by both the Western Electricity Coordinating Council (WECC) and the North American Electric Reliability Council (NERC). The Project resides within the PacifiCorp East Balancing Authority Area.

PacifiCorp and the California Independent System Operator (ISO) launched the Energy Imbalance Market (EIM) on November 1, 2014. The EIM is a voluntary market and the first western energy market outside of California, including six states upon launch: California, Idaho, Oregon, Utah, Washington, and Wyoming. The EIM uses California ISO's advanced market systems that automatically balance supply and demand for electricity every 15 minutes, dispatching the least-cost resources every five minutes. Since the launch of the EIM, NV Energy joined the market December 1, 2015, adding Nevada to the EIM footprint. Puget Sound Energy and Arizona Public Service joined the EIM on October 1, 2016, Portland General Electric joined the EIM on October 1, 2017, and Idaho Power is scheduled to join on April 1, 2018. Additionally, other balancing authorities in the west have indicated interest or are pursuing participation. PacifiCorp continues to work with the California ISO, existing and prospective EIM entities, and stakeholders to enhance market functionality and support market growth with the addition of new EIM entities.

The California ISO is exploring expanding into a regional ISO. PacifiCorp is exploring joining the regional ISO and becoming a full participating transmission owner (~~PTO~~) or potentially facilitating greater coordination with a regional ISO. This effort is aimed at reducing costs for consumers, enhancing coordination and reliability of western electric networks, facilitating the integration of renewable resources, reducing emissions, and enhancing regional transmission planning and expansion.

2.2 NEED FOR THE ELECTRICITY GENERATED BY THE PROJECT §5.18 (C)(1)(D)(B)

PacifiCorp serves 1.9 million retail customers, representing residential, commercial and industrial sectors, including 1,133,000 in Utah, Idaho, and Wyoming as PacifiCorp dba Rocky Mountain Power, and an additional 786,000 in Washington, Oregon, and California as PacifiCorp dba Pacific Power. In 2017, their load requirements are approximately 60,000,000 MWh.

PacifiCorp is required to have resources available to continuously meet its customer needs. The percentage of PacifiCorp's energy supplied by energy source varies from year to year and is subject to numerous operational and economic factors such as planned and unplanned outages, fuel commodity prices, fuel transportation costs, weather, environmental considerations, transmission constraints, and wholesale market prices of electricity. PacifiCorp evaluates these factors continuously in order to facilitate economical dispatch of its generating facilities. When factors for one energy source are less favorable, PacifiCorp must place more reliance on other energy sources. For example, PacifiCorp can generate more electricity using its low cost hydroelectric and wind-powered generating facilities when factors associated with these facilities are favorable. When factors associated with hydroelectric and wind resources are less favorable, PacifiCorp increases its reliance on coal- and natural gas-fueled generation or purchased electricity.

In addition to meeting its customers' energy needs, PacifiCorp is required to maintain operating reserves on its system to mitigate the impacts of unplanned outages or other disruption

in supply, and to meet intra-hour changes in load and resource balance. This operating reserve requirement is dispersed across PacifiCorp's generation portfolio on a least-cost basis based on the operating characteristics of the portfolio. Operating reserves may be held on hydroelectric, coal-fueled or natural gas-fueled resources. PacifiCorp manages certain risks relating to its supply of electricity and fuel requirements by entering into various contracts, which may be accounted for as derivatives and may include forwards, options, swaps and other agreements.

The 30-year (1986-2015) average annual generation of the Project is 16,926 MWh. All of the power produced by the Project is taken into PacifiCorp's electric system for consumption by the utility's customers. The Project's estimated historical annual cost to produce power is based on the BusBar cost of the Project. BusBar costs include annual depreciation, capital project financing based on the weighted average cost of capital, income and real estate taxes, and annual operations and maintenance costs. The average historical annual cost of power produced by the Project has been approximately \$1.6 million, or approximately \$43.45 per MWh, for the period 2012 to 2016. Based on an average annual consumption of 12,000 kWhs per household, the average power production from the Project is enough to satisfy the needs of approximately 2,920 homes.

