WEBER HYDROELECTRIC PROJECT (FERC No. 1744)

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

INITIAL STATEMENT



DECEMBER 2017

BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

WEBER HYDROELECTRIC PROJECT PROJECT NO. 1744

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

INITIAL STATEMENT (Pursuant to 18 CFR 4.61)

- (1) PacifiCorp (hereinafter "Licensee" or PacifiCorp) applies to the Federal Energy Regulatory Commission (hereinafter "FERC" or "Commission") for a new license for the Weber Hydroelectric Project (hereinafter "Project"), as described in the attached exhibits. The Project is currently licensed to PacifiCorp as Project No. 1744, by Order dated June 28, 1990.
- (2) The location of the Project is:

State or territory:	Utah
County:	Weber, Morgan, Davis
Township or nearby towns:	Ogden
Stream or other body of water:	Weber River

(3) The exact name, business address, and telephone number of the applicant are:

PacifiCorp 825 NE Multnomah, Suite 1500 Portland, OR 97232 Telephone: 503-813-6657

(4) The exact name, business address, and telephone number of each person authorized to act as agent for the applicant in this application are:

Mark Sturtevant, Managing Director PacifiCorp – Renewable Resources 825 NE Multnomah, Suite 1500 Portland, OR 97232 Telephone: 503-813-6680 E-mail: mark.sturtevant@pacificorp.com Todd Olson, Director of Compliance PacifiCorp – Renewable Resources 825 NE Multnomah, Suite 1500 Portland, OR 97232 Telephone: 503-813-6657 E-mail: todd.olson@pacificorp.com Eve Davies, Licensing Project Manager PacifiCorp – Renewable Resources 1407 West North Temple, Suite 210 Salt Lake City, UT 84116 Telephone: 801-220-2245 Email: <u>eve.davies@pacificorp.com</u>

- (5) The applicant is a citizen of the United States and is not claiming preference under section 7(a) of the Federal Power Act. See 16 U.S.C. 796.
- (6) (a) The statutory or regulatory requirements of the State of Utah, in which the Project is located, which would, assuming jurisdiction and applicability, affect the Project with respect to bed and banks, and to the appropriation, diversion, and use of water for power purposes, and with respect to the right to engage in the business of developing, transmitting, and distributing power and in any other business necessary to accomplish the purposes of the license under the Federal Power Act are:
 - 401 Water Quality Certification from the Utah Department of Environmental Quality to assure compliance with section 401 of the Federal Clean Water Act.
 - State of Utah Division of Water Rights for both regulation of the water rights to operate the Project, and for a necessary stream alteration permit for the proposed fish passage.
 - (b) The steps which the Applicant has taken, or plans to take, to comply with each of the laws cited above are:
 - The applicant will apply for the 401 Water Quality Certification per 18 CFR § 5.23 (b).
 - PacifiCorp will maintain its 1938 water right (35-8061) for 365 cubic feet per second (cfs) to operate the Project.
 - PacifiCorp will maintain its 1965 water right (35-8062) for 100 acre-feet for storage.
 - PacifiCorp will maintain its 1949 water right (35-8741) for storage at Echo Reservoir (U.S. Bureau of Reclamation project) and releases to be used for power generation.
- (7) Brief Project description:

The Weber Hydroelectric Project is located in Weber, Davis, and Morgan (primarily the latter) counties in northern Utah. The Project is situated on the Weber River and is located approximately nine miles southeast of the City of Ogden. The existing Project consists of a concrete diversion dam, two radial gates, an intake structure, a steel pipeline encased in concrete, a historic and non-operational fish passage structure (commonly referred to as the 'ice chute'), a powerhouse with one generating unit, a discharge pipe,

and a transmission line. An upstream fish ladder is proposed for inclusion in the licensed project works for the new license.

The FERC project boundary encompasses 14.94 acres of land managed by the US Department of Agriculture Forest Service (USFS), Wasatch-Cache National Forest, as well as lands owned by the Union Pacific Railroad Company and the Utah Department of Transportation. There are no Tribal reservations in the project boundary. Facilities included within the Project Boundary include the dam, impoundment, the 9,107-foot-long penstock, powerhouse and tailrace, and a small picnic area and recreation site immediately adjacent and to the north of the dam.

The Project is a run-of-river operation and is not used for daily peaking of generation. Downstream of the Project dam, the current license mandates a continuous minimum stream flow of 34 cfs or inflow to Project, whichever is less, from October 1-March 31 annually; and, a continuous minimum flow of 34-50 cfs (range dependent on the annual runoff forecast), or inflow to Project, whichever is less, from April 1 - September 30 annually.

Inflows less than approximately 50 cfs (minimum hydraulic capacity plus minimum flows) are passed at the dam. Flows greater than 354-370 cfs (maximum hydraulic capacity plus minimum flows) are likewise spilled.

The Project has a single Horizontal Francis turbine rated at 5,000 hp (3,850 kW) and a generator rated at 3,850 kW.

(8) Lands of the United States.

The Weber Hydroelectric Project is located on a combination of public and private lands.

U.S. Forest Service Ogden Ranger District 507 E. 25th Street Ogden, UT 84401 Union Pacific Railroad 1400 Douglas Street Omaha, NE 68179

(9) Construction of the Project.

This is an existing project and no new generation is planned in association with this application for new license. Construction of a new fish ladder is proposed as a Protection, Mitigation and Enhancement measure for the new license.

ADDITIONAL GENERAL INFORMATION

(Pursuant to 18 C.F.R. § 5.18)

(1) Identify every person, citizen, association of citizens, domestic corporation, municipality, or state that has or intends to obtain and will maintain any proprietary right necessary to construct, operate, or maintain the Project:

PacifiCorp (Licensee) has obtained and will maintain any proprietary rights necessary to construct, operate, or maintain the Weber Hydroelectric Project (FERC No. 1744) (Project).

- (2) Identify (providing names and addresses):
 - (i) Every county in which any part of the Project, and any Federal facilities that would be used by the Project is located:

The Project is located in Weber, Morgan and Davis Counties, Utah. County offices are located at:

Weber County Clerk	Morgan County Clerk	Davis County Clerk
Weber County	Morgan County	P.O. Box 618
380 Washington Blvd #320	Courthouse	Farmington, UT 84025
Ogden, UT 84401	48 West Young Street	-
-	Morgan, UT 84050	

- (ii) Every city, town, or similar local political subdivision:
 - (a) In which any part of the Project is or is to be located and any Federal facility that is or is to be used by the Project is located:

The Project is located in the State of Utah, on the Weber River about nine miles southeast of the City of Ogden, and is located on both public and private land. It is not located within a city, town, or similar local political subdivision.

(b) That has a population of 5,000 or more people and is located within 15 miles of the existing or proposed Project dam:

Jeff Oyler	Lance Evans	Sean Wilkinson
Planning Manager	Department Director	Planning Director
Davis County Planning	Morgan County Planning	Weber County Planning
Department	and Development	Division
P.O. Box 618	Morgan County Courthouse	2380 Washington Blvd.
Farmington, UT 84025	48 West Young Street	Ste. 240
	Morgan, UT 84050	Ogden, UT 84401

Marsha Morrow City Recorder 250 North Main Street Centerville, UT 84014

Clinton City 2267 N. 1500 W. Clinton, UT 84015

Hooper City Hooper City Civic Center 5580 W. 4600 S. Hooper, UT 84315

North Ogden City Municipal Bldg. 505 E. 2600 N. North Ogden, UT 84414

Riverdale City 4600 S. Weber River Dr. Riverdale, UT 84405

South Weber City 1600 E. South Weber Dr. South Weber, UT 84405

Washington Terrace, UT

84405

Washington Terrace City City Hall 5249 S. South Pointe Dr.

West Haven City 4150 S. 3900 W. West Haven, UT 84401

Harrisville City

Farr West City

Kaysville City

23 E. Center

Plain City

Roy City

4160 W. 2200 N.

5051 S. 1900 W.

Roy, UT 84067

200 W. 1300 N.

Sunset, UT 84015

Plain City, UT 84404

Roy Municipal Building

Sunset City Corporation

1896 N. 1800 W. Farr West, UT 84404

Farr West City Office

Kaysville, UT 84037

Boulevard

West Point City West Point City Hall 3200 W. 300 N. West Point, UT 84015

(iii) Every irrigation district, drainage district, or similar special purpose political subdivision:

The following parties are signatories with PacifiCorp predecessor-companies to two water interference agreements which affect Project water rights:

Wayne Pullan	Jeff Budge	Richard D. Smith
U.S. Bureau of	Provo River Water Users	Weber River Water Users &
Reclamation	285 W. 1100 North	Davis and Weber Co. Canal
302 E. 1860 South	Pleasant Grove, UT 84062	Company
Provo, UT 84606		138 W. 1300 North
		Sunset, UT 84105

Clearfield City 363 West Independence 55 S. State St. Clearfield, UT 84015 Harrisville, UT 84404

> Fruit Heights City City Hall 910 S. Mountain Rd. Fruit Heights, UT 84037

Layton City 437 N. Wasatch Dr. Layton, UT 84041

Pleasant View City 520 W. Elberta Drive Ogden, UT 84414

South Ogden City 3950 S. Adams Avenue, Ste. 1 South Ogden, UT 84403

Syracuse City **Municipal Building** 1979 W. 1900 S. Syracuse, UT 84075 (iv) Every other political subdivision in the general area of the Project that there is reason to believe would be likely to be interested in, or affected by, the application:

Sean Harwood	Brent DeYoung	Mark Anderson, Assistant
U.S. Forest Service	Utah Department of	General Manager
Ogden Ranger District	Transportation, Region 1	Weber River Water
507 E. 25th Street	166 W. Southwell St.	Conservancy District
Ogden, UT 84401	S. Willard, UT 84340	2837 E. Highway 193
		Layton, UT 84040

(v) All Indian Tribes that may be affected by the Project:

There are no tribal lands or tribal claims within or immediately adjacent to the Project Area. The following Indian Tribes are associated with the larger region where the Project is located and may be interested in the application:

Darren B. Parry, Chairman Northwestern Band of Shoshone Nation 707 North Main Street Brigham City, UT 84302

Nathan Small Tribal Chairman Shoshone-Bannock Tribes P. O. Box 306 Fort Hall, ID 83203

Virgil W. Johnson, Chairman Confederated Tribe of Goshute HC 61. Box 6104 195 Tribal Center Rd. Ibapah, UT 84034 Candace Bear, Chairwoman Skull Valley Band of Goshute 407 Skull Valley Rd. Skull Valley, UT 84029

Luke Duncan, Chairman Ute Indian Tribe P.O. Box 190 Fort Duchesne, UT 84026-0190

Tamra Borchardt-Slayton, Chairperson Paiute Tribes of Utah 440 North Paiute Dr. Cedar City, UT 84721

- (3) The Applicant has, in accordance with 18 CFR § 5.18 (3)(i), made a good-faith effort to notify, by certified mail (for the Final License Application; this Draft will use U.S. Mail), the following entities of the filing of this application:
 - (a) Every property owner of record of any interest within the bounds of the Project;
 - (b) The entities listed in (2) above;
 - (c) Other governmental agencies that would likely be interested in or affected by the application.

A complete listing of appropriate agencies, tribes, local governments, non-governmental organizations, and abutting property owners to which notice of this license application was distributed is provided in Appendix A.

- (4) In accordance with 18 CFR § 4.61 of the Commission's regulations, the following Exhibits are attached to and made a part of this application:
 - Exhibit A Project Description and Description of Operations
 - Exhibit E Environmental Report (Applicant Prepared Environmental Assessment)
 - Exhibit F General Design Drawings and Supporting Design Report (provided *under separate cover as CEII for security purposes*)
 - Exhibit G Project Boundary Maps
 - Exhibit H Description of Project Management and Need for Project Power

SUBSCRIPTION

This Application for License for the Weber Hydroelectric Project, FERC No. 1744, is executed in the State of Utah, Counties of Weber, Morgan and Davis, by Signee of PacifiCorp (Mark Sturtevant), who, being duly sworn, deposes and says that the contents of this application are true to the best of his knowledge or belief and that he is authorized to execute this application on behalf of PacifiCorp. The undersigned has signed this application this ____ day of _____, 2017.

PacifiCorp

By ______(*To be signed for final license application*)

VERIFICATION

SWORN to before me, Commissioner for [Insert Notary Language], this _____ day of _____ 2017.

My commission expires on: _____

CERTIFICATE OF SERVICE

I hereby certify that I have this day served notice of availability and/or a copy of the *Final License Application for the Weber Hydroelectric Project (FERC Project No. 1744)*, via certified mail, upon each person designated on the attached Distribution List.

Dated this [Insert Date] day of [Insert Month, Year], at Portland, Oregon.

