

LOW-IMPACT HYDROPOWER CERTIFICATION APPLICATION

Monroe Drop Hydroelectric Project

(FERC NO. 14430)

September 2022



Table of Contents

1. FACILITY DESCRIPTION	1
2. STANDARDS SELECTIONS AND ZONES OF EFFECT	14
3. SUPPORTING INFORMATION	15
A. Ecological Flow Regimes	15
B. Water Quality.....	16
C. Upstream Fish Passage	17
D. Downstream Fish Passage and Protection.....	18
E. Shoreland and Watershed Protection	20
F. Threatened and Endangered Species Protection	21
G. Cultural and Historic Resources Protection	22
H. Recreational Resources.....	23
4. FACILITY AND STAKEHOLDER CONTACTS FORMS.....	24
5. ATTESTATION AND WAIVER FORM	28

APPENDICES

IPac species report

NUID agreement

USBR Agreement

USDA Special Use Permit

1. FACILITY DESCRIPTION

The Monroe Drop Project is located within the Deschutes River Basin on the North Unit Irrigation District Main Canal (NUMC), Figures 1-2. The project boundary encompasses 2.1 acres within the Crooked Creek National Grasslands administered by the US Forest Service (USFS) and within a US Bureau of Reclamation (USBR) held easement for the NUMC. Construction of the North Unit Irrigation project began in 1938 and was completed in 1949. The NUMC and Monroe Drop are facilities operated by the North Unit Irrigation District (NUID) with a primary purpose to deliver irrigation water.

Principal features of the irrigation project include Wickiup Dam and Reservoir, Crane Prairie Dam and Reservoir, Haystack Dam and Reservoir, North Unit Main Canal and lateral system, and the Crooked River Pumping Plant. Releases from Wickiup Reservoir are diverted from the river at the North Canal Dam in Bend, OR which was built by local interests before USBR construction work began. Water is carried to about 50,000 acres of irrigated lands by the North Unit Main Canal and distributed through a system of laterals. Water stored in Crane Prairie Reservoir (upstream of Wickiup Reservoir) is also diverted by the North Canal Dam into delivery and distribution systems to more than 47,000 acres. It was built and is operated by Central Oregon Irrigation District and Crook County Improvement District No. 1.

The North Unit Main Canal is one of three irrigation canals that originate at the North Canal Diversion Dam at RM 164.8 on the Deschutes River. The Crooked River Pumping Plant is located where the North Unit Main Canal crosses the Crooked River at about RM 27.6. The canal diverts water from the Deschutes and Crooked rivers approximately 37 miles, and 11 miles south (upstream) of the hydro project, respectively through a series of canals and drop structures to irrigate the surrounding farm land.

The Main Canal's Monroe Drop structure is a 35-foot-long, 15-foot-high concrete open irrigation drop with winged transition sections upstream and downstream. Water falls between 13.5 feet to 16.5 feet at this structure, depending on flow. The Monroe Drop also contains an automated gate that controls the normal flow of irrigation water through the Main Canal.

Monroe Hydro was issued a FERC conduit exemption on August 1, 2014 and was constructed in 2015 with one Natel SLH100 turbine, a powerhouse, intake channel and a draft tube in the lower canal (Figures 3-5). An Obermeyer gate in the main canal spillway controls the head at the project site and is fully inflated during the entire operating season. The Obermeyer gate is lowered during the canal weed flushing periods to allow for all canal debris to pass the project and not cause blockage in the facilities. The Obermeyer gate is not part of the FERC exemption as it is part of the canal operating system. The SLH turbine was later replaced with a Natel Restoration Hydro Turbine (RHT) under an exemption amendment issued by FERC on January 20, 2020. The RHT is a compact hydroelectric turbine that couples high performance with safe through-turbine fish passage. Uniquely thick fish-safe blades optimized for low head applications eliminate the need for fine fish screens, reducing costs while also increasing plant efficiency (Figure 6).

The turbine replacement required replacing the top section of the rectangular draft tube with a cylindrical draft tube. This modification required a modification to the wingwall notch to accommodate the slightly enlarged draft tube. The lower section of the draft tube which is supported by a foundation in the canal was not modified. The existing intake (48-foot-long, 7-foot-diameter pipe) and powerhouse structures were not modified and the enlargement of the already existing wingwall notch to accommodate the draft tube structure was the only necessary change to canal civil structures. The project discharges water back to the Main Canal through a 25-foot-long rectangular section draft tube of varying dimensions. The project also includes a 2,200-foot-long power line buried in conduit under the canal service road that interconnects with a 12.5 kV distribution line owned and operated by PacifiCorp.

The nameplate of the project is 300 kW and 1,078 MWh annually. The design head range averages 4.7 m with a flow of 323 cfs through the plant which fluctuates based on the available flow as noted in table one by month. The project operates as a run-of-river project and runs seasonally in coordination with the normal irrigation season, April-October. The project does not change the timing or location of water delivered to irrigation users and after irrigation season the canal is drained.