2.2.1 The Reasonable Costs and Availability of Alternative Sources of Power §5.18 (c)(1)(i)(B)(1)

PacifiCorp purchases and sells power in the short-term energy markets to balance the seasonal and daily variations in its customer loads and PacifiCorp's owned and contracted resources. PacifiCorp has also engaged in progressive conservation efforts to encourage its customers to be as efficient as possible with their electric consumption. If load growth cannot be met through cost-effective conservation, then new resource acquisitions, wholesale market purchases, or power supply contracts must be sought. If a new license is not granted for the Project, PacifiCorp would purchase an equivalent amount of replacement power from the wholesale power market.

2.2.2 Increase in Costs if the Licensee is not Granted a License §5.18 (c)(1)(i)(B)(2)

In the event a new license is not granted for the Project, PacifiCorp would purchase an equivalent amount of replacement power from the wholesale power market. At a discount rate of 6.59% and based on the December 2016 Palo Verde flat-price official forward price curve¹, the net present value of replacement power from 2020 through 2040 is \$20.7 million (i.e., \$57.1 million in 2016 dollars). Relying on the wholesale power market to replace the Project's generation exposes PacifiCorp to increased financial and supply risks.

¹ The last year of the December 2016 official forward price curve is 2038. Projected costs for years beyond 2038 were inflated based on the 2037 inflation forecast costs.

2.2.3 Effects of Alternative Sources of Power §5.18 (c)(1)(i)(B)(3)

Any viable new generating resource equal in output and comparable in operating characteristics to the Project would likely be more expensive in the long-term than continued operation of the existing Project. Therefore, under current laws and regulations, replacing the Project with a different generating resource and decommissioning the Project could increase the retail power costs in PacifiCorp's service territory.

2.2.3.1 Effects on Licensee's Customers §5.18 (c)(1)(i)(B)(3)(a)

In the unlikely event the license were transferred to a different licensee, the Project's operating costs and power benefits would be transferred to the new licensee. This would result in a reallocation of the Project's net benefits from PacifiCorp's customers to the customers of the new licensee. However, there is no proposal from another potential licensee to license the Weber Project.

2.2.3.2 Effect on Licensee's Operating and Load Characteristics §5.18 (c)(1)(i)(B)(3)(b)

Because the Project is a small contributor to PacifiCorp's overall power supply portfolio, there would be minimal impact to the region's overall load characteristics. However, the loss of any base load generation, such as the Project, could increase the number of transmission curtailments PacifiCorp may expect under certain system conditions, and result in the loss of the low-cost power to PacifiCorp's customers that Weber has historically generated.

2.2.3.3 Effect on Communities Served by the Project §5.18 (c)(1)(i)(B)(3)(c)

PacifiCorp has provided a comprehensive set of Demand Side Management (DSM) programs to its customers since the 1970s. The programs are designed to reduce energy consumption and more effectively manage when energy is used, including management of seasonal peak loads. PacifiCorp offers services to customers such as energy engineering audits and information on how to improve the efficiency of their homes and businesses. To assist customers in investing in energy efficiency, PacifiCorp offers rebates or incentives encouraging the purchase and installation of high-efficiency equipment such as lighting, heating and cooling equipment, weatherization, motors, process equipment and systems, as well as incentives for energy project management, efficient building operations and efficient construction. Incentives are also paid to solicit participation in load management programs by residential, business and agricultural customers through programs such as PacifiCorp's residential and small commercial air conditioner load control program and irrigation equipment load control programs. Although subject to prudence reviews, state regulations allow for contemporaneous recovery of costs incurred for the DSM programs through state-specific energy efficiency surcharges to retail customers or for recovery of costs through rates.

During 2016, PacifiCorp spent \$141 million on these DSM programs, which resulted in an estimated 689,815 MWh of first-year energy savings and an estimated 290 MW of peak load management. In addition to these DSM programs, PacifiCorp has load curtailment contracts with a number of large industrial customers that deliver up to 3105 MW of load reduction when

needed, depending on the customers' actual loads. Recovery of the costs associated with the large industrial load management program are captured in the retail rate agreements with those customers approved by their respective state commissions or through PacifiCorp's general rate case process.

Without the above DSM program and alternatives provided by PacifiCorp to its customers, costs to consumers would likely be significantly higher and lack of conservation measures would put greater demand on the power resources thus causing the need for new development to make up for the higher demand.