Beth Bendickson, Sr. Project Coordinator PacifiCorp – Renewable Resources 825 NE Multnomah, Suite 1500 Portland, OR 97232

(To be signed for final license application)

APPENDIX A

DISTRIBUTION LIST

Federal Agencies		
Sean Harwood	Jamie Gough	Charlie Rosier
District Ranger	Water Rights and Uses	Recreation, Lands & Special
U.S. Forest Service	Program	Uses
Ogden Ranger District	Manager/Interregional	U.S. Forest Service,
507 E. 25th St., Suite 103	Hydropower Team Leader	Uinta-Wasatch-Cache
Ogden, UT 84401	U.S. Forest Service	National Forest
	Intermountain Region 4	Forest Supervisor's Office
	324 25th St.	857 W. South Jordan Pkwy
	Ogden, UT 84401	South Jordan, UT 84095
Director	Regional Director	Robert F. Stewart
U.S. Department of Energy	Bureau of Reclamation	Regional Environmental Officer
Denver Regional Support	125 S State St., Room 6107	US Dept. of Interior
Office	Salt Lake City, UT 84138	PO Box 25007
1617 Cole Blvd., Flr 2		Denver, CO 80225
Golden, CO 80401		
David Hurd	Wayne Pullan	Rick Jones
Environmental Protection	Area Manager	Wildlife Biologist
Specialist	U.S. Bureau of Reclamation	U.S. Bureau of Reclamation
NPS	302 E. 1860 South	302 E. 1860 South
Intermountain Regional	Provo, UT 84606	Provo, UT 84606
Office		
12795 W. Alameda Pkwy		
Denver, CO 80225-0287		
Director of Lands	Regional Director	Hydropower Program Manager
USDA-Forest Service	Attn: LC 705	U.S. Bureau of Indian Affairs
Intermountain Region	Bureau of Reclamation	911 NE 11 th Avenue
324 25th St.	Lower Colorado Region	Portland, OR 97232
Ogden, UT 84401	PO Box 61470	
	Boulder City, CO 89006	
Larry Cist	Doug Benevento	Evan Williams
Utah Field Supervisor	Regional Administrator	Federal Energy Regulatory
U.S. Fish and Wildlife	U.S. Env. Protection Agency	Commission
Service	Region 8	Division of Hydropower
2369 W. Orton Circle, Suite	1595 Wynkoop St.	Licensing
50	Mailcode 8RA	888 First St., NE
West Valley City, UT 84119	Denver, CO 80202-1129	Washington, DC 20426
Sue Masica	Paul Chase	
Regional Director	Fisheries Biologist	
National Park Service	U.S. Forest Service	
12795 Alameda Pkwy	Logan Ranger District	
Denver, CO 80225	Wasatch-Cache National	
	Forest	
	1500 E. Hwy 89	
	Logan, UT 84321	

State Agencies			
Brent DeYoung	Paul Thompson	State Engineer	
Utah Department of	Utah Division of Wildlife	Division of Water Rights	
Transportation, Region 1	Resources	Utah Dept. of Natural Resources	
166 W. Southwell St.	515 E. 5300 S.	PO Box 146300	
S. Willard, UT 84340	Ogden, UT 84405	Salt Lake City, UT 84114	
Bill James	Michal D. Fowlks, Director	Kari Lundeen	
Wildlife Program Director	Division of Wildlife	Utah Department of Water	
Utah Dept. of Natural	Resources	Quality	
Resources	Utah Dept. of Natural	195 N. 1950 W.	
PO Box 146301	Resources	Salt Lake City, UT 84114	
Salt Lake City, UT 84114	PO Box 146301		
	Salt Lake City, UT 84114		
Director, State Parks	Director	Director	
Utah Department of Natural	Division of Oil, Gas and	Utah Geologic Survey	
Resources	Mining	1594 W. North Temple, Suite	
1594 W. North Temple	Utah Dept. of Natural	3410	
Suite 116	Resources	Salt Lake City, UT 84116	
Salt Lake City, UT 84116	PO Box 145801		
	Salt Lake City, UT 84114		
Eric Millis, Director	Attorney General	DPU/PSC Library	
Utah Division of Water	Utah Office of Attorney	Utah State Division of Public	
Resources	General	Utilities	
1594 W. North Temple	236 State Capital Building	PO Box 146751	
Salt Lake City, UT 84116	Salt Lake City, UT 84114	Salt Lake City, UT 84114	
Brad Westwood, Director	Chris Hansen	William Damery	
Utah Division of State	Utah Division of State	Utah Division of Water Quality	
History	History	PO Box 144870	
300 S. Rio Grande St.	300 S. Rio Grande St.	Salt Lake City, UT 84114	
Salt Lake City, UT 84101	Salt Lake City, UT 84101		
Shirlee Silversmith	Chrissy Wilson	Sarah Seegert	
Utah Division of Indian	Utah Division of Wildlife	Utah Division of Wildlife	
Affairs	Resources	Resources	
250 North 1950 West, Suite	PO Box 146301	PO Box 146301	
Α	1594 W. North Temple	1594 W. North Temple, Suite	
Salt Lake City, UT 84116	Suite 2110	2100	
	Salt Lake City, UT 84114	Salt Lake City, UT 84114	
Nongovernmental Organizations			
Charlie Vincent	Kevin Colburn	Paul Burnett	
American Whitewater	National Stewardship	Trout Unlimited	
1800 E 3990 South	Director	5279 South 150 East	
Salt Lake City, UT 84124	American Whitewater	Ogden, UT 84405	
	PO Box 1540	_	
	Cullowhee, NC 28723		

Tribes		
Darren B. Parry	Candace Bear	Nathan Small
Tribal Chairman	Chairwoman	Tribal Chairman
Northwestern Band of	Skull Valley Band of Goshute	Shoshone-Bannock Tribes
Shoshone Nation	407 Skull Valley Rd.	PO Box 306
707 North Main St.	Skull Valley, UT 84029	Fort Hall, ID 83203
Brigham City, UT 84302		
Luke Duncan	Virgil W. Johnson	Tamra Borchardt-Slayton
Chairman	Chairman	Chairperson
Ute Indian Tribe	Confederated Tribe of	Paiute Tribes of Utah
PO Box 190	Goshute	440 North Paiute Dr.
Fort Duchesne, UT 84026-	HC 61 Box 6104	Cedar City, UT 84721
0190	195 Tribal Center Rd.	
	Ibapah, UT 84034	
Cleve Davis	Dan Stone	
Environmental Coordinator	Policy Analyst	
Fish and Wildlife Department	Shoshone-Bannock Tribe	
Shoshone-Bannock Tribes	PO Box 306	
PO Box 306	Fort Hall, ID 83203	
Fort Hall, ID 83203		
Local/Governments	•	
Jeff Oyler	Lance Evans	Sean Wilkinson
Planning Manager	Department Director	Planning Director
Davis County Planning	Morgan County Planning and	Weber County Planning
Department	Development	Division
PO Box 618	Morgan County Courthouse	2380 Washington Blvd., Suite
Farmington, UT 84025	48 West Young St.	240
	Morgan, UT 84050	Ogden, UT 84401
Davis County	Morgan County	Weber County
Board of County	Board of County	Board of County Commissioners
Commissioners	Commissioners	2380 Washington Blvd. Flr 3
Farmington, UT 84025	Morgan, UT 84050	Ogden, UT 84401
Marsha Morrow	Harrisville City	Clearfield City
City Recorder	363 West Independence	55 S. State St.
250 North Main St.	Boulevard	Clearfield, UT 84015
Centerville, UT 84014	Harrisville, UT 84404	
Clinton City	Farr West City	Fruit Heights City
2267 N. 1500 W.	Farr West City Office	City Hall
Clinton, UT 84015	1896 N. 1800 W.	910 S. Mountain Rd.
	Farr West, UT 84404	Fruit Heights, UT 84037
Hooper City	Kaysville City	Layton City
Hooper City Civic Center	23 E. Center	437 N. Wasatch Drive
5580 W. 4600 S.	Kaysville, UT 84037	Layton, UT 84041
Hooper, UT 84315	-	

North Ogden City	Plain City	Pleasant View City
Municipal Bldg.	4160 W. 2200 N.	520 W. Elberta Drive
505 E. 2600 N.	Plain City, UT 84404	Ogden, UT 84414
North Ogden, UT 84414		
Riverdale City	Roy City	South Ogden City
4600 S. Weber River Drive	Roy Municipal Building	3950 S. Adams Avenue, Suite 1
Riverdale, UT 84405	5051 S. 1900 W.	South Ogden, UT 84403
	Roy, UT 84067	
South Weber City	Sunset City Corporation	Syracuse City
1600 E. South Weber Drive	200 W. 1300 N.	Municipal Building
South Weber, UT 84405	Sunset, UT 84015	1979 W. 1900 S.
	,	Syracuse, UT 84075
Washington Terrace City	West Haven City	West Point City
City Hall	4150 S. 3900 W.	West Point City Hall
5249 S. South Pointe Drive	West Haven, UT 84401	3200 W. 300 N.
Washington Terrace, UT		West Point, UT 84015
84405		
Farmington City	Ogden City	Cole Panter
PO Box 160	Ogden Municipal Building	Weber & Ogden Water
Farmington, UT 84025	2549 Washington Blvd.	Commissioner
	Ogden, UT 84401	PO Box 741
		Ogden, UT 84402
Mark Anderson	Jeff Budge	Richard D. Smith
Assistant General Manager.	Provo River Water Users	Weber River Water Users &
Weber Basin Water	285 W. 1100 North	Davis and Weber Co. Canal
Conservancy District	Pleasant Grove, UT 84062	Company
2837 E. Hwy. 193		138 W. 1300 North
Lavton, UT 84040		Sunset, UT 84105
Uintah City		
2191 East 6550 South		
Uintah, UT 84405		
Other		
Justin Mahr	Mark Sturtevant	Eve Davies
Contract Manager	Managing Director	Licensing Project Manager
Union Pacific Rail Rd.	PacifiCorp	PacifiCorp
1400 Douglas St.	Renewable Resources	Renewable Resources
Omaha, NE 6817	825 NE Multnomah	1407 West North Temple
	Suite 1500	Suite 210
	Portland, OR 97232	Salt Lake City, UT 84116
		-

Beth Bendickson	Todd Olson	
Sr. Project Coordinator	Director, Compliance	
PacifiCorp	PacifiCorp	
Renewable Resources	Renewable Resources	
825 NE Multnomah	825 NE Multnomah	
Suite 1500	Suite 1500	
Portland, OR 97232	Portland, OR 97232	

WEBER HYDROELECTRIC PROJECT (FERC No. 1744)

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

EXHIBIT A

PROJECT DESCRIPTION

AND

APPENDIX A: DETAILED PROJECT LOCATION MAPS



DECEMBER 2017

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Appendix A – Detailed Project Location Maps

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

WEBER HYDROELECTRIC PROJECT (FERC No. 1744)

PACIFICORP

EXHIBIT A PROJECT DESCRIPTION §4.61 (C)

1.0 PROJECT LOCATION

PacifiCorp, a subsidiary of Berkshire Hathaway Energy, is the Licensee for the Weber Hydroelectric Project (FERC No. 1744) (Project). The Project is located in the northern portion of the State of Utah in a small area of Weber, Morgan, and Davis counties, approximately nine miles from the City of Ogden on the Weber River. The Project is partially located on lands managed by the Wasatch-Cache National Forest, and partially on lands owned by the Union Pacific Railroad Company. There are no Tribal reservations in the Federal Energy Regulatory Commission (FERC) Project Boundary. The U.S. Department of Agriculture Forest Service (USFS) manages approximately 15 acres within the proposed Project Boundary.

The exact names, addresses, telephone numbers, and email addresses of the Licensee's representatives are:

Mark Sturtevant, Managing Director PacifiCorp – Renewable Resources 825 NE Multnomah, Suite 1500 Portland, OR 97232 Phone Number: 503-813-6680 mark.sturtevant@pacificorp.com Todd Olson, Director of Compliance PacifiCorp – Renewable Resources 825 NE Multnomah, Suite 1500 Portland, OR 97232 Phone Number: 503-813-6657 todd.olson@pacificorp.com

Eve Davies, Relicensing Program Manager PacifiCorp – Renewable Resources 1407 W. North Temple, NTO 210 Salt Lake City, UT 84116 Phone Number: 801-220-2245 eve.davies@pacificorp.com

For the purposes of this document, the Project Boundary is defined as all lands and waters within the FERC Project Boundary (whether existing or proposed) for the Weber

Hydroelectric Project No. 1744, as denoted by the Project's Exhibit G. The Project Area is the area which contains all Project features (encompassing the FERC Project Boundary as defined above), and which extends out for the purposes of characterization and analysis from the furthest edge of the Project Boundary, and across the river to the far riverbank (including the river regardless of which side of the river the Project features are found), as shown in Figure 1. Where appropriate, the Area of Potential Effect (APE) is defined by resource as the lands and waters within a given vicinity, often an additional one-mile buffer, around the Project Area.

The location of the Project is shown in Figure 1. Detailed maps showing lands and waters both within the Project Boundary and the Project Area, land ownership, and Project facilities are provided in Appendix A.