Figure 1. Deschutes Basin

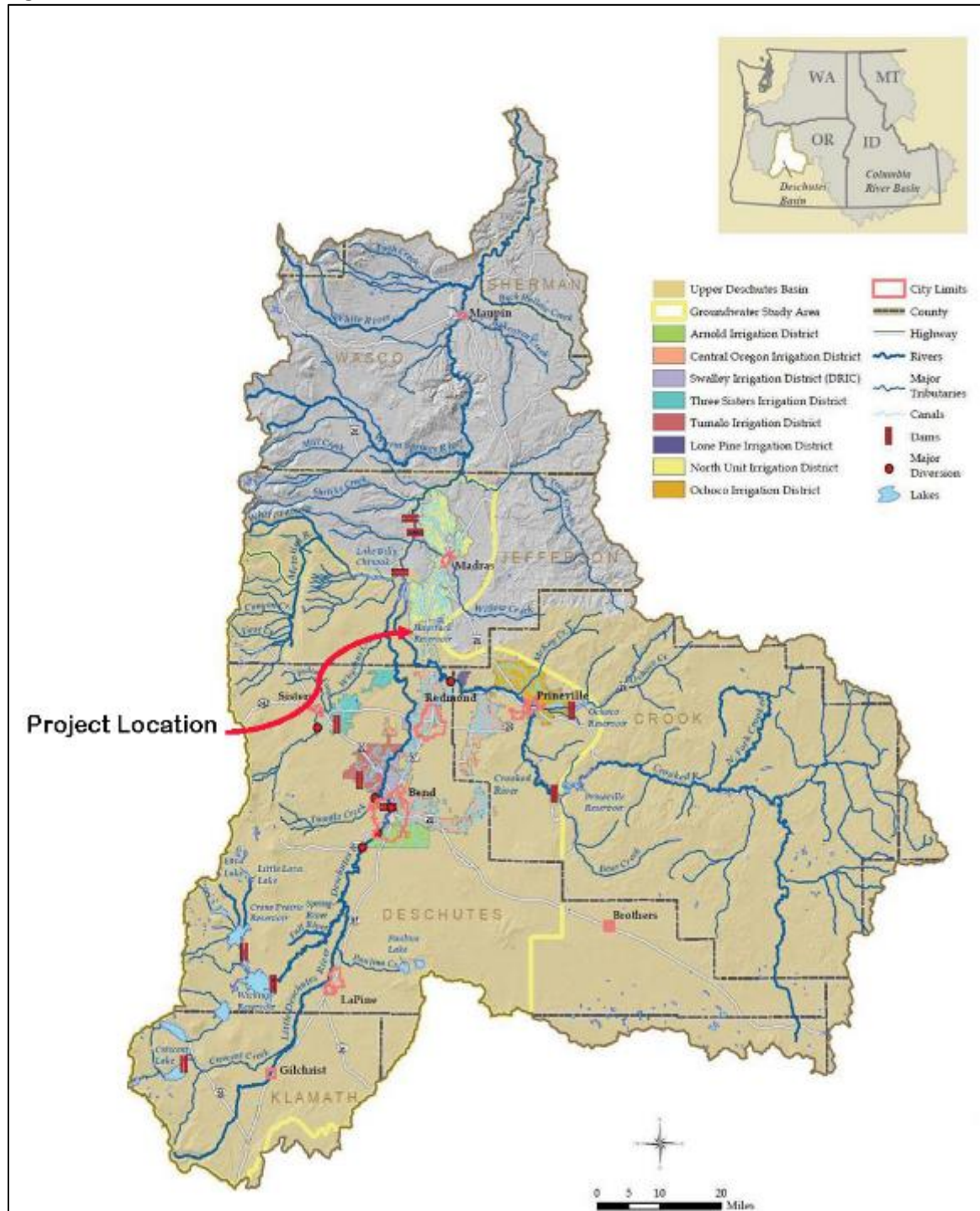
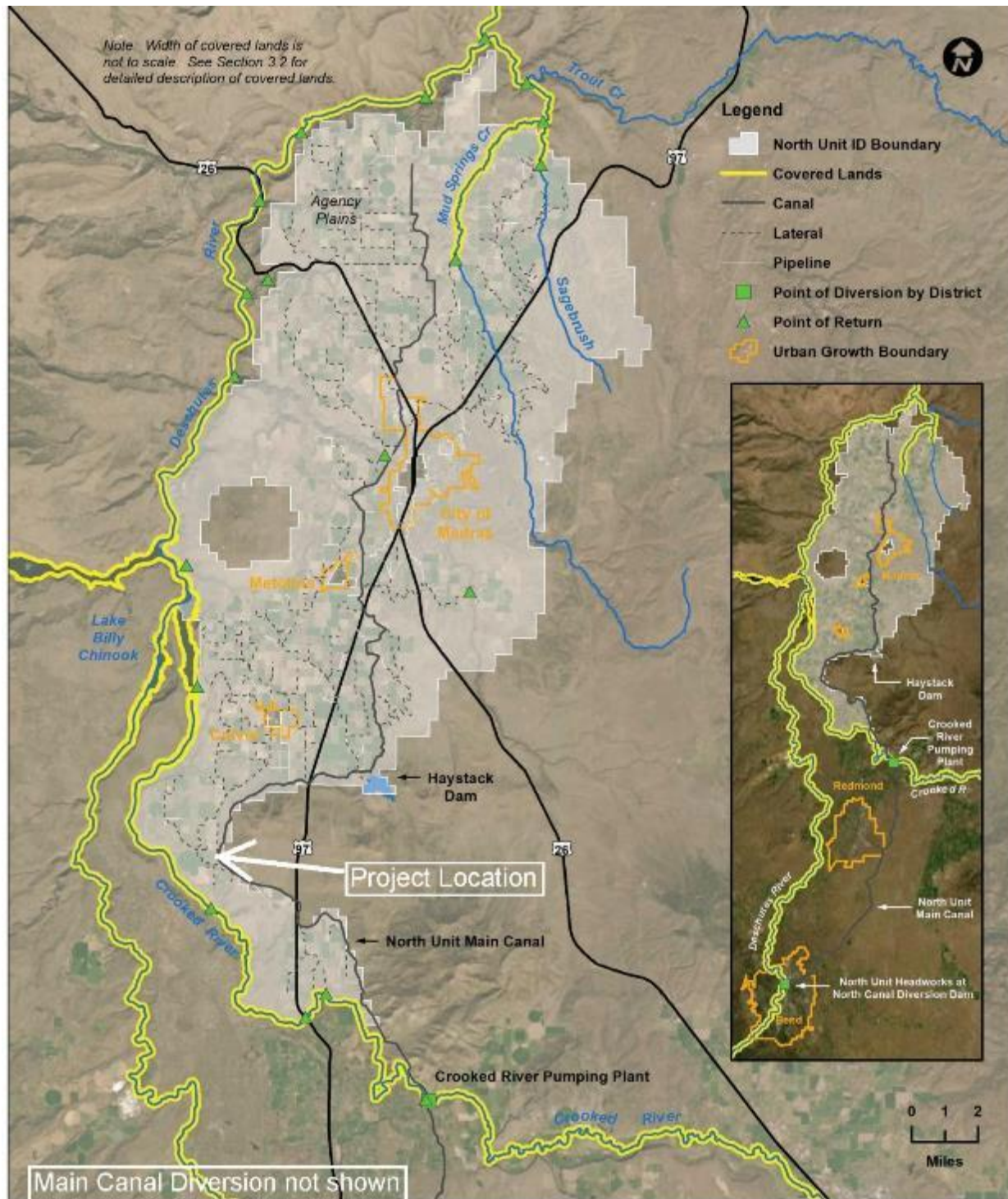


Figure 2. Project Location



[Source: Deschutes Basin Habitat Conservation Plan¹]

¹ https://www.fws.gov/sites/default/files/documents/DBHCP%20Volume%201%20December%202020_0.pdf