See the discussion above in Sections 2.2.1, *The Reasonable Costs and Availability of Alternative Sources of Power*, and 2.2.2, *Increase in Costs if the Licensee is not Granted a License*, regarding the loss of the Project's generation.

2.2.3.4 Need, Reasonable Cost and Availability of Alternative Sources of Power §5.18 (c)(1)(i)(C)

As PacifiCorp experiences the need for new generating resources, it will need to determine whether it is better to own a resource or purchase power from another party. While the ultimate decision will be made at the time resources are acquired, and will primarily be based on cost, there are other considerations that may be relevant.

With owned resources, PacifiCorp is in a better position to control costs, make life extension improvements, use the site for additional resources in the future, change fueling strategies or sources, efficiently address plant modifications that may be required as a result of changes in environmental or other laws and regulations, and utilize the plant at cost as long as it remains economic. In addition, by owning a plant, PacifiCorp can hedge itself from the uncertainty of the ability to perform consistent with the terms and conditions outlined in a power purchase agreement over time.

Depending on contract terms, purchasing power from a third party in a long-term contract may help mitigate and may avoid liabilities associated with closure of a plant. A long-term power purchase agreement relinquishes control of construction cost, schedule, ongoing costs and compliance to a third party, and exposes the buyer to default events and contract remedies that will not likely cover the potential negative impacts. Finally, credit rating agencies impute debt associated with long-term resource contracts that may result from a competitive procurement process, and such imputation may affect PacifiCorp's credit ratios and credit rating.

PacifiCorp's IRP considers an integrated portfolio analysis to value new resources. If an alternative to the Project's power and capacity is required, no single replacement resource would be assumed. Instead, integrated portfolio planning implies that all existing resources and loads would be evaluated together to find the best mix of resources based on least cost and lowest risk. To match the Project's average annual generation and capacity, the alternative cost estimate is based on the Project's projected annual output as if wholesale market purchases were utilized to replace Project MWs.

2.3 EFFECT OF POWER ON APPLICANT'S INDUSTRIAL FACILITY §5.18 (C)(1)(I)(D)

This section is not applicable as all power generated by the Weber Project moves via the Project transmission line to the adjacent non-Project substation and subsequently to the grid.

2.4 NEED OF THE TRIBE FOR ELECTRICITY §5.18 (C)(1)(I)(E)

This section is not applicable as PacifiCorp is not an Indian tribe.

2.5 IMPACTS ON THE OPERATIONS AND PLANNING OF THE LICENSEE'S TRANSMISSION SYSTEM OF RECEIVING OR NOT RECEIVING THE LICENSE §5.18 (C)(1)(I)(F)

The Project is connected to the PacifiCorp transmission system via a short lateral 77-foot 46 kV transmission line from the powerhouse to Weber Substation (not part of the Project), which integrates the generation resources with the local PacifiCorp transmission system via four 46kV transmission lines.

Reducing generation levels at the Project would remove the power flow into the local transmission grid (affecting customer's costs, as noted above), but would not affect PacifiCorp's ability to serve its customer load in the vicinity.

2.6 STATEMENT OF NEED FOR MODIFICATIONS TO EXISTING PROJECT FACILITIES OR OPERATIONS §5.18 (C)(1)(I)(G)

No new or upgraded facilities or structural changes to the Project during the term of the new license are proposed, with the exception of the proposed [Protection, Mitigation and Enhancement \(PM&E\)](#) measures to provide an upstream fish ladder associated with the Project diversion dam, as well as several recreation site amenities and upgrades. Project facilities described previously in Exhibit A would otherwise remain the same under the proposed action.

2.6.1 Proposed Project Operation

No operational changes to the Weber Project during the term of the new license are proposed except for those necessary to accommodate the following Proposed PM&E measures described in detail in both the associated Weber Applicant-Prepared Environmental Analysis (APEA) and Exhibit A: FISH-2, FISH-3, FISH-4, and REC-9.