Figure 1. Project Location Map

2.0 DESCRIPTION OF PROJECT §4.61 (C)(1)

The Project was initially constructed in 1910 by Utah Light and Railway Company, which was acquired by a predecessor company and became part of Rocky Mountain Power and PacifiCorp (then Utah Power and Light) in 1915. The Project has a generating capacity of 3.85 megawatts (MW). The original license was made effective January 1, 1938 and expired June 30, 1970. Subsequently a FERC operating license was issued annually for a period from 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 FERC, the current license was issued on June 28, 1990. It expires on May 31, 2020.

2.1 PROJECT FEATURES

The existing Project consists of a concrete diversion dam, two radial gates, a low-level outlet gate, an intake structure, a steel pipeline (encased in concrete for the first approximately 125 feet of its length), a powerhouse with one generating unit, a discharge pipe, a transmission line, and a fish passage structure (historic and non-operational), hereafter referred to as the 'ice chute.'

2.1.1 Turbine Type §4.61 (c)(1)(i-ii)

The Project is operated through a single Horizontal Francis turbine with 5,000 horse-power.

2.1.2 Description of Project Operation §4.61 (c)(1)(iii)

The Project is a run-of-river operation and is not used for daily peaking of generation. The current operating license was issued by FERC in 1990 with a 30-year license term, expiring May 31, 2020. The license does not specify any daily/seasonal ramping rates, flushing flows, reservoir operations, or flood control operations. Prior to 1993, the Project was manually operated locally. Following the installation of an automated control system in 1993, the Weber Project is now designed to be capable of unmanned semi-automatic operation and is controlled by a programmable logic controller. Two local operators are located nearby in Ogden, Utah, and visit the Project daily and as dispatched by PacifiCorp's Hydro Control Center located in Ariel, Washington. However, the plant may at times be unattended. The Hydro Control Center monitors the Project operations remotely and notifies the local operators when an issue arises. In addition to standard local generator protection equipment and alarms, the penstock pressure, generator load, forebay level, and circuit breaker status at the Weber Project are monitored by a hydro control operator at the Hydro Control Center. The Weber flowline can divert up to approximately 365 cubic feet per second (cfs) at the Project dam; the bypass reach is approximately 1.7 miles long.

Downstream of the Weber diversion dam, the current license mandates a continuous minimum stream flow of 34 cfs or inflow, whichever is less, from October 1 - March 31

annually; and, a continuous minimum flow of 34-50 cfs (range dependent on the annual runoff forecast), or inflow, whichever is less, from April 1 - September 30 annually.

Annual maintenance is routinely conducted each year and involves vegetation management (including landscaping areas) on Project lands, recreation area maintenance and management (including seasonal portable restroom facilities), limited road maintenance activities, as-needed maintenance on the water conveyance system and generating unit, and non-routine forebay dredging. The timing and scope of annual maintenance activities are coordinated with the Wasatch-Cache National Forest during required annual consultation and as the need arises, as provided in the 1990 Weber license articles and in the Special-Use Permit issued for the Project by the USFS.

2.1.2.1 LOW FLOW OPERATIONS

The Weber Project functions in run-of-river mode under all operational conditions, but particularly during low flow operations when the forebay is emptied and the river channel carries water directly to and through the low-level outlet in the Weber dam (and spillway gates, as required). If the forebay falls four inches below the top of the spillway gate, turbine flows are reduced via automated pond level control. Flows are continually reduced until the unit shuts down, at which point all flow is passed through the minimum flow gate/ice chute (and spillway gates, as required). During winter months, the pond level controls are set to maintain a low water set point up to 12 inches below the normal pond level. For operation of the proposed future fish ladder, at times when the forebay elevation is lower than the inverted opening of the proposed fish ladder intake (or conditions exist that prevent the required 20 cfs flow into the proposed fish ladder), PacifiCorp has committed to keep the low-level gate operational, subject to operational constraints and requirements such as extreme winter icing conditions (PacifiCorp will undertake periodic maintenance as required to ensure operation). If the low-level gate is inoperable for 10 days or more due to extreme temperature or flow conditions, PacifiCorp will consult the specified members of the Fisheries Working Group (FWG) as required by the October 11, 2017 Memorandum of Agreement (MOA) regarding Proposed Protection, Mitigation and Enhancement (PM&E) measures and open the low-level gate as soon as possible (also see Appendix A of Exhibit E of this Draft License Application).

2.1.2.2 PROPOSED PROJECT OPERATIONS

The Project will continue to operate as a run-of-the-river facility with new PM&E measures for potential recreation (boating) flows and a new proposed fish ladder slightly modifying the manner, but not the timing, of flow releases into the bypass reach. PacifiCorp proposes to continue the existing minimum flow regime (34-50 cfs, depending on season and annual runoff forecast), although the minimum flow will be released through both the proposed fish ladder (20 cfs) as well as the existing ice chute structure that would underlie the new fish ladder and release the remainder of the minimum flow (14-30 cfs).

The proposed fishway at the Project is a vertical slot fish ladder, with a design flow of 20 cfs. Any remaining minimum flows will be passed via the existing minimum flow gate/ice chute. 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 minimum

flow requirement (34-50 cfs). To ensure that supplemental attraction flows through the ice chute provide the necessary attraction flow for fish passage, when needed, the south radial gate would be opened rather than the north radial gate (currently the north radial gate is opened; this change would require a new motor and controls on the south radial gate). In addition, in the event of a prolonged Project outage, PacifiCorp would keep the forebay full, if possible, to ensure continued fish ladder operation and consult with the specified members of the FWG as noted in the October 11, 2017 MOA regarding the Proposed PM&E measures.

The proposed recreation-related PM&E measure deals with supporting whitewater boating use of the bypass reach. If a safe and legal egress site is identified by the boating community, and agreed to by the 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. If undertaken, the exact schedule of this provision of boater flows would be determined in conjunction with American Whitewater, and coordinated 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 this section would remain the same under the proposed action.

2.1.2.3 ANNUAL GENERATION §4.61 (C)(1)(IV)

The Project has an existing installed generating capacity of 3.85 MW. The average annual generation is 16,926 megawatt-hours (MWh). The average monthly generation is 1,411 MWh. PacifiCorp began collecting electronic records of Project generation and water outflow in 1966. Therefore, approximately 50 years of data (1966-2016) were used to calculate the values in Table 1, below. The table provides the average monthly generation rate (MWh) and turbine discharge (cfs) based on hourly data. The daily average generation and turbine discharge is highest in June (65.4 MWh/day, 1,961 MWh/30 days, 303 cfs) and lowest in November (20.4 MWh/day, 613 MWh/30 days, 95 cfs). Winter flows and associated generation are affected by the seasonal diversion of water away from the lower Weber River resulting from the 1938 and 1965 Bureau of Reclamation contracts that can provide storage water to Deer Creek (and subsequently Jordanelle) and Echo Reservoirs during winter months. These contracts result in an average annual power generation increase of 5,246 additional MWh from the generation at the Bureau of Reclamation's Deer Creek Hydroelectric Facility during the time that water is diverted away from the Weber Hydroelectric Project, for a total average annual generation of 22,307 MWh credited to the Weber Project. Table 2 shows generation data for the Weber Project during the most recent 10-year period.

Month	Generation (MWh)	Discharge (cfs)
January	838	125
February	883	145
March	1,430	214
April	1,742	269
May	1,981	296
June	1,961	303
July	1,982	296
August	1,954	292
September	1,754	271
October	1,095	164
November	613	95
December	692	103
¹ These averages include the approximate three	-year period (1983 – 1985) that the Weber plant	was offline due to a fire; the average annual

Fable 1. 1966 – 2016 Averag	e Monthly Generation Rate	and Turbine Discharge ¹

generation with those years excluded is 750 MWh higher than shown above.

Table 2. Historical Monthly Generation Totals at the Weber Hydroelectric Project 2007-2016 (MWh)

Month	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	AVERAGE
January	559	157	212	35	903	1,042	$(15)^1$	(14)	(14)	-	287
February	628	301	307	85	1,846	391	(11)	(12)	(12)	71	359
March	1,743	1,210	1,489	508	2,200	1,657	285	(11)	(11)	1,221	1,029
April	2,069	1,875	2,051	1,661	2,193	2,024	744	(10)	334	1,956	1,490
May	2,069	2,240	1,322	2,210	2,277	2,057	1,864	(9)	1,814	2,254	1,810
June	2,196	2,254	2,157	2,263	2,230	2,123	1,748	(6)	1,635	2,090	1,869
July	2,122	2,318	2,307	2,276	2,283	2,152	1,688	1,237	2,021	2,115	2,052
August	2,133	2,252	2,329	2,254	2,253	1,702	1,431	2,011	1,930	1,934	2,023
September	1,800	2,212	2,129	2,037	2,188	1,351	1,152	1,768	1,822	1,440	1,790
October	999	1,294	700	1,069	2,176	601	46	100	422	501	791
November	97	179	111	160	1,246	13	(11)	(11)	(7)	44	182
December	68	178	40	758	2,071	(13)	(13)	(12)	(8)	-	307
Total Annual	16,483	16,470	15,154	15,316	23,866	15,100	8,908	5,031	9,926	13,626	13,989

2.1.3 Average Head §4.61 (c)(1)(v)

The estimated average head on the plant is 185 feet. There is no storage reservoir as the Project is operated as a run-of-river Project. The forebay area within the Project Boundary is 8.86 acres with a water surface area of 8.4 acres. The storage volume of the reservoir is 42 acre-feet.

2.1.4 Reservoir Surface Area and Storage Capacity §4.61 (c)(1)(vi)

The normal maximum water surface area and normal maximum water surface elevation (North American Vertical Datum of 1988 [NAVD88]), and gross storage capacity of the Project impoundment (forebay) are:

Area	8.4 acres, maximum
Elevation	4,797.19 feet (dam crest)
Storage	Approximately 42 acre-feet

2.1.5 Hydraulic Capacity §4.61 (c)(1)(vii)

<u>Minimum Hydraulic Capacity</u>: The turbine can be operated to 9.0 kilowatts (kW)/0 cfs with either standard (automated mode) or manual operation.

<u>Maximum Hydraulic Capacity</u>: The Weber flowline can divert up to approximately 320 cfs (up to 365 cfs instantaneously) at the Project dam.¹

Estimated Dependable Capacity: 1,160 kW using the most recent 30-year period of record. For the purpose of this document, dependable capacity is based on the annual energy production during the driest year, 2002, of the 30-year period of record. The dependable capacity was based on the 2002 annual energy production divided by the number of hours per year.

Drainage Area: The Weber River Basin drains an area of 2,476 square miles in Summit, Morgan, Weber, and Davis Counties, Utah, and part of Uinta County, Wyoming. The primary drainage of the basin, the Weber River, begins its journey near Reids Peak (11,708 feet) in the Uinta Mountains, flows west to Oakley, Utah, and then flows in a northwesterly direction to its terminus at Great Salt Lake. The Weber River is approximately 125 miles long, and within its drainage there are approximately 968 miles of perennial streams and 1,254 miles of intermittent streams (Utah Water Atlas 2015). Flows in the Weber River Basin are regulated by seven major reservoirs. Echo and Rockport Reservoirs are located on the mainstem of the Weber River, whereas Pineview, Causey, East Canyon, Lost Creek, and Smith & Morehouse Reservoirs are located on tributaries.

Flow duration curves can be found below in Figures 2, 3, and 4.

¹ 1938 and 1965 agreements and existing water rights: 35-8061—365 cfs flow right, 35-8062—100 af storage, 35-8741— af storage in Echo.



Flow Exceedance Percentile

Figure 2. Daily Flow Duration Curve - Weber River at Gateway (Inflow Gage). Data from 1966 - 2016.



Figure 3. Monthly Flow Duration Curves - Weber River at Gateway (inflow gage). Note that the maximum flow on each axis is the maximum observed daily average flow for that month. Data from January 1, 1966 through December 31, 2016.



Figure 4. Alternative Monthly Flow Duration with Identical Axis for all Months

2.1.6 Size, Capacity & Construction Materials of Structures §4.61 (c)(1)(viii)

Table 3 details size and construction material information of Weber Project structures.

Equipment/Structure	Dimensions	Capacity	Construction Materials	
Diversion Dam	27 ft. high by 79 ft. wide by 114 feet long; crest elevation of 4.797.18 ft. (NAVD88)		Concrete	
Radial Gates (2)	29 ft. wide	N/A	Steel-original	
Intake Structure	20 ft. wide by 27 ft. long	N/A	Concrete and wood building	
Trash Racks	18.6 ft. wide by 14.6 ft. high with 2-inch clear spacing	N/A	Steel	
Pipeline	9,110 ft. long by 5.5 ft. to 6.3 ft. diameter	N/A	Steel and steel encased in concrete	
Fish Passage Structure (non-operational)	3 ft. wide by 18 ft. long	N/A	Concrete	
Generator	Rated at 1.0 power factor, 360 rpm, three-phase, 60 cycles, and 2,300 volts, under 185-ft head.	3,850 kW	Steel	
Powerhouse	73.5 ft. long by 56.4 ft. wide	3.85 MW	Brick and concrete	
Turbine	N/A	3,850 kW generating unit (5,000 HP) operating under a head of 185 ft.	Steel	
Discharge Pipeline (Draft tube)	N/A	N/A	Steel	
Transmission Line	77 ft. long	46 kilovolts (kV)	Steel tower and wire	

 Table 3. Size, Capacity & Construction Materials of Structures

2.1.7 Project Photos

2.1.7.1 DIVERSION DAM

The diversion dam is constructed of concrete and is 27 feet high and 114 feet long (Photos 1 and 2).