Figure 3. Project Layout

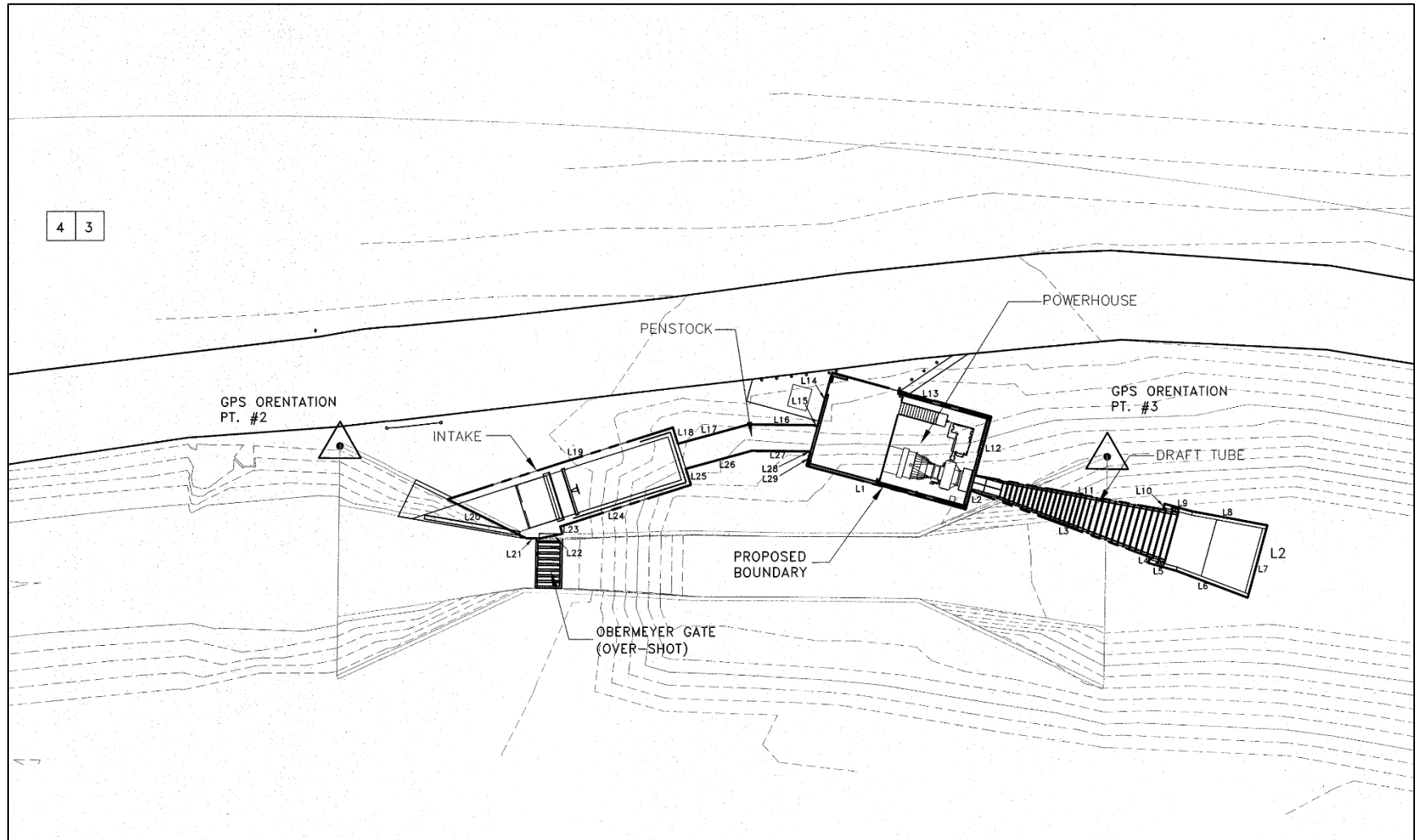


Figure 4. Powerhouse and Discharge



Figure 5. Monroe Drop Viewed from Downstream Showing Drop Structure, Chute, and Concrete Wing Walls

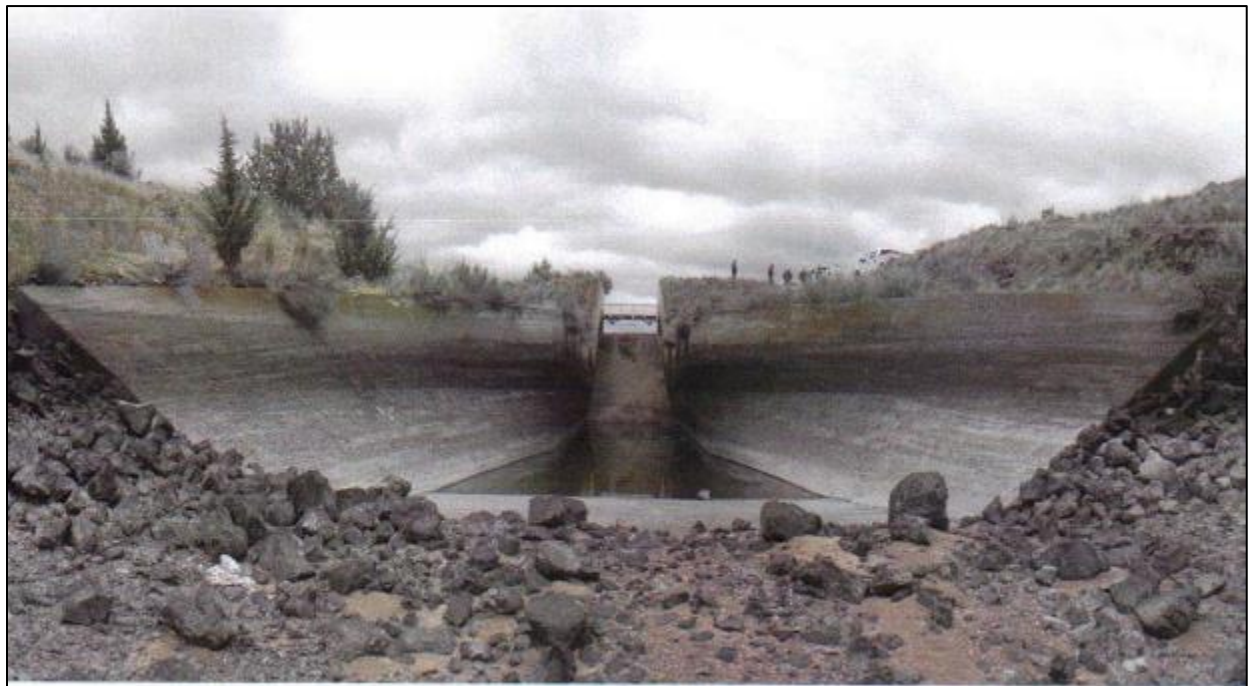


Figure 6. Monroe Drop Restoration Turbine



Table 1. Facility Description

Item	Information Requested	Response (include references to further details)
Name of the Facility	Facility name (use FERC project name or other legal name)	Monroe Drop Hydroelectric Project
Reason for applying for LIHI Certification	1. To participate in state RPS program 2. To participate in voluntary REC market (e.g., Green-e) 3. To satisfy a direct energy buyer's purchasing requirement 4. To satisfy the facility's own corporate sustainability goals 5. For the facility's corporate marketing purposes 6. Other (describe)	(select and describe only applicable reasons) 1. <input type="checkbox"/> State Program: Click or tap here to enter text. 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input checked="" type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> describe: Click or tap here to enter text.
	If applicable, amount of annual generation (MWh and % of total generation) for which RECs are currently received or are expected to be received upon LIHI Certification	Amount of MWh participating: 100% % of total MWh generated:
Location	River name (USGS proper name)	N/A - North Unit Irrigation District Main Canal
	Watershed name - Select region, click on the area of interest until the 8-digit HUC number appears. Then identify watershed name and HUC-8 number from the map at: https://water.usgs.gov/wsc/map_index.html	17070305 Crooked River
	Nearest town(s), <u>county(ies)</u> , and state(s) to dam	Culver, Jefferson County, OR
	River mile of dam above mouth	N/A
	Geographic latitude and longitude of dam	Lat: 44.462349 Long: -121.246953
Facility Owner	Application contact names	Jessica Penrod
	Facility owner company and authorized owner representative name.	Natel Energy, Jessica Penrod, Abe Schneider, Linda Womack

Item	Information Requested	Response (include references to further details)
	FERC licensee company name (if different from owner)	Natel Energy
Regulatory Status	FERC Project Number (e.g., P-xxxxx), issuance and expiration dates, or date of exemption	P-14430, issued 08/01/2014
	FERC license type (major, minor, exemption) or special classification (e.g., "qualified conduit", "non-jurisdictional")	Conduit exemption
	Water Quality Certificate identifier, issuance date, and issuing agency name. Include information on amendments.	None issued under the exemption
	Hyperlinks to key electronic records on FERC e-Library website or other publicly accessible data repositories ²	FERC exemption 2014 https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20140801-3021&optimized=false FERC exemption amendment 2014 correcting the project description https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20141002-3022&optimized=false FERC exemption amendment 2020 turbine replacement https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20200117-3043&optimized=false
Powerhouse	Date of initial operation (past or future for pre-operational applications)	2015
	Total installed capacity (MW)	0.30 MW

² For example, the FERC license or exemption, recent FERC Orders, Water Quality Certificates, Endangered Species Act documents, Special Use Permits from the U.S. Forest Service, 3rd-party agreements about water or land management, grants of right-of-way, U.S. Army Corps of Engineers permits, and other regulatory documents. If extensive, the list of hyperlinks can be provided separately in the application.