The fisheries related Proposed PM&E measures deal with facilitating fish passage. The proposed fish ladder, with a design flow of 20 [cubic feet per second \(cfs\)](#) through the proposed fishway, would accommodate upstream fish passage for [Bonneville cutthroat trout \(BCT\)](#) and bluehead sucker. The remaining minimum flow (14-30 cfs) would be passed via the existing minimum flow gate and historic fish passage flume. The 20 cfs through the fishway would remain constant with the existing minimum flow gate being used to provide the flow adjustment required to accommodate the varying annual minimum flow requirement (34-50 cfs). To ensure

that supplemental attraction flows through the historic fish passage flume provide the necessary attraction flow, when needed, the south radial gate would be opened rather than the north radial gate (currently the north radial gate is opened). In addition, in the event of a prolonged Project outage PacifiCorp would keep the forebay full if possible to ensure fish ladder operation. When the forebay is dewatered PacifiCorp would keep the low-level gate operational, subject to constraints such as extreme winter icing conditions. Keeping the low-level gate operational would facilitate fish passage when the proposed fish ladder is non-functioning.

The recreation related Proposed PM&E measure deals with supporting whitewater boating use of the bypass reach. In the event that a safe and legal egress site is obtained by the boating community and agreed to by the U.S. Forest Service (USFS) and PacifiCorp, PacifiCorp would provide boater flows to the bypass reach by curtailing generation (up to 320 cfs or inflow) for 4-hour segments on four Saturdays prior to July 15 annually. The exact schedule of this provision of boater flows would be determined in conjunction with American Whitewater, and in coordination with the USFS and Davis and Weber Counties Canal Company (DWCCC). Boater flows in the future may be subject to minimum boater use.

In all other respects the Project operations described in Exhibit A would remain the same under the proposed action.

2.7 CONSISTENCY WITH COMPREHENSIVE PLANS §5.18 (C)(1)(I)(H)

2.7.1 Overview

Section 10(a)(2) of the Federal Power Act (FPA) requires ~~the Federal Energy Regulatory Commission (FERC or Commission)~~ to consider the extent to which a project is consistent with Commission-approved federal and state comprehensive plans for improving, developing, and conserving waterways affected by the project. In accordance with Section 10(a)(1) of the FPA, the list of Commission approved federal and state comprehensive plans was reviewed to determine applicability to the Project.

The Project's consistency with FERC-approved state and federal comprehensive plans is discussed below. ~~The c~~omprehensive ~~p~~Plans listed below have not been updated since their development unless otherwise noted. FERC currently lists 18 comprehensive plans for the State of Utah.

2.7.2 FERC-Approved State of Utah and Federal Comprehensive Plans

Note: Unless otherwise noted, these plans have not been updated or updates have not been submitted to FERC for approval since their development dates. Of the 18 listed plans, the following eight were determined to be applicable and were reviewed during the relicensing process to ensure that the Project is consistent with the plan's goals and objectives. Some of the Commission-listed plans have been updated and the current version is not listed. In these cases, PacifiCorp will review the most current version of each listed plan title:

1. Forest Service. 2003. Wasatch-Cache National Forest land and resource management plan. Department of Agriculture. Salt Lake City, Utah. March 2003.
2. Utah Department of Natural Resources. 2006. Conservation and management plan for three fish species in Utah. Salt Lake City, Utah.
3. Utah Department of Natural Resources. 2006. Range-wide conservation agreement and strategy for roundtail chub, bluehead sucker, and flannelmouth sucker. Salt Lake City, Utah.
4. Utah Department of Natural Resources. 2014. 2014 Utah Statewide Comprehensive Outdoor Recreation Plan. Salt Lake City, Utah.
5. U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.
6. Lentsch et al. Conservation agreement and strategy for Bonneville cutthroat trout in the state of Utah.
7. Lentsch et al. 2000. Rangewide conservation agreement and strategy for Bonneville cutthroat trout rangewide.
8. Weber River Partnership. 2014. The Weber River Watershed Plan.

Of the 18 listed Plans, the following 10 were determined to not be applicable to the Project and were not reviewed during relicensing:

1. Bureau of Land Management. 1990. Proposed Dixie resource management plan/final environmental impact statement. Department of the Interior, Cedar City, Utah.
2. Bureau of Land Management. 1993. Diamond Mountain resource area manage plan. Department of the Interior, Vernal, Utah. Spring 1993.
3. Forest Service. 1986. Ashley National Forest land and resource management plan. Department of Agriculture, Vernal, Utah. October 8, 1986.
4. Forest Service. 1990. Fishlake National Forest land and resource management plan. Department of Agriculture, Richfield, Utah.
5. Forest Service. 1986. Manti-LaSal National Forest land and resource management plan. Department of Agriculture, Price, Utah.
6. Forest Service. 2003. Uinta National Forest land and resource management plan. Department of Agriculture, Provo, Utah. May 2003.
7. Forest Service. n.d. Dixie National Forest land and resource management plan. Department of Agriculture, Cedar City, Utah.
8. National Park Service. The Nationwide Rivers Inventory. Department of the Interior, Washington, D.C. 1993.