Photo 1. Diversion Dam



Photo 2. Diversion Dam and Intake Street Level View

The intake structure, located in the white building shown in Photo 2, measures approximately 27 feet long and 20 feet wide. Trash racks are located slightly upstream of the intake to ensure debris does not enter the pipeline. Water is diverted from the Weber River into the intake structure, and continues down the pipeline. The approximately 1.7-mile-long pipeline (approximately 9,110 feet long) is located partially on land owned by the Union Pacific Railroad, and partially on land managed by the USFS. The pipeline is constructed of concrete and steel (Photo 3). The width ranges from 5.5 to 6.3 feet. The intake structure is located on the dam between the low-level gate and the south buttress wall, housed in a small wood frame intake house. A one-story wood-frame watchman's house (currently unused, and proposed for removal as part of the potential intake modernization project listed in Table 4) is located just downstream from the intake house, and is joined to the intake house. The intake diverts flow into a 74-inch-diameter reinforced concrete pipe for the first 125 feet, transitioning to a welded steel pipe. This replaced 2,000 feet of concrete pipe and 7,075 feet of wood stave pipe in 1949. The pipeline is buried along most of its length. It crosses the river on a 99-footspan riveted steel Howe truss bridge made by the American Bridge Company downstream from the dam.



Photo 3. Pipeline

2.1.7.2 POWERHOUSE

The powerhouse, associated cottages, and diversion dam occupy land managed by the USFS. The 46-kV transmission line is approximately 77 feet long. The dam is located approximately 1.7 miles upstream from the powerhouse. The powerhouse discharges into the Weber River, as shown in Photo 4. The powerhouse (Photo 4 and Photo 5) is approximately 73.5 feet long by 56.4 feet wide, and 29 feet in height to the top of the concrete parapet wall (does not include the height of the stepped roof detail). The powerhouse is a rectangular brick building with a gabled concrete roof supported by riveted steel Fink trusses. The end walls are five bays wide with stepped parapets at the gables. Original window openings have been

bricked in. Side elevations are three bays wide, also with infilled window openings. The structure sits on a concrete foundation. Because of its location above the river and next to Interstate 84, it is more visible than the diversion dam and other developed components of the Project Area.

The powerhouse contains a generating unit with a rated capacity of 3,850 kW operating under a head of 185 feet producing a 50-year average annual energy output of 16,926 MWh. The generating unit was manufactured in 1909-1910.



Photo 4. Aerial View of Powerhouse and Substation (Substation is not part of the Project)


Photo 5. Street Level View of Weber Substation (Not part of the Project) and Powerhouse

2.1.7.3 BYPASS REACH AND TAILRACE

The bypass reach is the portion of the Weber River where water is removed from the river between the diversion dam and powerhouse. (Photo 6). The Project bypass reach is approximately two miles long and the upper portion is frequently used by anglers. The bypass reach terminates where the water enters the powerhouse downstream and is returned to the Weber River. The discharge area is approximately 16 feet wide.



Photo 6. Bypass Reach to Powerhouse

2.1.7.4 APPURTENANT FACILITIES AND EQUIPMENT

Plant operators' cottages were built near the Weber powerhouse approximately 1.7 miles downstream of the Weber diversion dam. The entire area, including the plant powerhouse, associated substation, cottages, and associated outbuildings is listed on the National Register of Historic Places as an historic district. Originally known as Devil's Gate (Register No. 89000276), it is now known as the Weber Hydroelectric Plant District.

One section of the flowline, near the Weber powerhouse, was subsequently placed in a three-sided concrete box culvert under the westbound lanes of Interstate 84 when the freeway was constructed in the 1960s.

2.2 **PROJECT COSTS §4.61 (C)(1)(IX)**

Year	Upgrades	Capital	O&M
2021	Weber Intake Modernization	\$1,768,000	n/a
2022-2025	Owner's Dam Safety Program	\$115,000	\$50,000 periodically;
	Analysis and Implementation		\$400,000 life-of-license total
2022	Weber Butterfly Valve and	\$640,000	n/a
	Penstock Section		
2022	Weber Penstock Support Structure	\$219,000	n/a
	Upgrade (aka Trestle Work)		
2022	Weber Pipeline River Crossing	\$186,000	n/a
	Recoat		
2024	Weber #2 House Removal	\$28,000	n/a
2025	Cathodic Protection	\$691,000	n/a
2029	Weber Penstock and Gate Painting	\$430,000	n/a
2030	Weber Journal Bearing Re-	\$59,000	n/a
	rabbiting		
2030	Weber Flow Monitor Replacement	\$323,000	n/a
2034	Weber Powerhouse Roof	\$86,000	n/a
	Replacement		
2034	Weber Relay Replacement	\$323,000	n/a
Annual	Operations and Maintenance		\$274,000/year
			\$12,039,000 life-of-license total
Various	Small Projects	\$288,000	n/a

Table 4. Estimated Capital and Operation and Maintenance (O&M) Costs for PotentialProject Upgrades

2.3 CAPITAL COSTS AND ESTIMATED O&M COSTS OF PROPOSED ENVIRONMENTAL MEASURES §4.61 (C)(1)(X)

2.3.1 Protection, Mitigation, and Enhancement Measures (PM&E)

PacifiCorp's Proposed PM&E strategies focus on preserving areas in the watershed that are ecologically important. In situations where habitat impacts are unavoidable and cannot be recovered, PacifiCorp's mitigation strategies have been employed to offset the losses. In cases when a change to the environment occurs, enhancement can help alleviate the effects. Table 5 describes PacifiCorp's current PM&E measures.

Resource	Environmental Measure	License Article or Other Reference	Compliance History
Fisheries and	Maintain required 34-50 cfs minimum stream flow for the bypass reach of the river affected by the Project.	Article 401	Variances average less than once/year, reported to FERC as they have occurred
Aquatic Resources	Operational measures to reduce impacts to aquatic resources, such as minimizing sediment release during forebay elevation changes, and not flushing sediment from the Project forebay.	Voluntary	Full compliance
Botanical Resources	Annual consultation with the USFS regarding any planned maintenance or operational measures that would involve ground-disturbing activities.	Article 104	Full compliance
	Annual weed control around the Project recreation site, dam and flowline intake, and powerhouse/cottage area.	Voluntary	Full compliance
Terrestrial Wildlife Resources	Annual consultation with the USFS regarding any planned maintenance or operational measures that could impact wildlife habitat.	Article 104	Full compliance
Cultural Resources	Implementation of a Cultural Resources Management Plan.	Article 403	Full compliance
Recreation Resources	Construction (completed in 1992) and maintenance of the existing recreation site consisting of the following: a paved parking area, five picnic tables, a grassy area, fishing access to the Weber River downstream of the dam, fishing access to the forebay with a handicapped-accessible platform, and a portable toilet that is available on a seasonal basis.	Article 405	Full compliance

Table 5. Existing PM&E Measures

Table 6 details proposed PM&E measures under the new License. All existing PM&E measures (those shown in Table 5) are also part of the proposed mitigation measures. Table 7 details the costs of both the existing and proposed mitigation measures. All Weber relicensing stakeholders signed a Memorandum of Agreement regarding the Proposed PM&E measures, with the exception of the Utah Department of Environmental Quality - Division of Water Quality (UDWQ), who instead sent a letter of support for the proposed PM&E measures (also see Exhibit E, Appendix A)

 Table 6. Proposed PM&E Measures

Resource	Proposed PM&E Measure
Geology and Soils	None.
Water Resources	HYD-1: Continue existing seasonally-adjusted minimum stream flows (34-50 cfs). Implement
(Hydrology)	annual change, if needed, in required minimum streamflow within 10 days of the final Weber
	River runoff forecast from Natural Resources Conservation Service (NRCS), using the current
	formula.
Water Resources	No PM&E measure is proposed because existing 1938 and 1965 agreements and existing water
(Water Rights)	rights [35-8061—365 cfs flow right, 35-8062—100 af storage, 35-8741—af storage in Echo]
	will remain unchanged.
Water Resources	No PM&E measure is proposed because adherence to existing O&M practices is protective of
(Water Quality)	the resource (state water quality standards are being met).
Fisheries and Aquatic	FISH-1: Continue to provide minimum stream flow for the bypassed reach of the river affected
Resources	by the Weber Project (identical to HYD-1, above).
	FISH-2: Construct, operate, and maintain a fish ladder suitable for upstream passage of both
	Bonneville Cutthroat Trout (BCT) and Bluehead Sucker, including a fish trap operated by Utah
	Division of Wildlife Resources (UDWR) and Trout Unlimited (TU) and maintained by
	PacifiCorp. PacifiCorp will consult annually with UDWR, TU, and USFS related to fish ladder
	and trap operation and maintenance according to a Communication Plan developed between
	UDWR, TU, USFS, U.S. Fish and Wildlife Service (FWS) and PacifiCorp. The Communication
	Plan will also specify group contacts, alternates, and contact methods over the life of the license.
	FISH-3: Keep the low-level gate operational when forebay is dewatered subject to operational
	constraints and requirements such as extreme winter icing conditions (undertake periodic
	maintenance as required to ensure operation). If the forebay is dewatered and the low-level gate
	is inoperable for more than 10 days due to extreme temperature or flow conditions, PacifiCorp
	will consult with UDWR, TU, FWS, Utah Division of Water Quality (UDWQ), and USFS (per
	the Communication Plan methods) and open the low-level gate as soon as possible.
	FISH-4: In the event of a prolonged Project outage, keep forebay full if possible to ensure fish
	ladder operation; PacificOrp will consult with UDWR, TU, FWS, UDWQ, and USFS (per the
	Communication Plan methods) to discuss fishway operation during any interim periods
Deteniel Degenneeg	POT 1. Continue existing ensuel USES consultation
Dotanical Resources	DOT-1: Conduct wood control nor biotonic procession adding the area shutting improved Project
	DOI-2: Conduct weed control per historic practice, adding the area abutting improved Project river access point in riperian habitat (see PEC 8, below), subject to landowner weed control
	requirements and constraints
Torrostrial Wildlifa	WI 1: Continue existing annual USES consultation
Posouroos	WL-1 : Continue existing annual OSFS consultation.
Cultural and	CUI T_1. Finalize and implement the Historic Properties Management Plan (HPMP) (formerly
Tribal Resources	approved as the Cultural Resources Management Plan [CRMP])
Recreation Resources	REC-1 : Continue to maintain the existing Weber Recreation Site but with modifications
Recreation Resources	outlined below
	REC-2 : Coordinate with USES UDWR TU UDWO FWS and American Whitewater (AW)
	on improved interpretive signage: include potential for improved technology to include a code
	that is scan-able and that links to flow information (REC-3). Install signage instructing visitors
	on dog waste protocol and provide dog waste bags for disposal.
	REC-3 : Create a webpage hosted and maintained by PacifiCorp (linked on both the Corporate
	website and the Project website) indicating approximate bypass reach flows (program subtracts
	generation flow from U.S. Geological Survey (USGS) gage site flow and posts it to website)—
	when minimum streamflow only, the calculated number will be replaced by the phrase
	"minimum streamflow of approximately 50 cfs or inflow" to eliminate the risk of showing a
	calculated flow that could be less than the minimum for that period.
	REC-4 : Install and maintain a year-round permanent vault Americans with Disabilities Act
	(ADA)/Architectural Barriers Act (ABA)-compliant toilet facility (flush bathrooms are available
	at the Utah Department of Transportation (UDOT) rest stop upstream).