Item	Information Requested	Response (include references to further details)
	Average annual generation (MWh) and period of record used	913
	<u>Mode of operation</u> (run-of-river, peaking, pulsing, seasonal storage, diversion, etc.)	Run-of-canal (e.g., operates only if there is sufficient flow in the canal)
	Number, type, and size of turbine/generators, including maximum and minimum hydraulic capacity and maximum and minimum output of each turbine and generator unit	One Natel MS-D190 Restoration Hydro Turbine, with maximum hydraulic capacity of 9.4 cms and minimum hydraulic capacity of 4 cms. The nameplate generating capacity of the unit is 300 kW.
	Trashrack clear spacing (inches) for each trashrack	0.5 Inches thick and 6 inch spacing
	Approach water velocity (ft/s) at each intake if known	2003-2010 flows as used in generation estimate. November - March 0 cfs April 178 May 380 June 377 July 410 August 370 September 301 October 109
	Dates and types of major equipment upgrades	In 2020, replaced Natel SLH100 turbine with Natel RHT turbine of the same size
	Dates, purpose, and type of any recent operational changes	None
	Plans, authorization, and regulatory activities for any facility upgrades or license or exemption amendments	None planned
Dam or Diversion	Date of original dam or diversion construction and description and dates of subsequent dam or diversion structure modifications	Canal system built 1938-1949

<i>Item</i>	<i>Information Requested</i>	<i>Response (include references to further details)</i>
	Dam or diversion structure length, height including separately the height of any flashboards, inflatable dams, etc. and describe seasonal operation of flashboards and the like	N/A no dam at the project
	Spillway maximum hydraulic capacity	N/A – no spillway
	Length and type of each penstock and water conveyance structure between the impoundment and powerhouse	48-foot-long, 7-foot-diameter pipe
	Designated facility purposes (e.g., power, navigation, flood control, water supply, etc.)	Power, but canal is used for irrigation
<i>Conduit Facilities Only</i>	Date of conduit construction and primary purpose of conduit	2015, conduit is for irrigation, hydro plant is for power purposes
	Source water	North Unit Irrigation District Main Canal
	Receiving water and location of discharge	North Unit Irrigation District Main Canal
<i>Impoundment and Watershed</i>	Authorized maximum and minimum impoundment water surface elevations	N/A – no impoundment
	Normal operating elevations and normal fluctuation range	N/A
	Gross storage volume and surface area at full pool	N/A
	Usable storage volume and surface area	N/A
	Describe requirements related to impoundment inflow and outflow, elevation restrictions (e.g., fluctuation limits, seasonality) up/down ramping and refill rate restrictions.	N/A – run of river operation using available irrigation canal flows

Item	Information Requested	Response (include references to further details)
	Upstream dams by name, ownership (including if owned by an affiliate of the applicant's company) and river mile. If FERC licensed or exempt, please provide FERC Project number of these dams. Indicate which upstream dams have downstream fish passage.	North Canal Diversion Dam Deschutes River, approx. river mile 174 and located 37 miles upstream of the hydro plant. It has no hydro but has downstream fish passage. Owned by Central Oregon Irrigation District and Crook County Improvement District No. 1
	Downstream dams by name, ownership (including if owned by an affiliate of the applicant's company), river mile and FERC number if FERC licensed or exempt. Indicate which downstream dams have upstream fish passage	Haystack Reservoir, man-made reservoir built by USBR that receives, stores, and releases water from/to the Main Canal downstream of Monroe Drop
	Operating agreements with upstream or downstream facilities that affect water availability and facility operation	The operating agreement with NUID is to use 100% of available flow in the canal when flow is available. No additional flow is added for the purposes of increasing hydro production.
	Area of land (acres) and area of water (acres) inside FERC project boundary or under facility control. Indicate locations and acres of flowage rights versus fee-owned property.	2.1 acres within with Crooked Creek National Grasslands. Project facilities encompass 912 square feet.
Hydrologic Setting	Average annual flow at the dam, and period of record used	178 cfs observed in the years 2003-2010
	Average monthly flows and period of record used	2003-2010 monthly flows: November - March 0 cfs April 178 May 380 June 377 July 410 August 370 September 301 October 109

<i>Item</i>	<i>Information Requested</i>	<i>Response (include references to further details)</i>
	Location and name of closest stream gaging stations above and below the facility	N/A – not located on a natural river
	Watershed area at the dam (in square miles). Identify if this value is prorated from gage locations and provide the basis for proration calculation.	Approx. 4,520 sq miles at USGS gage # 14087380 (Crooked River) located about 2.5 miles south of Monroe Drop
	Other facility specific hydrologic information (e.g., average hydrograph)	N/A
<i>Designated Zones of Effect</i>	Numbers and names of each zone of effect (e.g., “Zone 1: Impoundment”)	Zone 1: upstream reach Zone 2: downstream reach
	River mile of upstream and downstream limits of each zone of effect (e.g., “Zone 1 Impoundment: RM 6.3 - 5.1”)	N/A – not on a natural river. Zone 1 extends about 87 feet upstream of the intake structure. Zone 2 extends about 350 feet downstream of the powerhouse. See Zone of Effect image

2. STANDARDS SELECTIONS AND ZONES OF EFFECT

Table 2. Standard selections

Zone:		1: Upstream Reach	2: Downstream Reach
River Mile at upper and lower extent of Zone:		~ 87 feet in length	~ 350 feet in length
Criterion			
A	Ecological Flows	1	1
B	Water Quality	1	1
C	Upstream Fish Passage	1	1
D	Downstream Fish Passage	1, PLUS	1
E	Shoreline and Watershed Protection	1	1
F	Threatened and Endangered Species	3	3
G	Cultural and Historic Resources	2	2
H	Recreational Resources	1	1

Figure 7. Zones of Effect



3. SUPPORTING INFORMATION

A. Ecological Flow Regimes

Table 3. Ecological Flows Standards

Criterion	Standard	Instructions
A	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none">• Confirm the location of the powerhouse relative to any dam/diversion structures and demonstrate that there are no bypassed reaches in the designated Zone of Effect.• For run-of-river facilities, provide details on operations and describe how flows, water levels, and operations are monitored to ensure such an operational mode is maintained. In a conduit facility, identify the source waters, location of discharge points, and receiving waters for the conduit system within which the hydropower facility is located. This standard cannot be used for conduits that discharge to a natural waterbody.• For impoundment zones, explain water management (e.g., fluctuations, ramping, refill rates, restrictions) and how those requirements support fish and wildlife habitat within the ZoE.

Both Zones of Effect qualify for Standard A-1. The project is a conduit project with source and receiving water within the man-made North Unit Main Canal. NUID holds various water rights issued by the State of Oregon that authorize diversion and conveyance of water from the Deschutes and Crooked rivers for irrigation purposes.

The project operates in passive run-of-canal mode with no storage and diverts available irrigation water from the canal. The project uses the majority of the available water which is then returned to the canal about 100 feet downstream from the project intake after passing through the turbine.

The project operates only during the irrigation season (April through October) and does not change the amount or timing of canal flows, which are discontinued when the canal is dewatered at the end of the irrigation season. However, due to the prolonged drought, the last two seasons have had irrigation flow shutdowns to extend the water season through October. As a result, mid-season shutdowns have been required and are expected to continue during drought years.

There are no FERC exemption requirements related to flows. During emergency powerhouse outages, flow that would normally pass through the powerhouse remains in the canal. The Obermeyer gate, operated by the project, automatically adjusts to maintain constant elevation upstream of the drop structure and to maintain flow downstream of it. Typically, the gate is

inflated at the beginning of the season to full capacity and remains so except for a few days when the irrigation district requires a flushing of the system for debris management.

B. Water Quality

Table 4. Water Quality Standards

Criterion	Standard	Instructions
B	1	<u>Not Applicable / De Minimis Effect:</u> <ul style="list-style-type: none">Explain the rationale for why the facility does not alter water quality characteristics below, around, and above the facility.

Both Zones of Effect qualify for Standard B-1. The project does not alter water quality since it operates in run-of-canal mode. The waterbody is not a natural river and thus not subject to state water quality standards. No state water quality certificate was required as part of the FERC exemption proceeding.

Water in the canal originates in the Deschutes and Crooked Rivers well upstream of the project, and is used only for irrigation, not drinking water or other consumptive uses. However, the 2018/2020 Oregon Integrated Report's online mapping tool³ indicates that the Crooked River upstream of the diversion (segment OR_SR_1707030510_02_101806) is impaired for fish and aquatic life due to temperature, bio-criteria, phosphorus, and total dissolved gas. The Deschutes River at the Main Canal diversion (segment OR_SR_1707030108_02_102627) is impaired for temperature and pH. None of these impairments are the result of project operations.