9. U.S. Fish and Wildlife Service. 1986. Whooping Crane Recovery Plan. Department of the Interior, Albuquerque, New Mexico. December 23, 1986.
10. U.S. Fish and Wildlife Service. Canadian Wildlife Service. 1986. North American waterfowl management plan. Department of the Interior. Environment Canada. May 1986.

2.7.2.1 State of Utah Comprehensive Plans

Utah Department of Natural Resources. 2006. Conservation and management plan for three fish species in Utah. Salt Lake City, Utah.

This Conservation and Management Plan describes a strategy for identifying and implementing conservation measures for roundtail chub (*Gila robusta*), bluehead sucker (*Catostomus discobolus*), and flannelmouth sucker (*Catostomus latipinnis*) (henceforth referred to as the three species) and their habitats in Utah. Wildlife officials representing the states of Arizona, Nevada, Utah, New Mexico, Colorado, and Wyoming signed the Range-wide Conservation Agreement (Agreement) for the Three Species in April of 2004. Federal agencies, such as the Bureau of Land Management and National Park Service, signed the Agreement in 2005. The Agreement was meant to be a generalized schematic of conservation goals and objectives designed to expedite implementation of conservation measures for the species throughout their ranges. Subsequent to the development of the Agreement, the Utah Division of Wildlife Resources (UDWR) developed a Range-wide Conservation Strategy (Strategy) for the three species. The Strategy provides general guidance to each of the cooperators as they develop their state plans, as required by the Agreement.

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The 2006 Plan was reviewed against the proposed Project and determined to be consistent.

Utah Department of Natural Resources. 2006. Range-wide conservation agreement and strategy for roundtail chub, bluehead sucker, and flannelmouth sucker. Salt Lake City, Utah.

This Conservation Agreement was developed to expedite implementation of conservation measures for the roundtail chub (*Gila robusta*), bluehead sucker (*Catostomus discobolus*), and flannelmouth sucker (*Catostomus latipinnis*).

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The 2006 Conservation Agreement was reviewed against the proposed Project and determined to be consistent.

Utah Department of Natural Resources. 2014. 2014 Utah Statewide Comprehensive Outdoor Recreation Plan. Salt Lake City, Utah.

The major objectives of the Utah State Comprehensive Outdoor Recreation Plan (SCORP) are to (1) provide information about high-quality outdoor recreation opportunities through Land and Water Conservation Fund grants and other programs, (2) describe state strategic planning to improve the quality of life and health in Utah, and (3) provide facts and recommendations that help guide and justify allocations of scarce matching grant dollars.

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The Utah SCORP was reviewed against the proposed Project and determined to be consistent.

2.7.2.2 FERC-Approved Federal Comprehensive Plans

Forest Service. 2003. Wasatch-Cache National Forest land and resource management plan. Department of Agriculture. Salt Lake City, Utah. March 2003.

The 2003 Forest Plan guides all natural resource management activities and sets management direction for the Wasatch-Cache National Forest. It was developed to implement Alternative 7, the Preferred Alternative in the accompanying Final Environmental Impact Statement (FEIS) and Record of Decision. This Plan describes what desired future conditions and goals for the Forest are, what priorities have been identified (Objectives), what resource management practice may be employed and where, based on the availability and suitability of lands, and the projected levels of goods and services expected to result from resource management. This Forest Plan provides broad program-level direction for management of the land and its resources.

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The 2003 Forest Plan was reviewed against the proposed Project and determined to be consistent.

U.S. Fish and Wildlife Service. n.d. Fisheries USA: the recreational fisheries policy of the U.S. Fish and Wildlife Service. Washington, D.C.