Resource	Proposed PM&E Measure
	REC-5 : Consult with USFS to create a new ADA/ABA-compliant accessible picnic site on flat
	lawn area closest to parking lot (consisting of a concrete pad, a grill, and an accessible picnic
	table), or to modify the existing site per USFS standards.
	REC-6 : Maintain/repave access road to Weber Recreation Site and existing asphalt path in
	picnic area.
	REC-7 : Reconfigure former sandbox area fencing to remove south, east, and west portions
	(retain north portion to partition recreation site from I-84).
	REC-8 : Improve two existing user-created trails located in and outside the Weber FERC Project
	Boundary:
	a. In the Project Boundary, improve (construct steps) the existing dirt river access trail at
	the west end of the recreation site;
	b. Outside the Project Boundary, provide \$30,000 through an off-license agreement with
	TU to fund cooperative effort to improve pedestrian river access (with concurrence
	from UDOT and the underlying land owner) at the under-freeway user-created trail
	extending west from the weber Recreation Site. Proposed improvements would
	involve breaking up the existing large-boulder surface or backfilling this surface to
	create a navigable path of smaller rock with minimal width (no paving). Funds
	provided inrough the on-license agreement may be used by 10 to provide another
	nabitat benefit in the watershed in the event that improving pedestrian river access in
	the indicated location is inteasible or requires less funding than provided through the
	agreement.
	REC-9 . Support wintewater boaring use of bypass reach. If A w call identify access which it
	(DWCCC) agree to review the proposed access and the items and improvements needed for sefe
	(DwCCC) agree to review the proposed access and the nems and improvements needed for sale
	USES agreed in its cold discretion, that the proposed access is appropriate for public use
	DSFS agrees, in its sole discretion, that the proposed access is appropriate for public use, PacifiCorp will appually provide boster flows to the bypass reach by curtailing generation (up to
	a chicorp will alluarly provide boater nows to the bypass reach by curtaining generation (up to 320 cfs or inflow) for 4 hour segments on four Saturdays prior to July 15. Flow schedule and
	notice to be determined in conjunction with AW and in coordination with DWCCC and USES
	with the provision that hoater flows in the future may be subject to minimum hoater use (fewer
	than a minimum threshold of hoaters may result in suspension of hoater flows). Specific use
	triggers and related release changes to be determined
Land Use	None
Aesthetic	None
Resources	
Socioeconomic	None.
Resources	

Resource Area	Existing PM&E	Proposed PM&E	Capital Costs of	O&M Costs of
		-	Proposed PM&E	Proposed PM&E
Water Resources	Bypass Reach Minimum Flow			
and Hydrology	Continuous minimum stream flow of	HYD-1 and FISH-1: Continue existing	N/A	\$129,000 annually; valued at
	34 cfs or inflow, whichever is less,	seasonally-adjusted minimum stream flows		\$5,440,000 total over the life
	from October 1-March 31 annually;	(34-50 cfs). Implement annual change, if		of the new license.
	and, a continuous minimum flow of	needed, in required minimum streamflow		Levelized cost of this lost
	34-50 cfs (range dependent on the	within 10 days of the final Weber River		generation is \$6.04/MWh
	annual runoff forecast), or inflow,	runoff forecast from NRCS, using the		
	whichever is less, from April 1-	current formula.		
	September 30 annually.			
Fisheries and	Upstream Fish Ladder			
Aquatic	N/A	FISH-2: Construct, operate, and maintain a	\$2,889,000	\$5,000 annually for facility
Resources		fish ladder suitable for upstream passage of		maintenance; \$185,000 total
		both BCT and Bluehead Sucker, including		over the life of the license
		a fish trap operated by UDWR and TU and		
		maintained by PacifiCorp. PacifiCorp will		
		consult annually with UDWR, TU, and		
		USFS related to fish ladder and trap		
		operation and maintenance according to a		
		Communication Plan developed between		
		UDWR, TU, USFS, FWS and PacifiCorp.		
		The Communication Plan will also specify		
		group contacts, alternates, and contact		
		methods over the life of the license.		
	Low Level Gate Operation			
	This measure is in effect when	FISH-3: Keep the low-level gate	\$65,000	\$40,000 periodically;
	forebay is dewatered to allow fish	operational to allow fish passage when		\$160,000 total over the life
	passage.	forebay is dewatered, subject to operational		of the license
		constraints and requirements such as		
		extreme winter icing conditions (undertake		
		periodic maintenance as required to ensure		
		operation). If the forebay is dewatered and		
		the low-level gate is inoperable for more		
		than 10 days due to extreme temperature or		
		flow conditions, PacifiCorp will consult		
		with UDWR, TU, FWS, UDWQ, and		

Table 7. Existing and Proposed PM&E Measure Costs. Values are in 2017 dollars

Resource Area	Existing PM&E	Proposed PM&E	Capital Costs of	O&M Costs of			
			Proposed PM&E	Proposed PM&E			
Fisheries and		USFS and open the low-level gate as soon					
Aquatic	as possible.						
Resources	Project Operation During Prolonged Outages						
(continued)	N/A	FISH-4: In the event of a prolonged	\$0	\$1,000 annually; \$44,000			
		Project outage, keep forebay full if possible		total over the life of the			
		to ensure fish ladder operation; PacifiCorp		license			
		will consult with UDWR, TU, FWS,					
		UDWQ, and USFS (per the					
		Communication Plan methods) to discuss					
		fishway operation during any interim					
		periods exceeding 10 days when neither the					
		low-level gate nor the fishway are					
Vegetation and	Annual Congultation	operable.					
Vegetation and Rotonicol	Annual Consultation	BOT 1. Continue existing annual USES	\$0	\$2,000 appually: \$78,000			
Bosources	meet each year with the USFS to	sonsultation	φU	\$2,000 annually, $$78,000$			
Resources	operational measures that would	consultation		(includes costs for WI 1			
	involve ground-disturbing activities			(includes costs for wL-1, below)			
	Annual Weed Control			0010 (1)			
	Complete weed management	BOT-2: Conduct weed control per historic	\$0	\$2,000 annually: \$76,000			
	activities around the Project	practice, adding the area abutting improved	ΨŬ	total over the life of the			
	recreation site. dam and flowline	Project river access point in riparian habitat		license			
	intake, and powerhouse/cottage	(see REC-8, below), subject to landowner					
	area.	weed control requirements and constraints.					
Terrestrial and	Annual Consultation						
Wildlife	Meet each year with the USFS to	WL-1: Continue existing annual USFS	\$0	\$0 additional (included as			
Resources	review any planned maintenance or	consultation.		part of BOT-1, above)			
	operational measures that could						
	impact wildlife habitat.						
Cultural and	Cultural Resources Management Pla	an (CRMP)					
Tribal Resources	Plan currently serves to identify,	CULT-1: Finalize and implement the	\$6,000	\$15,000 total over the life of			
	evaluate, document, register, and	updated HPMP (formerly approved as the		the license			
	establish basic information about	CRMP).					
	known and discovered cultural						
	resources so that proper planning						

Resource Area	Existing PM&E	Proposed PM&E	Capital Costs of	O&M Costs of Proposed PM &F		
			Proposed Pivi&E	Proposed PM&E		
	can take place to protect cultural					
	and historic resources and provide					
D	stewaraship to these resources.					
Recreational		DEC 1 . Continue to maintain the station	0.4			
Kesources	Construction (completed in 1992)	KEC-1: Continue to maintain the existing	50	Included in O&M costs in		
	and maintenance of the existing	weber Recreation Site, but with		1 able 4, above		
	recreation site consisting of the	modifications outlined below.				
	following: a paved parking area, five					
	picnic tables, a grassy area, fisning					
	access to the weber River					
	aownstream of the aam, fishing					
	access to the forebay with a					
	nunaicappea-accessible plaiform,					
	and a portable totlet that is available					
	On a seasonal basis					
	Since we wanted and include	DEC 2. Coordinate with LISES LIDWD	\$15,000	\$25,000		
	Signs are posted and include	KEC-2: Coordinate with USFS, UDWR,	\$15,000	\$25,000		
	required FERC Form 80 signage,	intermentive signages include notantial for				
	sile rules and regulations, and some	improved technology to include a code that				
	adallional interpretive signage.	is seen able and that links to flow				
		information (REC 2). Install signage				
		instructing visitors on dog waste protocol				
		and provide deg waste bags for disposal				
	Wabsita Outroach	and provide dog waste bags for disposal.				
		DEC 3: Create a wahrage heated and	\$20,000	02		
	11/23	maintained by PacifiCorn (linked on both	\$20,000	φυ		
		the Corporate web site and the Project web				
		site) indicating approximate hypass reach				
		flows (program subtracts generation flow				
		from USGS gage site flow and posts it to				
		website)when minimum streamflow				
		only the calculated number will be				
		replaced by the phrase "minimum				
		streamflow of approximately 50 cfs or				
		inflow" to eliminate the risk of showing a				

Resource Area	Existing PM&E	Proposed PM&E	Capital Costs of	O&M Costs of		
			Proposed PM&E	Proposed PM&E		
Recreational		calculated flow that could be less than the				
Resources		minimum for that period.				
(continued)						
	Restroom					
	Maintain seasonal restroom	REC-4: Install and maintain a year-round	\$64,000	Included in O&M costs in		
	facilities (currently these are	permanent vault ADA/ABA-compliant		Table 4, above		
	portable restrooms) at Weber	toilet facility (flush bathrooms are				
	Recreation Site.	available at the UDOT rest stop upstream).				
	ADA-Compliant Access					
	Some ADA access provided at Weber	REC-5: Consult with USFS to create a	\$20,000	\$0 (maintained with overall		
	Recreation Site, although standards	new ADA/ABA-compliant accessible		recreation site)		
	have changed since 1992	picnic site on flat lawn area closest to				
	installation.	parking lot (consisting of a concrete pad, a				
		grill, and an accessible picnic table), or to				
		modify the existing site per current USFS				
		standards.				
	Access Road and Path					
	This PM&E measure was	REC-6: Maintain/repave access road to	\$100,000	As needed; \$44,000 total		
	implemented as part of original	Weber Recreation Site and existing asphalt		over the life of the license		
	recreation site construction in 1992.	path in picnic area.				
	Recreation Site Fencing					
	Fencing was installed during	REC-7: Reconfigure former sandbox area	\$12,000	\$2,000 periodically; \$20,000		
	original recreation site construction	fencing to remove south, east, and west		over the life of the license		
	in 1992, but modifications are	portions (retain north portion to partition				
	proposed as part of the current	recreation site from I-84).				
	relicensing.					
	Pedestrian River Access					
	N/A	REC-8: Improve two existing user-created		Included in REC O&M cost		
		trails located in and outside the Weber		above		
		FERC Project Boundary:		\$0		
		a. In the Project Boundary, improve	a. \$22,000			
		(construct steps) the existing dirt river				
		access trail at the west end of the				
		recreation site;				
		b. Outside the Project Boundary,	b. \$50,000			
		provide \$30,000 through an off-license				

Resource Area	Existing PM&E	Proposed PM&E	Capital Costs of	O&M Costs of
		-	Proposed PM&E	Proposed PM&E
Recreational		agreement with TU to fund cooperative		
Resources		effort to improve pedestrian river access		
(continued)		(with concurrence from UDOT and the		
		underlying land owner) at the under-		
		freeway user-created trail extending		
		west from the Weber Recreation Site—		
		proposed improvements would involve		
		breaking up the existing large-boulder		
		surface or backfilling this surface to		
		create a navigable path of smaller rock		
		with minimal width (no paving). Funds		
		provided through the off-license		
		agreement may be used by TU to		
		provide another habitat benefit in the		
		watershed in the event that improving		
		pedestrian river access in the indicated		
		location is infeasible or requires less		
		funding than provided through the		
		agreement.		
	Boating Use of Bypass Reach	1	<u> </u>	
	N/A	REC-9: Support whitewater boating use of	\$10,000	\$4,000 annually; \$166,000
		bypass reach: If AW can identify access		total over the life of the
		which it believes to be safe and legal, the		license.
		USFS and DWCCC agree to review the		
		proposed access and the items and		
		improvements needed for safe use, such as		
		but not limited to signage, steps for the		
		portage area, and hazard mitigation. If the		
		USFS agrees, in its sole discretion, that the		
		proposed access is appropriate for public		
		use, PacifiCorp will annually 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. Flow schedule		
		and notice to be determined in conjunction		

Resource Area	Existing PM&E	Proposed PM&E	Capital Costs of	O&M Costs of
			Proposed PM&E	Proposed PM&E
		with AW, and in coordination with		
		DWCCC and USFS, with the provision		
		that boater flows in the future may be		
		subject to minimum boater use (fewer than		
		a minimum threshold of boaters may result		
		in suspension of boater flows). Specific use		
		triggers and related release changes to be		
		determined.		

3.0 PROJECT PURPOSE §4.61 (C)(2)

FERC, when issuing a new license for the Weber Project, requires that PacifiCorp undertake appropriate measures to promote both the development (power) and nondevelopment uses (e.g., scenic, recreational, environmental) of the waterway. These public interest uses, identified by FERC in its licensing orders, constitute the "project purpose." The Weber Project is owned and operated by PacifiCorp to provide electricity to its customers. The Weber Project lands enclose only the lands necessary to operate and maintain the Weber Project and for other purposes such as recreation, shoreline control, or protection of environmental resources.

The Project Boundary is an administrative marker that clearly delineates those lands necessary for the operation and maintenance of the Project and for other Project purposes. These lands are determined through Exhibit G (Project Boundary maps) reflecting the inclusion or exclusion of certain lands.

Continued operation of the Project as proposed under a new license would provide affordable renewable hydroelectric generation to meet a portion of local power requirements, resource diversity, and capacity needs in the northern Utah region of PacifiCorp's service territory.

4.0 APPLICATION DEVELOPMENT COSTS §4.61 (C)(3)

The current budget estimate for the development of the new license application and associated materials is currently \$1,099,000.