The canal itself does not support aquatic life due to normal operating and maintenance procedures. Dewatering the canal from November to May and the NUID's periodic application of aquatic pesticides authorized under a state NPDES permit limits the potential for aquatic life. Also, since the project is located 6 miles upstream of Haystack Reservoir and there are 55-60 similar drops of varying height along the canal system in that section, it is unlikely that the project would have any effect on dissolved oxygen levels. Given the short distance between the project intake and discharge (150 ft) and lack of storage, water temperature is also unlikely to be affected by project operations.

Of interest, the Deschutes River was designated as an Oregon Scenic Waterway in 1970. Portions of the river upstream and downstream of the Main Canal diversion dam were designated as a Federal Wild and Scenic River in 1988, along with the lower Crooked River.⁴

³ <https://hdcgxc2.deq.state.or.us/Html5Viewer211/?viewer=wqsa>

⁴ <https://www.rivers.gov/rivers/deschutes.php>

C. Upstream Fish Passage

Table 5. Upstream Fish Passage Standards

Criterion	Standard	Instructions
C	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none">• Explain why the facility does not impose a barrier to upstream fish passage in the designated ZoE. Typically, impoundment zones will qualify for this standard since once above a dam and in an impoundment, there is no additional facility barrier to further upstream movement.• Document available fish distribution data and the lack of migratory fish species in the ZoE.• If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

Both Zones of Effect qualify for Standard C-1. There are no migratory fish in the project reach. The canal delivers water to the surrounding farmlands via a series of canals and drop structures to irrigate the surrounding farm land, therefore there are no natural water bodies downstream. However, the US Fish and Wildlife Service (USFWS) IPaC online species report indicates that the threatened bull trout range may overlap with the general project vicinity within the Deschutes River Basin (see Section F below).

The North Canal Diversion Dam on the Deschutes River (upstream of the project) was a blockage to upstream fish movement until irrigation districts and Oregon Department of Fish and Wildlife (ODFW) jointly funded the design and construction of a fish ladder in 2017. Resident fish now have the ability to move upstream and downstream at the dam. To prevent downstream migrating fish entrainment, all intakes at the dam are screened.

Haystack Reservoir is located downstream of the project. It is a man-made reservoir built at the site of an intermittent stream.⁵ It receives, stores, and delivers water for irrigation users. Releases from Haystack Reservoir flow in a feeder canal back to the North Unit Main Canal downstream of Monroe Drop for use in the irrigation service area. The reservoir supports largemouth bass, crappie, rainbow trout, kokanee (a land-locked sockeye salmon), brown trout, and brown bullhead, none of which require passage to complete their life cycles. The trout are stocked annually by ODFW.

Standard article 2 of the FERC exemption requires compliance with any terms and conditions that the United States Fish and Wildlife Service and any state fish and wildlife agencies have determined are appropriate to prevent loss of, or damage to, fish and wildlife resources. This information is also identified in the US Forest Service special use permit. In addition, ODFW's section 30(c) conditions incorporated into the exemption reserves authority for the agency to

⁵ <https://www.usbr.gov/projects/index.php?id=183>

modify or add to these terms and conditions at any time for the protection of fish and wildlife and their habitats. The conditions also include this requirement:

If at any time, unanticipated circumstances or emergency situations arise in which fish or wildlife are being killed, harmed or endangered by any of the project facilities, the exemptee shall immediately take appropriate action to prevent further loss. The exemptee shall, within 24 hours, notify the nearest Oregon DFW office and comply with the measures required by Oregon DFW to prevent additional injury or mortality. The exemptee shall notify the Commission as soon as possible but no later than 10 days after each occurrence and inform the Commission as to the nature of the occurrence and measures taken.

To date there have been no such emergency situations and no instances where fish or wildlife were harmed at the project.

D. Downstream Fish Passage and Protection

Table 6. Downstream Fish Passage Standards

Criterion	Standard	Instructions
D	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> • Explain why the facility does not impose a barrier to downstream fish passage in the designated ZoE, considering both physical obstruction and increased mortality relative to natural downstream movement (e.g., entrainment into hydropower turbines). Typically, tailwater/downstream zones will qualify for this standard since below a dam and powerhouse there is no additional facility barrier to further downstream movement. Bypassed reach zones must demonstrate that flows in the reach are adequate to support safe, effective, and timely downstream migration. • For riverine fish populations that are known to move downstream, explain why the facility in the designated ZoE does not contribute adversely to the species populations or to their access to habitat necessary for successful completion of their life cycles; or • Document available fish distribution data and the lack of fish species requiring passage in the ZoE; or • If migratory fish species have been extirpated from the area, explain why the facility is not or was not the cause of the extirpation.

Criterion	Standard	Instructions
D	PLUS	<u>Bonus Activities:</u> <ul style="list-style-type: none"> • If advanced technology has been or will be deployed, explain how it will increase fish passage success relative to other options; or • If a basin-scale redevelopment strategy is being pursued, explain how it will increase the abundance and sustainability of migratory fish species in the river system; or • If adaptive management is being implemented describe the management objectives, the monitoring program to evaluate performance against those objectives, and the management actions that will be taken in response to monitoring results.

Both Zones of Effect qualify for Standard D-1. The canal is dewatered from November to March or April, so no year-round fish habitat exists. The intake at the Main Canal diversion dam on the Deschutes River (37 miles upstream from the project) is fitted with a trash rack and fish screening which does not meet current ODFW standards. The irrigation district and ODFW had entered into an agreement to replace the screening and have been in consultation on design for several years. There has not been a conclusion to this issue due to the rising costs and division of who will pay for the repairs.

An August 20, 2019 letter from ODFW⁶ indicated that juvenile and adult redband trout, brown trout, and mountain whitefish had been observed stranded in the canal when it was dewatered and expressed concern that given high approach velocities, these fish could become impinged or entrained on the screens.

The intake at the Crooked River Pumping Station has more modern screening and the National Marine Fisheries Service had indicated in 2003 that it met all aspects of their criteria for the protection of fry-size and larger salmonid fishes.⁷

However, even if fish passed the Main Canal diversion dam and reached the project, the Restoration Turbine has been shown to be extremely fish friendly in laboratory testing and recently in field testing at Monroe Drop. The Pacific Northwest National Laboratory (PNNL) found 100% survival of fish up to 15 inches long. A combination of hydraulic characterization and biological testing with rainbow trout. Sensor fish and balloon tag technologies were used to analyze the physical turbine stressors and recover trout to assess passage condition. PNNL's test revealed minimal injury or impact to fish passage even when the turbine was operated at full power.⁸ The turbine's hydraulic design is innovative, particularly with respect to the

⁶ https://elibrary.ferc.gov/elibrary/filelist?accession_number=20190828-5193&optimized=false

⁷ See pp 3-27, 3-28 in:

https://www.fws.gov/sites/default/files/documents/DBHCP%20Volume%201%20December%202020_0.pdf

⁸ <https://www.energy.gov/eere/water/articles/pnnl-testing-campaign-verifies-fish-passage-performance-natel-energy-s>

thickness of the blades' leading edges, which are engineered to reduce tip speed and minimize strike probability and harm to fish. Therefore, LIHI's PLUS standard for this advanced technology should apply.

E. Shoreland and Watershed Protection

Table 7. Shoreline and Watershed Protection Standards

Criterion	Standard	Instructions
E	1	<p><u>Not Applicable / De Minimis Effect:</u></p> <ul style="list-style-type: none"> • If there are no lands with significant ecological value associated with the designated ZoE, document and justify this (e.g., describe the land use and land cover within the FERC project or facility boundary, and absence of critical habitat for protected species). • Document that there have been no Shoreline Management Plans or similar protection requirements for the facility.

Both Zones of Effect qualify for Standard E-1.