This Policy defines the [U.S. Fish and Wildlife Service's \(USFWS\)](#) stewardship role in the management of the Nation's recreational fishery resources. The USFWS believes that the preservation, maintenance, mitigation, and enhancement of aquatic ecosystems is one of the most important roles the Federal government can undertake to ensure high-quality recreational fisheries.

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The USFWS Policy was reviewed against the proposed Project and determined to be consistent.

2.7.2.3 Other Relevant Resource Management Plans

Lentsch et al. Conservation agreement and strategy for Bonneville cutthroat trout in the state of Utah.

The primary goal of Bonneville Cutthroat Trout Conservation Agreement is to ensure the long-term existence of BCT within its historic range in Utah by coordinating conservation efforts among state agencies, tribal governments, Federal agencies, and other interested partners. Ensuring the long-term existence of BCT in Utah will require: 1) maintaining, improving, restoring and protecting existing and potential BCT habitat, 2) protecting and expanding genetically healthy BCT populations, and 3) conservation outreach.

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The Conservation Agreement was reviewed against the proposed Project and determined to be consistent.

Lentsch et al. 2000. Rangewide conservation agreement and strategy for Bonneville cutthroat trout rangewide.

The primary goal of this Agreement is to ensure the long-term existence of Bonneville cutthroat trout within its historic range by coordinating conservation efforts among states, tribal governments, Federal management agencies, and other involved parties.

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The Conservation Agreement was reviewed against the proposed Project and determined to be consistent.

Weber River Partnership. 2014. The Weber River Watershed Plan.

The goal of this plan is to recognize both the human and ecological values that the Weber watershed provides, identify and assess challenges and threats to those values, and develop strategies to protect and enhance those values into the future. Restoration and protection actions will be rooted in the universally shared values that were identified through the planning process, which includes: Collective Quality of Life, Water Quantity, Water Quality, Agriculture, Recreational Fishing, Water-based Recreation, and Community and Economic Development.

FPA §10(a)(2), 16 U.S.C. §803(a)(2)(A), 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 a project. The Weber River Watershed Plan was reviewed against the proposed Project and determined to be consistent.

2.8 FINANCIAL AND PERSONNEL RESOURCES §5.18 (C)(1)(I)(I)

PacifiCorp has adequate financial resources to meet its obligations under a new license for the Project. PacifiCorp's financial information is available in the annual Securities and Exchange Commission Form 10-K report which can be accessed on-line at <https://www.last10k.com/sec-filings/ppwlm> here.

As of December 31, 2016, PacifiCorp had approximately 5,700 employees, of which approximately 3,300 were covered by union contracts, principally with the International

Brotherhood of Electrical Workers, the Utility Workers Union of America and the International Brotherhood of Boilermakers. Currently PacifiCorp has two full-time, operations employees that provide 24/7 coverage along with the Hydro Control Center located in Ariel Merwin, Washington, and an assigned multi-functional maintenance team of up to six employees available as needed from the Utah Hydro Operations Center located at the nearby Pioneer Plant, dedicated to support of the Project in varying capacities. Further, engineering and environmental compliance support staff are located in Salt Lake City, Utah, with additional support services and personnel in Portland, Oregon. The local employees are adequate in number and have the appropriate training to operate the Project in accordance with the provisions of the license.

2.9 NOTIFICATION OF AFFECTED LANDOWNERS §5.18 (C)(1)(I)(J).

PacifiCorp does not propose to expand the Project to encompass additional lands of others. Therefore, notification of adjacent landowners will not be made beyond every property owner of record of any interest in the property within the bounds of the Project per CFR 18 § 4.32(a).

2.10 APPLICANT'S ELECTRICITY CONSUMPTION EFFICIENCY IMPROVEMENT PROGRAM §5.18 (C)(1)(I)(K)(1)

Customer conservation is encouraged through PacifiCorp's "wattsmart" energy efficiency programs, which include cash incentives for home energy upgrades. The wattsmart program includes tools and information to help customers save energy and money through the following methods, available on-line at <https://www.pacificpower.net/res/sem/eeti.html>:

- Efficiency Video Clips—Customers can follow the "high-bill detective" through six areas of the home where they can make improvements to save money.
- Calculate Energy Use—Customers choose from common appliances and equipment for the home to gain a better understanding of electricity use.
- Usage Data—Customers can download monthly electricity usage information on PacifiCorp's website and use the data to see how a customer's home measures up.
- PacifiCorp Online Home Analysis—Customers can fill out this online survey and get customized recommendations for savings in a home.
- Department of Energy Online Home Audit—Customers can complete this online survey about a home to find out how they use energy and get detailed instructions on how to reduce consumption.