5.0 ON-PEAK AND OFF-PEAK VALUES OF PROJECT §4.61 (C)(4)

The Project is only operated in run-of-river mode, and therefore, estimated values of on- and off-peak Project power are not required.

6.0 ESTIMATED CHANGE IN PROJECT GENERATION §4.61 (C)(5)

The Project will continue to operate as a run-of-river facility, with new PM&E efforts for recreation (boating) flows and a new proposed fishway modifying the manner, but not the timing nor the volume, of minimum flows in the bypass reach.

The recreation-related PM&E measure deals with supporting potential whitewater boating use of the bypass reach. In the event that a safe and legal egress site is identified by the boating community and agreed to by the 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, for a total of up to 16 hours (48 MWh) annually of potential lost generation. The exact schedule of this provision of boater flows would be determined in conjunction with AW, and coordinated with the USFS and DWCCC. Boater flows in the future may be subject to minimum boater use. The Project operations described in this section would remain the same under the proposed action. Therefore, the value of power due to Project changes is expected to change minimally (up to 48 MWh annually, if approved) under the new license.

7.0 UNDEPRECIATED NET INVESTMENT (BOOK VALUE) OF THE PROJECT §4.61 (C)(6)

As of December 31, 2016, PacifiCorp had incurred an Original Cost Investment of \$4,554,002, Accumulated Depreciation of \$3,201,688, and a Net Book Value of \$1,352,314 for the Project.

8.0 ESTIMATED ANNUAL COST OF THE PROJECT §4.61 (C)(7)

Project costs were calculated using rate-based methodology that incorporates existing net investment, routine hydro operations O&M, property and income taxes, depreciation and amortization, deferred taxes, and rate of return (PacifiCorp is self-insured).

The total Project forecast period is 44 years², from 2017 to 2060. Period of analysis is based on PacifiCorp's financial model duration. The annual inflation rate estimate is 2.53%. PacifiCorp's discount rate of 6.59% is based on the after-tax, weighted average cost of capital.

Property taxes paid on the Project were 1.51% of the 2016 net book value, or \$20,409, in 2016 (2016 is the last year calculated at the time of this analysis). PacifiCorp's corporate tax rate is 37.951%. See Tables 8 and 9 for additional information regarding analysis period capital expenses.

Item	44-year Total (2016 \$5. Millions of \$5.)	Present Value Cost		
	(2010 \$\$, Millions of \$\$)	(2010 \$\$, Willions of \$\$)		
Property Taxes	1,869	694		
Book Depreciation	48,189	6,414		
Rate of Return @7.56%	10,872	4,121		
Current and Deferred Income Taxes	4,420	1,680		
Total	\$66,349	\$12,909		

Table 8. Project's Capitalized Expenses for Period of 44 Years

Table 9.	Project's	Capitalized Ex	penses for Period	l of 44 Years	With Inflation
I unic >.	IIUJEEUS	Cupitunzeu LA	pended for i erroe	I UI II I Cuib	v in minution

Item	44-year Total	Present Value Cost		
	(2016 \$s, Millions of \$s)	(2016 \$s, Millions of \$s)		
Routine O&M	12,039	5,421		
Dam Safety	400	176		
Impoundment	160	69		
Dredging/Maintenance				
1965 Contract	(401)	(181)		
Implementation O&M	345	141		
Total	\$12,543	\$5,626		

²PacifiCorp uses a financial model that considers the future 44-year period. It is expected that the analysis outcome for a 50-year analysis period (PacifiCorp is proposing a 50-year license period) is not significantly different than a 44-year period, due to the time-value of money nearing the end of the forecast period, and the additional level of uncertainty and risk injected into the analysis. This uncertainty, specifically affecting the analysis of the rate of inflation and the forward power cost price curve, has the effect of making the forecasted differences between the 44-and a 50-year mark meaningless. It is expected that a 50-year license would slightly improve the net customer benefit calculated in the current 44-year analysis from the generation benefit of a zero-fuel cost generating asset while adding no additional insight from a financial analysis perspective.

O&M estimates can vary significantly from year to year. PacifiCorp estimates are based on historical data as well as budget forecast estimates. Annual Project routine O&M costs were \$273,619 in 2016 dollars, totaling \$12 million over the 44-year analysis period. This estimate is based on the average of the prior three years of FERC Form 1 costs directly attributable to the Project reduced by relicensing implementation expenses. Table 9 shows the projected expenses to operate the Project for 44 years, unadjusted for inflation. The far-right column shows the total 44-year inflated costs, on a 2016 present value basis discounted at 6.59%.



9.0 SINGLE LINE ELECTRICAL DIAGRAM §4.61 (C)(8)

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10.0 MEASURES TO ENSURE SAFE MANAGEMENT §4.61 (C)(9)

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 years; however, several measures are taken to ensure safe management of the Project, as described in the following sections.

10.1 OWNER'S DAM SAFETY PROGRAM

The purpose of the Owner's Dam Safety Program (ODSP) is to define the procedures and actions that are to be taken by its employees and representatives to ensure that all dams and related water retaining structures are designed, constructed, maintained and operated in a manner sufficient to protect the public and its employees from the consequences of an unplanned event that could result in the uncontrolled release of water. On December 18, 2013, PacifiCorp filed a new ODSP with FERC. On February 24, 2015, FERC requested additional information and provided comments on the 2013 ODSP. On February 10, 2017, PacifiCorp filed a revised final of the 2013 ODSP. Several elements specific to the Weber Hydroelectric Project are currently planned for implementation in 2022. The Public Safety Program Elements of this ODSP consist of Emergency Action Plans (EAPs), Public Safety Plans (PSPs) and Security Plans. These are utilized to protect the public and provide notification to Emergency Management Agencies and/or the public if a course of events could or are leading to the uncontrolled release of water from a dam.

10.1.1 Emergency Action Plan

The EAP is a formal document that identifies potential emergency conditions at a dam and specifies a preplanned set of actions to be followed to minimize the notification time to the public and enable emergency management authorities to facilitate evacuations in the event of a failure. The Weber Project has been granted annual exemptions from the requirement of filing an EAP. As required by 18 CFR 12.21, PacifiCorp conducts annual comprehensive reviews of circumstances upstream and downstream of this Project to determine if there are changes that would endanger life, health, or property. Upon completion of these reviews, annual EAP exemptions are requested.

10.1.2 Public Safety Plan

A Public Safety Plan (PSP) is a formal document that identifies the location of specific safety features intended to provide the public with information about potentially hazardous conditions and areas restricted from public access, in and around PacifiCorp's dams and related facilities. The Weber Project PSP was Ordered by FERC on August 29, 1990. On April 28, 1993, PacifiCorp filed the new PSP with FERC. PSPs are updated

periodically; on December 18, 2014, PacifiCorp submitted a revised PSP for the Weber Project. A subsequent revision (Figures 5-7), was filed on December 6, 2017.

10.1.3 Site Security

PacifiCorp's Weber Project security consists of specific physical security measures such as locked gates, locked powerhouse doors, security fences and gates (some with razor wire to discourage unauthorized access), alarms, 24/7 electronic monitoring, and the potential for 24/7 access by the plant operators. These have been implemented to prevent an attack on the dam or other Project features that could result in an emergency condition leading to the potential uncontrolled release of water or a threat to public safety.

10.1.4 Continuous Improvement

Continuous improvement requires an organizational environment that enables identification and learning of relevant information to improve both the content and execution of PacifiCorp's ODSP on a continual basis. PacifiCorp formally maintains a "Plan/Execute/Measure/Correct" management system in order to ensure this cycle of continuous improvement. The most important role in ensuring the continued safe and efficient operation of PacifiCorp's dams belongs to PacifiCorp personnel. Efficient paths of communication have been established between all segments of PacifiCorp's organization including open sharing and distribution of information upward and downward within the organization. Implementation of the system, including annual training, places an emphasis on the importance of information sharing amongst PacifiCorp personnel. The results of assessments and audits of this ODSP are shared within the PacifiCorp organization as lessons identified become available. Where applicable, company procedures for "root cause" and "significant event report" type analyses are utilized to investigate events.

10.2 ENVIRONMENTAL INSPECTION REPORT

On May 15, 2017, FERC notified PacifiCorp that Environmental Inspections would be conducted at the project site on June 13, 2017 and June 14, 2017. On June 23, 2017, FERC issued the results of the 2017 Environmental Inspection. PacifiCorp completed the action items noted below on/before July 21, 2017.

 Action Item
 Status

 Trim the vegetation at the entrance to the accessible fishing pier upstream of the Weber
 Completed

 Diversion Dam and report back on its completion within 30 days of the date of this letter.
 Completed

 Replace the missing grills and report back on their replacement within 30 days of the date
 Completed

 Boater warning signage upstream of the dam was obscured by overgrown willows. This
 Completed

 Isuggested but not required.]
 Completed

 Table 10. Environmental Inspection Action Items 2017

Action Item	Status
Barbed wire along the peak of the fence on the north side of the diversion dam had been cut, and should be repaired. [Suggested but not required.]	Completed
Sizable gap under the southwest gate to the powerhouse switchyard. This gap should be	Completed
closed to prevent unauthorized access to the switchyard. [Suggested but not required.]	Completed

Based on file reviews, discussions, and field observations made during that inspection, the Project was in compliance with the license articles related to fish and wildlife, recreation, public safety, and cultural resources.³ Follow-up items needing action were noted during inspections of the Project, however as noted above, these items have since been completed.

³ Article 104 requires the Licensee to consult with the Forest Service annually with regard to measures needed to ensure protection and development of the natural resources values of the project area. Article 401 requires minimum flow releases of 34 cfs or inflow (whichever is less) from Oct. 1 to Mar. 31; and 50 cfs or inflow (whichever is less from Apr.1 to Sep. 31. Article 402 requires the licensee to install and maintain streamflow gages in the Weber River to monitor flows of Article 401. Part 8 requires recreational signage and postings. Article 405 requires the Licensee to develop a day-use area near the UDOT rest stop and file associated activities with Phase II and III of the recreation plan. Article 406 authorizes the Licensee to grant permission for certain types of land use and occupancy on the Project lands and waters prior to Commission approval. Article 403 requires the Licensee to consult with the SHPO prior to any future land disturbing activities within the Project Boundary. Article 404 requires the Licensee to consult with the SHPO before starting any land disturbing activities and conduct a CRMP. 18 CFR Part 12 requires the Licensee to maintain facilities and measures to ensure public safety.



Figure 5. Weber Project Current Public Safety Plan Part 12 Signage (Powerhouse)





Figure 6. Weber Project Current Public Safety Plan Part 12 Signage (Dam and Recreation Site)

C - CIONC		
	S = SIGNS	F = FENCING / HANDRAILS
SI-WEDER HTDRUELECTRIC PROJECT	S11-GAUTION: This Building Is Alarmed (8"x6")	F1 -Diversion dam security fencing consist of a 7 high
Ecderal Energy Regulatory Commission	312 -DANGER - Admittance by Authonized Personnel Unly	chain link tence with three strands of barbed wire
Department of Energy	(18 X14)	and razor ribbon around the top.
Project No. 1744	S13-DANGER	F2 -Recreation tencing consist of 48" high chain link
Further information may be obtained by calling:	DO NOL WAIK ON PIPE (24 X24)	rencing with top rall.
PACIFICORP 801-220-2245	Closed To The Public (10"x14")	F3 -Recreation tencing consist of 6 nigh chain link
1 701 10014 001-220-2240	S15-DANGER	rending with top rall.
DAY-USE RULES	DAM & SPILLWAY AHEAD (24"Y36")	top rail on both the upstroom and downstroom sides
		E5 Intake handrails consist of 42" high pine handrails
S2 -DANGER	VIOLATOPS WILL BE PROSECUTED (10"Y14")	located in front of the intake openings
KEEP OFF (10"x14")	S17-DANGER	E6 Eiching plotform hand rolling consist of 42" high steel
	PINER PISES PADIDI VI ISTEN FOR HORN (15"Y20")	handraile
S3 -UP&L	S18-NOTICE - Anglers Access 450 Feet (10"X14")	F7 -Maintenance mad access barrier is a 1-1/2 link chain
PRIVATE PROPERTY	S19 -NOTICE - IN THE EVENT OF AN EMERGENCY INVOLVING	supported from 4' diameter poles camented into the
NO TRESPASSING (10"x14")	THIS SITE PLEASE CALL HYDRO CONTROL CENTER	around
	877-562-9928	F8-Steel access cate
S4 -DANGER	S20 NO TRESPASSING	FQ _6' long link chain
RIVER SUBJECT TO RAPID RIVER	\$21 -NOTICE - THESE PREMISES PROTECTED BY ALADM	F10 -36" high nine handrail
FLUCTUATION (10"x14")	S22 -DANGER HIGH VOI TAGE ABOVE KEED OFF	Tra-oa men bibe nenerali
	S23 -PACIFICORP & MIDAMERICAN ENERGY	
S5 -WARNING	COMPANY - WEBER PLANT	L1 - Diversion dam lighting consist of three mounted
RIVER MAY RISE RAPIDLY	S24 -PACIFICORP & MIDAMERICAN ENERGY COMPANY HYDRO	spotlights.
STAY OUT / STAY ALIVE	RESOURCES - NOTICE - AUTHORIZED PERSONNEL ONLY	12 -Powerhouse lighting consist of building mounted
LISTEN FOR HORN (20"x24")	- CAUTION WEAR PROTECTIVE EQUIPMENT	incandescent lights and pole mounted mercury vapor lights
S6 -WARNING - HAZARDOUS WATER CONDITIONS		I 3 -Substation lighting consist of 5 incondescent lights
NO SWIMMING / STAY OUT / STAY ALIVE	S OPERATING	mounted on the switch rack structure
(15"X20")		14 -Access road lighting consists of four pole - mounted of
	PRIVATE PROPERTY - NO TRESDASSING	linhts
S7 -STOP SIGN (2'x2')	PROPIEDAD PRIVADA	iignio.
	- PROHIBIO EL PASO	S = SAFETY DEVICES
S8 -RIGHT TURN ONLY (20"x24')	S26 -WEBER SUBSTATION	SB1 -There is a 140' long floating safety boom installed
·····	\$27 -ROCKY MOUNTAIN POWER - A DIVISION OF PACIFICORP	upstream of the dam and intake structure. 2 floats no
S9 -CAUTION WEAR PROTECTIVE EQUIPMENT	WEBER SUBSTATION OGDEN	SWIMMING" are equally spaced across the boom. The
(12"x18")	S28 -NOT AN EXIT	boom is typically installed each April following ice-off
1999	S29 -CAUTION CONFINED SPACE KEEP OUT UNLESS	of the reservoir and removed in October prior toheave
S10 -DANGER	AUTHORIZED	snowfall.
HIGH VOLTAGE (10"x12")	S30-DANGER - RAILROAD CROSSING MUST CONTACT RAILWAY	
	BEFORE CROSSING (1-888-877-7267)	
	S31-CAUTION CLEARANCE (13'3")	
		EXHIBIT PSP-3
		WEBER H
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		INTO DESCO
		New York
		× 8
		同時
		69