There is very little land associated with the project, just 2.1 acres. There are no lands of ecological value and no critical habitats for threatened or endangered species. The FERC exemption includes no requirements related to the shoreline or watershed; however, the 2020 exemption amendment included requirements for development and implementation of an erosion and sediment control plan covering the planned modification work. The plan was submitted to FERC on January 23, 2020.

The area to the west of the canal is primarily agricultural land with cultivated grains, hay, and pastureland. To the east is the Crooked River National Grasslands. Vegetation in this area consists mainly of sagebrush scrub with native and introduced grasses, plants, and some Western juniper. Wildlife that could occur in the project vicinity include mule deer, antelope, furbearers, small mammals such as deer mice and ground squirrels, neotropical birds, and raptors.⁹

Within the project boundary, land was previously disturbed during construction of the canal, drop structure, and canal service road. Vegetation in this area is sparse and consists of grey rabbitbrush as well as native and introduced species.

⁹ https://www.fs.usda.gov/Internet/FSE_DOCUMENTS/stelprd3797050.pdf

F. Threatened and Endangered Species Protection

Table 8. Threatened and Endangered Species Standards

Criterion	Standard	Instructions
F	3	<p><u>Recovery Planning and Action:</u></p> <ul style="list-style-type: none">• If listed species are present, document that the facility is in compliance with relevant conditions in the species recovery plans, incidental take permits or statements, biological opinions, habitat conservation plans, or similar government documents.• Document that any incidental take permits and/or biological opinions currently in effect were designed as long-term solutions for protection of listed species in the facility area.

Both Zones of Effect qualify for Standard F-3 for bull trout (and Standard F-1 for other species).

According to the USFWS online mapping generated IPaC report (Appendix A) the federally threatened bull trout range encompasses the broad area in which the project is located. At the time of FERC exemption proceedings and after bull trout had been listed in 1998, USFWS indicated that there were no listed species present at the project site.¹⁰ As noted above, intake screening issues at the Main Canal diversion dam could potentially allow bull trout to enter the canal system but since it is dewatered for five months each year, there is no persistent habitat available in the project reach.

The North Unit Irrigation District is one of eight irrigation districts in the Deschutes Basin along with the City of Prineville that prepared the Deschutes Basin Habitat Conservation Plan (HCP)¹¹ to support issuance of incidental take permits by USFWS and NMFS, under the federal Endangered Species Act (ESA). The HCP includes an adaptive management approach to irrigation and city operations needed to protect habitat for the Oregon spotted frog and three species of fish including bull trout throughout the area encompassed by the Deschutes and Crooked rivers and their tributaries. This plan does not involve the project, nor would project operations adversely affect the species even if present in the project reach. As noted under Section D above, any fish that did approach and pass the project would not be harmed due to the fish-friendly turbine design.

The USFWS report also lists several migratory bird species protected under the federal Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act that could be present on a transient basis. None of those species are state listed. Since the project's power line is buried, there is no potential for bird-power line interactions or potential injury to bird species. In addition, no tree cutting occurs at the project that could impact roosting birds.

¹⁰ See Exhibit E dix A at https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20130816-5009&optimized=false

¹¹ https://www.fws.gov/sites/default/files/documents/DBHCP%20Volume%201%20December%202020_0.pdf

Oregon maintains a statewide list of threatened and endangered species.¹² All state-listed fish, amphibians and reptiles are also federally listed and are not present or potentially present based on the USFWS IPaC report. The only state-listed bird species not also federally listed is the California brown pelican (a coastal marine species) that would not be present at the project. The only mammals not also federally listed are the endangered Washington ground squirrel and the threatened wolverine. Neither species range extends to the project vicinity.^{13, 14}

The Oregon Department of Agriculture maintains a separate list of plants which indicates that no state-level threatened or endangered plants occur in Jefferson County where the project is located.¹⁵ Any newly identified protected species in the project vicinity would fall under the protective and mitigative measures defined in the USFW special use permit.

G. Cultural and Historic Resources Protection

Table 9. Cultural and Historic Resources Standards

Criterion	Standard	Instructions
G	2	<p><u>Approved Plan:</u></p> <ul style="list-style-type: none"> • Provide documentation of all approved state, federal, and recognized tribal plans for the protection, enhancement, and mitigation of impacts to cultural and historic resources affected by the facility. • Document that the facility is in compliance with all such plans.

Both Zones of Effect qualify for Standard G-2. During the FERC exemption consultation with the Oregon State Historic Preservation Office (SHPO), it was determined that the Monroe Drop structure and canal qualify as historic properties eligible for listing in the National Register of Historic Places and the SHPO determined that the hydro project would have an adverse effect on the historic properties. A Memorandum of Agreement (MOA)¹⁶ was executed in accordance with exemption article 15 between FERC and the SHPO with concurrence from Natel, NUID, and USBR. The MOA required photographic documentation of the Monroe Drop concrete chute structure which was completed and accepted by the SHPO on August 14, 2014.¹⁷

As part of the 2020 exemption amendment, the SHPO provided an email dated 08/13/2019¹⁸ confirming there would be no effect related to turbine replacement since the powerhouse is not 50 years old and therefore ineligible for listing on the National Register. Additionally the USFW special use permit has a provision requiring notification to them if resources are

¹² https://www.dfw.state.or.us/wildlife/diversity/species/threatened_endangered_candidate_list.asp

¹³ <https://ecos.fws.gov/ecp/species/3082>

¹⁴ <https://oregonwild.org/wildlife/wolverine>

¹⁵ <https://www.oregon.gov/oda/programs/PlantConservation/Pages/ListedPlants.aspx>

¹⁶ https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20140128-5018&optimized=false

¹⁷ https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20151215-5129&optimized=false

¹⁸ https://elibrary.ferc.gov/eLibrary/filelist?accession_number=20190828-5193&optimized=false

discovered and USFS would direct the project owner of the required protection and mitigation measures.

H. Recreational Resources

Table 10. Recreational Resources Standards

Criterion	Standard	Instructions
H	1	<u>Not Applicable / De Minimis Effect:</u> <ul style="list-style-type: none">• Document that the facility does not occupy lands or waters in the designated ZoE to which public access can be granted and that the facility does not otherwise impact recreational opportunities in the facility area.

Both Zones of Effect qualify for Standard H-1.

There are no recreational resources or uses in the project area. The irrigation district does not allow public access to the Main Canal due to safety concerns. Other recreational resources are available in the project vicinity, including at Haystack Reservoir which is popular for fishing, camping, boating and day use.¹⁹ Most of the federally-owned public land is included in the Deschutes River Recreation Area within the Crooked River National Grasslands. Fishing, hiking, and other activities are widely available throughout the general area.

¹⁹ <https://northunitid.com/haystack-reservoir-recreation/>

4. FACILITY AND STAKEHOLDER CONTACTS FORMS

Table 11. Applicant-related contacts

Facility Owner:	
Name and Title	Monroe Hydro LLC
Company	Natel Energy
Phone	510-342-5269
Email Address	MonroeHydro@natelenergy.com
Mailing Address	2401 Monarch St, Alameda, CA 94501
Facility Operator (if different from Owner):	
Name and Title	Click or tap here to enter text.
Company	Click or tap here to enter text.
Phone	Click or tap here to enter text.
Email Address	Click or tap here to enter text.
Mailing Address	Click or tap here to enter text.
Consulting Firm / Agent for LIHI Program (if different from above):	
Name and Title	Click or tap here to enter text.
Company	Click or tap here to enter text.
Phone	Click or tap here to enter text.
Email Address	Click or tap here to enter text.
Mailing Address	Click or tap here to enter text.
Compliance Contact (responsible for LIHI Program requirements):	
Name and Title	Click or tap here to enter text.
Company	Click or tap here to enter text.
Phone	Click or tap here to enter text.
Email Address	Click or tap here to enter text.
Mailing Address	Click or tap here to enter text.
Party responsible for accounts payable:	
Name and Title	Linda Womack, Accounts Payable
Company	Natel Energy
Phone	510-342-5269
Email Address	Accounting@natelenergy.com
Mailing Address	2401 Monarch St, Alameda, CA 94501

Table 12. Current relevant state, federal, and tribal resource agency contacts (excluding FERC).