2.11 INDIAN TRIBES AFFECTED BY THE PROJECT §5.18 (C)(1)(I)(L)

The existing and proposed Project is not located on or otherwise affecting the land of any Indian tribes.

3.0 INFORMATION TO BE PROVIDED BY AN APPLICANT WHO IS AN EXISTING LICENSEE

3.1 MEASURES PLANNED TO INSURE SAFE MANAGEMENT, OPERATION AND MAINTENANCE OF THE PROJECT §5.18 (C)(1)(II)(B)

Per Section 10 (c) of the ~~Federal Power Action (FPA)~~, FERC is authorized to establish regulations requiring licensees to operate and properly maintain their projects for the protection of life, health, and property. The Weber Project dam is classified as a low hazard rating with a regulatory inspection frequency of every three ~~(3)~~ years; however, several measures are taken to ensure safe management of the project.

PacifiCorp employees attend monthly safety meetings. All mandated safety training is tracked along with other core competency training. In addition to regular, monthly safety training, staff members meet daily to review the day's assignments and raise awareness about the potential hazards and practices to be followed. PacifiCorp maintains an electronic database of safety incidents. The database was reviewed from 2005 through June 2016 for any incidents at the Project; no OSHA-reportable, restricted duty, or lost time incidents were incurred by Project staff. There are no known records of injury or death to the public within the Project boundary. The most recent Public Safety Plan was filed with the Commission on December 18, 2014.

See Exhibit A, Section 10 for Project safety information.

3.2 CURRENT OPERATION OF THE PROJECT §5.18 (C)(1)(II)(C)

A description of the Project operation is contained in Exhibit A of this Draft License Application.

3.3 PROJECT HISTORY §5.18 (C)(1)(II)(D)

The Project was initially constructed in 1909-1910 by Utah Light and Railway Company and then acquired by a predecessor company to PacifiCorp (Utah Power & Light) and became part of Rocky Mountain Power and PacifiCorp in 1915. The project has a generating capacity of 3.85 MW. The original license was made effective January 1, 1938 and expired June 30, 1970. Subsequently, a FERC operating license was issued annually for ~~the~~ period ~~offrom~~ June 30, 1970 to June 28, 1990, due to a dispute with a nearby municipality that wanted to acquire the Weber Project. After a follow-up relicensing process with ~~the~~ FERC, the current license was issued on June 28, 1990. It expires on May 31, 2020.

3.4 LOST GENERATION DUE TO UNSCHEDULED OUTAGES §5.18 (C)(1)(II)(E)

Table 2~~Table 2~~ below details lost generation from 2013-2017.