Figure 7. Legend for Current Public Safety Plan



APPENDIX A: DETAILED PROJECT LOCATION MAPS



FIGURE A-1. DETAILED PROJECT LOCATION MAP (1 OF 3)



FIGURE A-2. DETAILED PROJECT LOCATION MAP (2 OF 3)



FIGURE A-3. DETAILED PROJECT LOCATION MAP (3 OF 3)

WEBER HYDROELECTRIC PROJECT (FERC NO. 1744)

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

EXHIBIT G

PROJECT MAPS



DECEMBER 2017

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

WEBER HYDROELECTRIC PROJECT (FERC No. 1744)

PACIFICORP

EXHIBIT G Project Maps

The Weber Hydroelectric Project is located in Weber, Morgan, and Davis counties in the state of Utah. The existing Exhibit G contains three drawings listed below in Table 1.

Table 1. Existing Exhibit G Drawings

Exhibit Sheet	FERC Drawing No.	Title/Showing	Approval order date
G-1	1744-19	Project Layout	6/28/1990
G-2	1744-20	Recreation and Forebay Sites	6/28/1990
G-3	1744-21	Existing Weber Plant Site	6/28/1990

The revised Exhibit G replaces the three current drawings with four newly created sheets that consist of a series of three overlapping maps depicting the proposed Project Boundary location and principal features of the Project and a fourth sheet with coordinates, distances, and descriptions for the boundary and flowline (buried pipeline center line) shown on the maps (Table 2). These maps also delineate the land ownership and property interests within that boundary. For the Weber Final License Application, PacifiCorp will also submit Geographic Information System (GIS) shapefiles for the Project Boundary, federal lands within the boundary, and georeference control points, and metadata text file (on CD) for the electronic filing.

Exhibit Sheet	FERC Drawing No.	Title/Showing
G-1	1744	Project Boundary Map/ shows eastern part of Project
G-2	1744	Project Boundary Map/ shows central part of Project
G-3	1744	Project Boundary Map/ shows western part of Project
G-4	1744	Project Boundary Description

Table 2. Revised Exhibit G Drawings

The existing FERC Project Boundary occupies a total of 18.48 acres, of which approximately 15.51 acres (according to the list on sheet G-1, FERC drawing no. 1744-19) are lands of the United States administered by the U.S. Forest Service (USFS).

PacifiCorp proposes to revise the Project Boundary under the next license term to include additional areas needed for operation and maintenance, and exclude areas outside of Project influence. The revised exhibits improve the alignment of the boundary with existing features based on new survey data and aerial imagery. The proposed Project Boundary would occupy a total of 18.08 acres, of which approximately 14.94 acres are lands of the United States administered by the USFS. There is a short segment of transmission line between the powerhouse building and the adjacent substation that occupies approximately 0.02 acres of lands of the United States (0.02 acres occupied by transmission line).

There are several proposed changes to the Project Boundary on federally-owned lands (see Revised Exhibit G sheets G-1 and G-3). On revised sheet G-1, the first change includes adjusting the alignment of the Project Boundary along the forebay and recreation area to more accurately follow existing features. The forebay shoreline at the normal maximum pool elevation as depicted on the original Exhibit G sheet G-2 (FERC drawing no. 1744-20), remains the intended boundary but the traverse description on that drawing did not align well with the actual forebay location. The proposed boundary improves alignment with the forebay. Likewise, the portion of the boundary that extends around the recreation area on the north side of the forebay, as shown on the original Exhibit G sheet G-2, required slight adjustments to improve the alignment with existing recreation area features. The proposed boundary continues to run along the north side of the recreation area fence but now it closely follows the north side of the recreation area access road to the junction with the highway rest area access road which avoids encroachment on the highway rest area. The other proposed change in this vicinity includes expanding the boundary approximately 520 feet downstream of the dam to incorporate the river and riparian area that lie between the recreation site and the flowline to provide a management buffer downstream of the dam.

The Project is located within the Uinta-Wasatch-Cache National Forest administrative boundary; however, the central portion of the Project in Section 29 T5N R1E SLM is located on private ownership. For this area, the proposed Project Boundary maintains the same 25-foot width along the flowline (12.5 feet on each side of the center line of the flowline) as the existing boundary (see revised Exhibit sheet G-2).

West of the section line between Section 29 and 30 T5N R1E SLM, the flowline and powerhouse are located on federally owned land. Once the flowline crosses under the highway (I-84) the proposed boundary expands to include the highway access ramp and the area between the highway, the Weber River, and the downstream side of the powerhouse. This part of the proposed boundary has been widened to include access roads, buildings, and maintenance areas that are currently used by the Project.

Downstream of the powerhouse, the proposed boundary has been reduced to include only the small area occupied by the Project transmission line (excluding the substation) and the access road and highway access ramp. The changes around the powerhouse are intended to include only those areas that are needed for the Project rather than the arbitrary rectangular area that defines the existing boundary.

A Public Land Survey System (PLSS) description of lands of the United States located within the proposed Project boundary and identified on these maps can be found in Table 3.

PLSS Township and Range, Salt Lake	PLSS Section	Subdivision Section	Acres	Agency Jurisdiction
Meridian				
T5N, R1E	28	Portions of the NW 1/4 of the SE 1/4	1.52	USFS
T5N, R1E	28	Portions of the NE 1/4 of the SW 1/4	3.69	USFS
T5N, R1E	28	Portions of the NW 1/4 of the SW 1/4	5.80	USFS
T5N, R1E	30	Portions of the NE 1/4 of the SE 1/4	0.79	USFS
Γ5N, R1E	30	Portions of the NW 1/4 of the SE 1/4	2.44	USFS
Г5N, R1E	30	Portions of the NE 1/4 of the SW 1/4	0.68	USFS
Federal Lands occu	ipied by T	ransmission Line	•	
T5N, R1E	30	Portions of the NE 1/4 of the SW 1/4	0.02	USFS
		Total Acreage	14.94	

Table 3. Description of Federal Lands within the Project Boundary






Project Boundary Table

Point	Northing (Meters)	Easting (Meters)	Bearing	Distance (feet)	Remarks	
1	4554424	425723			BEGINNING AT THE SW CORNER OF SEC 30 T5N R1E, AND BEARING N43-44- 55E 2672.4 FEET (GIS CALCULATED) TO THE NW CORNER OF THE WEBER	
				19	POWERHOUSE, THE POB ALONG SUBSTATION FENCE	
2	4554427	425719			BEND POINT ON SUBSTATION FENCE	
3	4554430	425675		144	ALONG SUBSTATION FENCE	
			S4-32-37E	10	ALONG SOUTH SIDE OF ACCESS ROAD	
4	4554427	425675	N76-42-58W	194	BEND POINT ON SOUTH SIDE OF ACCESS ROAD	
5	4554441	425618			INTX W/ UNMARKED NORTH/SOUTH BOUNDARY LINE	
6	1551117	125619	N0-0-0E	18	ALONG UNMARKED NORTH/SOUTH BOUNDARY LINE	
0	4334447	423010	S80-1-57E	75	ALONG SOUTH SIDE OF INTERSTATE 84	
7	4554443	425640	S74 2 12E	72	INTX W/ NORTH SIDE OF ACCESS ROAD	
8	4554437	425662	574-2-12E	13	BEND POINT ON NORTH SIDE OF ACCESS ROAD	
	4554400	405744	S84-37-10E	270	ALONG NORTH SIDE OF ACCESS ROAD	
9	4554429	425744	S87-5-54E	300	ALONG SOUTH SIDE OF INTERSTATE 84	
10	4554424	425835			BEND POINT ON INTERSTATE 84, WEST BOUND	
11	4554419	425893	S84-54-27E	191	ALONG SOUTH SIDE OF INTERSTATE 84 INTX W/ EDGE OF ACCESS ROAD	
			S81-18-13E	180	ALONG EDGE OF ACCESS ROAD	
12	4554411	425947	N81-51-33E	69	INTX W/ PIPELINE BUFFER (12.5' FROM PIPELINE C.L.)	
13	4554414	425968			INTX W/ INTERSTATE 84, WEST BOUND	
14	1551516	128314		7843	ALONG PIPELINE BUFFER (12.5' FROM PIPELINE C.L.)	
14	4004010	420314	N0-0-0E	126	ALONG UNMARKED NORTH/SOUTH BOUNDARY LINE	
15	4554554	428314		10	INTX W/ RECREATION AREA FENCE	
16	4554557	428314	NT1-10-23E	10	BEND POINT ON RECREATION AREA FENCE	
.0			N73-13-39E	45	ALONG RECREATION AREA FENCE	
17	4554561	428327	N81-38 10E	100	BEND POINT ON RECREATION AREA FENCE	
18	4554565	428357	1101-30-10E	100	BEND POINT ON RECREATION AREA FENCE	
10	4554504	400.400	S89-17-48E	232	ALONG RECREATION AREA FENCE	
19	4554564	428428	N63-53-23E	18	ALONG RECREATION AREA FENCE	
20	4554567	428433			BEND POINT ON RECREATION AREA FENCE	
21	1551563	128177	S85-35-3E	144	ALONG RECREATION AREA FENCE	
21	4004000	420477	S88-33-20E	295	ALONG RECREATION AREA FENCE	
22	4554561	428567	004.04.05	010	INTX W/ RECREATION AREA ACCESS ROAD	
23	4554551	428633	581-34-0E	219	BEND POINT ON RECREATION AREA ACCESS ROAD	
			S86-55-15E	343	ALONG RECREATION AREA ACCESS ROAD	
24	4554546	428737	S76-41-17F	167	BEND POINT ON RECREATION AREA ACCESS ROAD	
25	4554534	428787	070 41 172	107	BEND POINT ON RECREATION AREA ACCESS ROAD	
26	1551531	428800	N89-8-55E	41	ALONG RECREATION AREA ACCESS ROAD	
20	4004004	420000	N23-53-13E	26	ALONG RECREATION AREA ACCESS ROAD	
27	4554542	428803			INTX W/ REST AREA ACCESS ROAD	
28	4554539	428816	579-56-10E	44	INTX W/ EDGE OF REST AREA ACCESS ROAD INTX W/ EDGE OF REST AREA ACCESS ROAD AND EAST EDGE OF	
					RECREATION AREA ACCESS ROAD	
29	4554522	428816	S0-0-0W	56	ALONG UNMARKED NORTH/SOUTH BOUNDARY LINE INTX W/ WEBER FOREBAY SHORELINE (4797.4 FT NAVD88); THENCE THE PROJECT BOUNDARY FOLLOWS THE NORMAL WATER SURFACE AT ELEV 4792.3 FT MSL AS APPROX. REPRESENTED BY THE FOLLOWING COURSES	
			N85-12-4E	128		
30	4554525	428855	N76-40 24E	240		
31	4554547	428948	1N7 U-43-24E	312		
	AFF 4550	400000	N57-2-50E	54		
32	4004556	428961	N71-13-41E	44		
33	4554560	428974		~		
34	4554578	428988	N37-15-4E	74		
			N59-47-35E	57		
35	4554587	429003	N49-25-56F	83 83		
36	4554604	429022				
20	1551600	400454	N79-34-32E	441		
31	4004028	429154	N77-13-35E	147		
38	4554638	429198				
39	4554638	429233	N88-56-59E	115		
			S79-16-31E	69		
40	4554635	429254	S87-21-10F	103		
41	4554633	429285		103		
	4554005	400015	S79-31-27E	106		
42	4554627	429317	S13-5-28W	85	ALONG WEBER RIVER TO WEBER FOREBAY TRANSITION LOCATION	
43	4554602	429311			INTX W/ WEBER FOREBAY SHORELINE (4797.4 FT NAVD88); CONTINUING	
			N80-43 43/M	170	ALONG THE NORMAL WATER SURFACE (POINTS 29 TO 55):	
44	4554610	429260	1100-40-4200	170		
45	AEE 404 4	400040	N85-9-46W	156		
45	4004614	429213	S84-58-10W	124		