<i>Agency Contact</i>		<i>Area of Responsibility (check applicable boxes)</i>
Agency Name	USFS	<input type="checkbox"/> Flows <input type="checkbox"/> Water Quality <input type="checkbox"/> Fish/Wildlife <input type="checkbox"/> Watershed <input type="checkbox"/> T&E Species <input type="checkbox"/> Cultural/Historic <input checked="" type="checkbox"/> Recreation
Name and Title	Heidi Scott	
Phone	541-416-6632	
Email address	Heidi.scott@usda.gov	
Mailing Address	3160 NE 3rd Street, Prineville, OR 97754	

<i>Agency Contact</i>		<i>Area of Responsibility (check applicable boxes)</i>
Agency Name	U.S. Bureau of Reclamation	<input checked="" type="checkbox"/> Flows <input checked="" type="checkbox"/> Water Quality <input type="checkbox"/> Fish/Wildlife <input type="checkbox"/> Watershed <input type="checkbox"/> T&E Species <input type="checkbox"/> Cultural/Historic <input type="checkbox"/> Recreation
Name and Title	Mark Pfeifer, Power O&M /Electrical Engineer	
Phone	Office: (208) 378-5042	
Email address	mpfeifer@usbr.gov	
Mailing Address	Bureau of Reclamation/Columbia-Pacific Northwest Region	

Agency Contact		Area of Responsibility (check applicable boxes)
Agency Name	ODFW	<input type="checkbox"/> Flows <input type="checkbox"/> Water Quality <input checked="" type="checkbox"/> Fish/Wildlife <input type="checkbox"/> Watershed <input type="checkbox"/> T&E Species <input type="checkbox"/> Cultural/Historic <input type="checkbox"/> Recreation
Name and Title	Anne Pakenham Stevenson, ODFW Water Program Manager	
Phone	Office: 503-947-6084	
Email address	anna.p.stevenson@state.or.us	
Mailing Address	Click or tap here to enter text.	

Agency Contact		Area of Responsibility (check applicable boxes)
Agency Name	North Unit Irrigation District	<input checked="" type="checkbox"/> Flows <input type="checkbox"/> Water Quality <input type="checkbox"/> Fish/Wildlife <input type="checkbox"/> Watershed <input type="checkbox"/> T&E Species <input type="checkbox"/> Cultural/Historic <input type="checkbox"/> Recreation
Name and Title	Josh Baily, General Manager	
Phone	Office: 541 475-3625	
Email address	jbaily@northunitid.com	
Mailing Address	2024 NW Beech St, Madras, OR 97741	

Table 13. Current engaged stakeholder and tribal contacts.

None.

5. ATTESTATION AND WAIVER FORM

All applications for LIHI Certification must include the following statement before they can be reviewed by LIHI:

ATTESTATION

As an Authorized Representative of Natel Energy, the Undersigned attests that the material presented in the application is true and complete.

The Undersigned acknowledges that the primary goal of the Low Impact Hydropower Institute's certification program is public benefit, and that the LIHI Governing Board and its agents are not responsible for financial or other private consequences of its certification decisions.

The Undersigned further acknowledges that if LIHI Certification of the applying facility is granted, the LIHI Certification Mark License Agreement must be executed prior to the final certification decision and prior to marketing the electricity product as LIHI Certified® (which includes selling RECs in a market that requires LIHI Certification).

The Undersigned further agrees to hold the Low Impact Hydropower Institute, the Governing Board, and its agents harmless for any decision rendered on this or other applications, from any consequences of disclosing or publishing any submitted certification application materials to the public, or on any other action pursuant to the Low Impact Hydropower Institute's certification program.

Authorized Representative:

Name: _____ Gia Schneider _____

Title: _____ CEO _____

Authorized Signature: _____  _____

Date: 09 / 14 / 2022

APPENDICES

USFWS IPaC Species Report

NUID agreement

USBR Agreement

USDA Special Use Permit

IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location


Jefferson County, Oregon



Local office

Oregon Fish And Wildlife Office

☎ (503) 231-6179

 (503) 231-6195

2600 Southeast 98th Avenue, Suite 100
Portland, OR 97266-1398

<https://www.fws.gov/oregonfwo/articles.cfm?id=149489416>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can **only** be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species¹ and their critical habitats are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service (USFWS) and the fisheries division of the National Oceanic and Atmospheric Administration (NOAA Fisheries²).

Species and critical habitats under the sole responsibility of NOAA Fisheries are **not** shown on this list. Please contact [NOAA Fisheries](#) for [species under their jurisdiction](#).

-
1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information. IPaC only shows species that are regulated by USFWS (see FAQ).
 2. [NOAA Fisheries](#), also known as the National Marine Fisheries Service (NMFS), is an

office of the National Oceanic and Atmospheric Administration within the Department of Commerce.

The following species are potentially affected by activities in this location:

Fishes

NAME	STATUS
Bull Trout <i>Salvelinus confluentus</i> There is final critical habitat for this species. The location of the critical habitat is not available. https://ecos.fws.gov/ecp/species/8212	Threatened

Insects

NAME	STATUS
Monarch Butterfly <i>Danaus plexippus</i> Wherever found No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/9743	Candidate

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act¹ and the Bald and Golden Eagle Protection Act².

Any person or organization who plans or conducts activities that may result in impacts to migratory birds, eagles, and their habitats should follow appropriate regulations and consider implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are birds of particular concern either because they occur on the [USFWS Birds of Conservation Concern](#) (BCC) list or warrant special attention in your project location. To learn more about the levels of concern for birds on your list and how this list is generated, see the FAQ [below](#). This is not a list of every bird you may find in this location, nor a guarantee that every bird on this list will be found in your project area. To see exact locations of where birders and the general public have sighted birds in and around your project area, visit the [E-bird data mapping tool](#) (Tip: enter your location, desired date range and a species on your list). For projects that occur off the Atlantic Coast, additional maps and models detailing the relative occurrence and abundance of bird species on your list are available. Links to additional information about Atlantic Coast birds, and other important information about your migratory bird list, including how to properly interpret and use your migratory bird report, can be found [below](#).

For guidance on when to schedule activities or implement avoidance and minimization measures to reduce impacts to migratory birds on your list, click on the PROBABILITY OF PRESENCE SUMMARY at the top of your list to see when these birds are most likely to be present and breeding in your project area.

NAME

BREEDING SEASON (IF A BREEDING SEASON IS INDICATED FOR A BIRD ON YOUR LIST, THE BIRD MAY BREED IN YOUR PROJECT AREA SOMETIME WITHIN THE TIMEFRAME SPECIFIED, WHICH IS A VERY LIBERAL ESTIMATE OF THE DATES INSIDE WHICH THE BIRD BREEDS ACROSS ITS ENTIRE RANGE. "BREEDS ELSEWHERE" INDICATES THAT THE BIRD DOES NOT LIKELY BREED IN YOUR PROJECT AREA.)

Bald Eagle *Haliaeetus leucocephalus*

Breeds Dec 1 to Aug 31

This is not a Bird of Conservation Concern (BCC) in this area, but warrants attention because of the Eagle Act or for potential susceptibilities in offshore areas from certain types of development or activities.

Cassin's Finch *Carpodacus cassinii*

Breeds May 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9462>

Evening Grosbeak *Coccothraustes vespertinus*

Breeds May 15 to Aug 10

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

Lewis's Woodpecker *Melanerpes lewis*

Breeds Apr 20 to Sep 30

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9408>

Pinyon Jay *Gymnorhinus cyanocephalus*

Breeds Feb 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/9420>

Rufous Hummingbird *selasphorus rufus*

Breeds Apr 15 to Jul 15

This is a Bird of Conservation Concern (BCC) throughout its range in the continental USA and Alaska.