Table 2 Lost Generation and Explanation for Outages for Last 5 Years

Outage Start (date/time)		Outage End (date/time)		Duration (hours)	Potential Lost Generation	Cause
Date	Time	Date	Time	hrs.	MWh	
2/23/2013	06:00	2/27/2013	06:16	96.2667	370.63	Dewatering and rewatering equipment
3/21/2013	01:30	3/21/2013	03:27	1.95	7.51	Transmission system problems other than catastrophes (not switchyard problems)
3/26/2013	09:03	3/26/2013	09:20	.2833	1.09	Brushes and brush rigging.
4/9/2013	05:37	4/9/2013	07:37	2	7.7	Transmission system problems other than catastrophes (not switchyard problems)
6/15/2013	06:05	6/15/2013	10:20	4.25	16.36	Generator metering devices
7/6/2013	17:29	7/6/2013	18:59	1.5	5.78	Transmission system problems other than catastrophes (not switchyard problems)
9/11/2013	20:54	9/12/2013	00:59	4.0833	15.72	Other misc. external problems.
2/27/2014	11:00	7/11/2014	11:00	3216	12,381.60	Penstock modifications.
8/15/2014	01:30	8/15/2014	9:15	7.75	29.84	Forced outage--line disturbance
9/1/2014	04:23	9/1/2014	05:55	1.5333	5.9	Forced outage--line disturbance
4/30/2015	14:54	4/30/2015	18:35	3.6833	14.18	Forced outage--line disturbance
5/7/2015	17:37	5/7/2015	18:40	1.05	4.04	Forced outage--line disturbance
6/15/2015	21:33	6/15/2015	22:30	.95	3.66	Forced outage--line disturbance
8/10/2015	07:54	8/10/2015	09:00	1.1	4.24	Forced outage--line disturbance
9/1/2015	16:31	9/1/2015	17:30	.9833	3.79	Forced outage--line disturbance
9/14/2015	19:06	9/14/2015	20:30	1.4	5.39	Forced outage--line disturbance
9/16/2015	08:37	9.16/2015	09:50	1.2167	4.68	Forced outage--line disturbance
9/23/2015	16:56	9/23/2015	18:30	1.5667	6.03	Forced outage--line disturbance
4/4/2016	01:20	4/4/2016	2:20	1.0	3.85	Forced outage--line disturbance
4/25/2016	12:26	4/25/2016	14:40	2.2333	8.6	Forced outage--line disturbance
7/3/2016	15:37	7/3/2016	17:00	1.3833	5.33	Forced outage--line disturbance
7/12/2016	00:04	7/12/2016	01:05	1.0167	3.91	Forced outage--line disturbance
8/7/2016	10:05	8/7/2016	12:45	2.6667	10.27	Forced outage--line disturbance
9/22/2016	14:50	9/24/2016	10:00	43.0167	166.19	Lightning damage--exciter repair
11/30/2016	04:34	-	-	-	ongoing	Turbine seal and bearing damage--repair ongoing

3.5 LICENSEE'S RECORD OF COMPLIANCE §5.18 (C)(1)(II)(F)

The Project has a good record of compliance with the terms and conditions of the existing license. A review of the Licensee's records indicates no violations of the terms and conditions of the license. On December 20, 2016, FERC issued a notice to PacifiCorp informing them that a minimum flow deviation that occurred April 5-9, 2016, and reported by PacifiCorp when it was discovered in late 2016, was not considered a violation of Article 401. When Commission staff

reviewed PacifiCorp's compliance history, it was found to be a first-of-its-kind event, and unlikely to be repeated (due to additional procedures put in place by PacifiCorp when it was discovered). The Licensee has received no other communication from the Commission indicating possible non-compliance.

3.6 ACTIONS AFFECTING THE PUBLIC §5.18 (C)(1)(II)(G)

The licensee is not proposing any action that directly affects the public, with the ~~following exceptions: of the~~

- ~~A~~additional and improved proposed public recreation amenities at the Weber Recreation Site, including a new permanent vault toilet, upgraded accessible amenities, improved trails in the local area.
- ~~I~~improved interpretive signage and online information about Weber Project area flows.
- ~~T~~, the potential for future whitewater flows in the bypassed reach of the river.
- ~~I, and i~~ improved fisheries resources that will in turn improve angling opportunities in the larger watershed with the implementation of a new fish ladder, as noted previously.

These actions should affect the public by improving their potential recreation experiences in the future. Further information on public safety can be found in Section 3.1 and Exhibit A, Section 10.0.

3.7 OWNERSHIP AND OPERATING EXPENSES THAT WOULD BE REDUCED IF THE LICENSE WERE TRANSFERRED §5.18 (C)(1)(II)(H)

PacifiCorp is applying for a long-term license to continue to maintain and operate the Project. Additionally, there is no competing application to take over the Project. Because there is no proposal to transfer the Project license, this section is not applicable to the Project.

3.8 ANNUAL FEES FOR USE OF FEDERAL OR NATIVE AMERICAN LANDS §5.18 (C)(1)(II)(I)

Table 3 Annual Fees Paid Under Part I of the Federal Power Act

	Federal Land Acreage	Transmission Line Acreage	Total Annual Fees Paid
Current	15.51	0.02	\$10,670.12
Proposed	14.92	0.02	\$10,670.12

[NOTE: This is not expected to change, as the amount is based on the nameplate capacity of the Project, which will not change; annual FERC Land Use fees (\$246) may decrease slightly (but are not listed under Part I of the FPA)]