Point	Northing (Meters)	Easting (Meters)	Bearing	Distance (feet)	Remarks		
40	4554011	429175	S73-27-35W	80			
47	4554604	429152	S81-11-6W	146			
48	4554597	429108	00111000				
			S78-11-3W	217			
49	4554584	429043	054 40 47144	70			
50	4554571	429025	554-43-1799	12			
00	1001011	120020	S45-45-46W	114			
51	4554547	429000					
52	1551533	128075	S61-1-16W	95			
52	-00-000	420373	S72-34-1W	208			
53	4554514	428914					
E 4	4554504	100067	S77-39-53W	158			
54	4004004	420007	S80-18-2W	167			
55	4554495	428817			INTX W/ CONCRETE RETAINING WALL		
	4554400	100050	S89-11-24W	549	ALONG CONCRETE RETAINING WALL		
56	4554493	428650	S89-12-0\//	565	BEND POINT ALONG CONCRETE RETAINING WALL		
57	4554490	428478	000 12 000	000	INTX W/ INTAKE HOUSE AND CHAMBER AT DIVERSION DAM		
				88	ALONG FACILITIES AT DIVERSION DAM		
58	4554494	428457			INTX W/ PIPELINE BUFFER (12.5' FROM PIPELINE C.L SEE PIPELINE		
				8188	ALONG PIPELINE BUFFER (12.5' FROM PIPELINE C.L.)		
59	4554412	426008			INTX W/ SOUTH SIDE OF INTERSTATE 84, WEST BOUND		
		100000	N88-21-15E	68	ALONG SOUTH SIDE OF INTERSTATE 84		
60	4554412	426029	S0-0-0\//	18	INTX W/ UNMARKED NORTH/SOUTH BOUNDARY LINE		
61	4554407	426029	000000		INTX W/ SOUTH SIDE OF ACCESS ROAD		
			S85-14-27W	174	ALONG SOUTH SIDE OF ACCESS ROAD		
62	4554402	425976	SO 0 0W/	47	INTX W/ UNMARKED NORTH/SOUTH BOUNDARY LINE SOUTH OF GATE		
63	4554388	425976	30-0-010	47	INTX W/ NORTH SHORELINE OF WEBER RIVER; THENCE ALONG THE NORTH		
			000 40 4144	054	SHORELINE OF THE WEBER RIVER AS APPROX. REPRESENTED BY THE FOLLOWING COURSES BETWEEN POINTS 63 AND 70:		
64	4554380	425899	583-42-177	254			
			S83-44-30W	120			
65	4554376	425862		70			
66	4554379	425840	102-9-2300	13			
			N88-37-39W	187			
67	4554380	425783					
68	4554387	425757	IN74-48-43W	90			
			N86-47-2W	68			
69	4554388	425736		40			
70	4554400	425728	IN33-3-16W	46	INTX W/ WEBER POWERHOUSE WALL		
			N81-40-32W	28	ALONG WEBER POWERHOUSE WALL		
71	4554401	425720			BEND POINT ON WEBER POWERHOUSE WALL		
72	4554407	425721	N7-52-52E	20	ALONG WEBER POWERHOUSE WALL INTX W/ TRANSMISSION LINF BOUNDARY		
1 4	100-1-107		N82-50-17W	56	ALONG TRANSMISSION LINE BOUNDARY (9 FOOT OFFSET FROM C.L. OF		
					TRANSMISSION LINE)		
73	4554409	425704		10	BEND POINT ON TRANSMISSION LINE BOUNDARY		
			NI-9-40E	10	TRANSMISSION LINE)		
74	4554415	425705			INTX W/ WEBER SUBSTATION BOUNDARY		
7-		405745	S82-50-11E	33			
15	4554414	425715	S82-50-12F	23	ALONG TRANSMISSION LINE BOUNDARY		
76	4554413	425722			INTX W/ WEBER POWERHOUSE WALL		
		405555	N7-52-56E	36			
1	4554424	425723			INVI CORNER OF THE WEBER POWERHOUSE, THE POB		

Notes:

Project Boundary Table (continued)

1) Information in the table is based on GIS derived coordinates and measurements, and is not intended to represent station points or measurements established by ground surveys. 2) Coordinates and Bearings are in UTM Zone 12, NAD 83, meters. 3) Distances are in U.S. survey feet (Grid).
3) Project is located in the state of Utah, Salt Lake Meridian.





This Document is Considered Public Information.

Easement/Property Rights Reference Table

Easement/ Property Rights No.	Interest Type				
E1	Agreement No. 316 between Union Pacific Railroad Company and Utah Light & Railway Co. dated August 1, 1908 – grants rights to construct and maintain the hydroelectric project and is binding to the successors and assigns of both parties.				

I hereby state that the project boundary represented on this drawing is developed with reasonable accuracy in accordance with FERC requirements. PLSS is based on the Utah BLM PLSS/GCDB Cadastre Data set (8/25/2015 update) except the SW1/4 SEC 30, T5N, R1E which was adjusted by Meridian Engineering Inc., using found corners for SE SEC 25 T5N R1W and W1/4 SEC 30 T5N R1E. The adjusted PLSS is the basis for property boundaries. Other data has been developed from orthophotos and other sources including Federal, State, County, and PacifiCorp GIS sources. All reasonable efforts have been made to ensure that positional accuracy conforms to National Map Accuracy Standards for maps at 1:24,000 scale. Public Land Survey lines and Property lines are based on the Salt Lake Meridian.

PacifiCorp has reviewed the Project boundary shown herein. PacifiCorp possesses property rights* for all non-federal lands drawn on this map that are inside the boundary.

*See Easement/Property Rights Reference Table. Further records research may expose private land easements inside the project boundary that are not shown herein. It is not the intent of this map to impede the bona fide property rights of those private land easements that may exist for purposes unrelated to the operation and maintenance of the project (non-Project uses).

Pipeline Center Line Table

Point	Northing (Meters)	Easting (Meters)	Bearing	Distance (feet)	Remarks		
P1	4554497	428471			POINT OF DIVERSION		
	4554407	400.440	S89-51-28W	174			
P2	4004497	420410	S89-51-27W	84	ALONG BURIED PIPE. THE FOLLOWING COURSES:		
P3	4554497	428392			·		
D4	4554500	420256	N85-20-40W	120			
P4	4554500	428350	N76-5-40W	111			
P5	4554508	428323					
De	4554520	400004	N71-38-32W	320			
FU	4004009	420231	N77-58-3W	97			
P7	4554545	428202					
D8	1551511	128165	S87-53-37W	120			
10		420103	S74-19-38W	88			
P9	4554537	428139					
P10	4554509	428068	S68-34-28W	250			
1 10	+00+000	420000	S71-37-17W	130			
P11	4554496	428030	070 0 47144				
P12	4554487	427986	ວ78-9-17W	149			
		.27000	S81-38-28W	547			
P13	4554463	427821	004 00 0014	4 4 4			
P14	4554456	427778	301-38-28W	141	ALONG EXPOSED PIPE (TRESTLE) INTX W/ BURIED PIPE		
			N62-21-30W	53	ALONG BURIED PIPE, THE FOLLOWING COURSES:		
P15	4554464	427764	001.00.0014/	057			
P16	4554453	427686	581-38-2877	257			
			N85-51-32W	977			
P17	4554474	427389	NOE E1 2014	906			
P18	4554494	427117	1000-01-0200	090			
			N88-39-46W	187			
P19	4554495	427060	S86-5-14W	163			
P20	4554492	427011	500-5-1400	105			
			S83-38-27W	158			
P21	4554486	426963	N88-26-32W	592			
P22	4554491	426782					
D22	4554500	426677	N80-31-32W	348			
F 23	4334309	420077	N85-9-17W	185			
P24	4554514	426621					
P25	4554510	426567	S85-45-13W	1/8			
. 20	1001010	120001	S76-44-4W	182			
P26	4554497	426513	0.07 50 00/4/	470			
P27	4554477	426464	301-32-3288	172			
			S63-34-28W	210			
P28	4554449	426407	569-30-531/	2Q			
P29	4554439	426382	200 00 00 00 00				
Daa	AEE 4 405	400055	S81-30-36W	90			
P30	4004435	420355	N86-15-19W	92			
P31	4554437	426327					
D30	4551155	426226	N80-4-32W	335			
1 32		720220	N86-9-17W	143			
P33	4554458	426183	004 40 4014	4 = 1			
P34	4554451	426137	301-19-43W	151			
			S74-53-28W	440			
P35	4554416	426008	S81 51 20\A/	404			
P36	4554397	425880	301-31-2878	424			
			S84-27-31W	91			
P37	4554395	425852	S89-26-30\V/	84			
P38	4554394	425827					
	455 4000	405300	N84-41-33W	122			
P39	4004398	425790	N81-7-6W	171			
P40	4554406	425738			FAST WALL OF POWERHOUSE		

				Exhibit G-4 Weber Hydroelectric Project FERC No. 1744 Draft License Application December 15, 2017	Rev. 0a
		for Licens	NOIT	Project Boundary Description	
		Draft Applicatior	DESCRIF	Original Drawing Dated November 2017	
	_				
			OLD FERC NO.		
		12/15/2017	DATE		
		0a	NO		

FERC Drawing No. P-1744-__

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

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

WEBER HYDROELECTRIC PROJECT (FERC No. 1744)

PACIFICORP

EXHIBIT H

DESCRIPTION OF PROJECT MANAGEMENT AND NEED FOR PROJECT POWER

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

WEBER HYDROELECTRIC PROJECT (FERC No. 1744)

PACIFICORP

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, 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 Project is located in Weber, Davis, and Morgan counties, Utah, on the Weber River, approximately nine miles 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 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 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 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.

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

Table 1. Utah Hydroelectric Projects Owned by PacifiCorp

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 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)(I)(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.

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.

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 .

2.2.3.3 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 315 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 MWhs.

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 FERC 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 comprehensive 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 Management 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 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 <u>https://www.last10k.com/sec-filings/ppwlm</u>.

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, 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 online 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 FPA, FERC is authorized to establish regulations requiring licensees to operate and property 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 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 of 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 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 below details lost generation from 2013-2017.

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 outageline disturbance
9/1/2014	04:23	9/1/2014	05:55	1.5333	5.9	Forced outageline disturbance
4/30/2015	14:54	4/30/2015	18:35	3.6833	14.18	Forced outageline disturbance
5/7/2015	17:37	5/7/2015	18:40	1.05	4.04	Forced outageline disturbance
6/15/2015	21:33	6/15/2015	22:30	.95	3.66	Forced outageline disturbance
8/10/2015	07:54	8/10/2015	09:00	1.1	4.24	Forced outageline disturbance
9/1/2015	16:31	9/1/2015	17:30	.9833	3.79	Forced outageline disturbance
9/14/2015	19:06	9/14/2015	20:30	1.4	5.39	Forced outageline disturbance
9/16/2015	08:37	9.16/2015	09:50	1.2167	4.68	Forced outageline disturbance
9/23/2015	16:56	9/23/2015	18:30	1.5667	6.03	Forced outageline disturbance
4/4/2016	01:20	4/4/2016	2:20	1.0	3.85	Forced outageline disturbance
4/25/2016	12:26	4/25/2016	14:40	2.2333	8.6	Forced outageline disturbance
7/3/2016	15:37	7/3/2016	17:00	1.3833	5.33	Forced outageline disturbance
7/12/2016	00:04	7/12/2016	01:05	1.0167	3.91	Forced outageline disturbance
8/7/2016	10:05	8/7/2016	12:45	2.6667	10.27	Forced outageline disturbance
9/22/2016	14:50	9/24/2016	10:00	43.0167	166.19	Lightning damageexciter repair
11/30/2016	04:34	-	-	-	ongoing	Turbine seal and bearing damage- repair ongoing

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

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:

- Additional and improved proposed public recreation amenities at the Weber Recreation Site, including a new permanent vault toilet, upgraded accessible amenities, and improved trails in the local area.
- Improved interpretive signage and online information about Weber Project area flows.
- The potential for future whitewater flows in the bypassed reach of the river.
- 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)

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

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

[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)]