<https://ecos.fws.gov/ecp/species/8002>

Sage Thrasher *Oreoscoptes montanus*

Breeds Apr 15 to Aug 10

This is a Bird of Conservation Concern (BCC) only in particular Bird Conservation Regions (BCRs) in the continental USA

<https://ecos.fws.gov/ecp/species/9433>

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds. Please make sure you read and understand the FAQ "Proper Interpretation and Use of Your Migratory Bird Report" before using or attempting to interpret this report.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in the 10km grid cell(s) your project overlaps during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote a very liberal estimate of the time-frame inside which the bird breeds across its entire range. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (||)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the 10km grid cell(s) your project area overlaps. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

To see a bar's survey effort range, simply hover your mouse cursor over the bar.

No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information. The exception to this is areas off the Atlantic coast, where bird

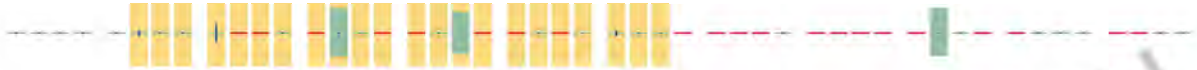
returns are based on all years of available data, since data in these areas is currently much more sparse.



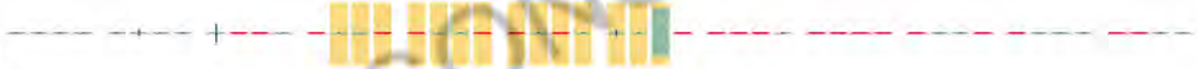
Lewis's
Woodpecker
BCC
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



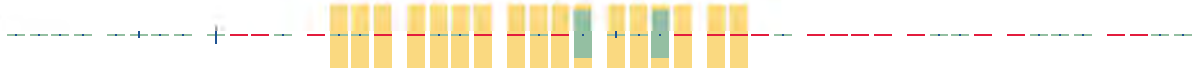
Pinyon Jay
BCC
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Rufous
Hummingbird
BCC
Rangewide
(CON) (This is
a Bird of
Conservation
Concern (BCC)
throughout its
range in the
continental
USA and
Alaska.)



Sage Thrasher
BCC - BCR
(This is a Bird
of
Conservation
Concern (BCC)
only in
particular Bird
Conservation
Regions
(BCRs) in the
continental
USA)



Tell me more about conservation measures I can implement to avoid or minimize impacts to

migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Implementation of these measures is particularly important when birds are most likely to occur in the project area. When birds may be breeding in the area, identifying the locations of any active nests and avoiding their destruction is a very helpful impact minimization measure. To see when birds are most likely to occur and be breeding in your project area, view the Probability of Presence Summary. [Additional measures](#) or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) and other species that may warrant special attention in your project location.

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#) and is queried and filtered to return a list of those birds reported as occurring in the 10km grid cell(s) which your project intersects, and that have been identified as warranting special attention because they are a BCC species in that area, an eagle ([Eagle Act](#) requirements may apply), or a species that has a particular vulnerability to offshore activities or development.

Again, the Migratory Bird Resource list includes only a subset of birds that may occur in your project area. It is not representative of all birds that may occur in your project area. To get a list of all birds potentially present in your project area, please visit the [AKN Phenology Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available. To learn more about how the probability of presence graphs are produced and how to interpret them, go the Probability of Presence Summary and then click on the "Tell me about these graphs" link.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a bird on your migratory bird species list has a breeding season associated with it, if that bird does occur in your project area, there may be nests present at some point within the timeframe specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

What are the levels of concern for migratory birds?

Migratory birds delivered through IPaC fall into the following distinct categories of concern:

1. "BCC Rangewide" birds are [Birds of Conservation Concern](#) (BCC) that are of concern throughout their range anywhere within the USA (including Hawaii, the Pacific Islands, Puerto Rico, and the Virgin Islands);
2. "BCC - BCR" birds are BCCs that are of concern only in particular Bird Conservation Regions (BCRs) in the continental USA; and
3. "Non-BCC - Vulnerable" birds are not BCC species in your project area, but appear on your list either because of the [Eagle Act](#) requirements (for eagles) or (for non-eagles) potential susceptibilities in offshore areas from certain types of development or activities (e.g. offshore energy development or longline fishing).

Although it is important to try to avoid and minimize impacts to all birds, efforts should be made, in particular, to avoid and minimize impacts to the birds on this list, especially eagles and BCC species of rangewide concern. For more information on conservation measures you can implement to help avoid and minimize migratory bird impacts and requirements for eagles, please see the FAQs for these topics.

Details about birds that are potentially affected by offshore projects

For additional details about the relative occurrence and abundance of both individual bird species and groups of bird species within your project area off the Atlantic Coast, please visit the [Northeast Ocean Data Portal](#). The Portal also offers data and information about other taxa besides birds that may be helpful to you in your project review. Alternately, you may download the bird model results files underlying the portal maps through the [NOAA NCCOS Integrative Statistical Modeling and Predictive Mapping of Marine Bird Distributions and Abundance on the Atlantic Outer Continental Shelf](#) project webpage.

Bird tracking data can also provide additional details about occurrence and habitat use throughout the year, including migration. Models relying on survey data may not include this information. For additional information on marine bird tracking data, see the [Diving Bird Study](#) and the [nanotag studies](#) or contact [Caleb Spiegel](#) or [Pam Loring](#).

What if I have eagles on my list?

If your project has the potential to disturb or kill eagles, you may need to [obtain a permit](#) to avoid violating the Eagle Act should such impacts occur.

Proper Interpretation and Use of Your Migratory Bird Report

The migratory bird list generated is not a list of all birds in your project area, only a subset of birds of priority concern. To learn more about how your list is generated, and see options for identifying what other birds may be in your project area, please see the FAQ "What does IPaC use to generate the migratory birds potentially occurring in my specified location". Please be aware this report provides the "probability of presence" of birds within the 10 km grid cell(s) that overlap your project; not your exact project footprint. On the graphs provided, please also look carefully at the survey effort (indicated by the black vertical bar) and for the existence of the "no data" indicator (a red horizontal bar). A high survey effort is the key component. If the survey effort is high, then the probability of presence score can be viewed as more dependable. In contrast, a low survey effort bar or no data bar means a lack of

data and, therefore, a lack of certainty about presence of the species. This list is not perfect; it is simply a starting point for identifying what birds of concern have the potential to be in your project area, when they might be there, and if they might be breeding (which means nests might be present). The list helps you know what to look for to confirm presence, and helps guide you in knowing when to implement conservation measures to avoid or minimize potential impacts from your project activities, should presence be confirmed. To learn more about conservation measures, visit the FAQ "Tell me about conservation measures I can implement to avoid or minimize impacts to migratory birds" at the bottom of your migratory bird trust resources page.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

WETLAND INFORMATION IS NOT AVAILABLE AT THIS TIME

This can happen when the National Wetlands Inventory (NWI) map service is unavailable, or for very large projects that intersect many wetland areas. Try again, or visit the [NWI](#)

[map](#) to view wetlands at this location.

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.

HYDROPOWER DEVELOPMENT AGREEMENT

This HYDROPOWER DEVELOPMENT AGREEMENT (this "Agreement"), is made and entered into this 20th day of March, 2012, by and between NATEL ENERGY, INC., a Delaware corporation ("Natel"), and NORTH UNIT IRRIGATION DISTRICT, an irrigation district with offices in Madras, Oregon ("District").

RECITALS

WHEREAS, Monroe Hydro, LLC, an Oregon limited liability company and wholly-owned subsidiary of Natel (the "Project Company") intends to apply for a preliminary permit (the "Permit") from the Federal Energy Regulatory Commission ("FERC") to conduct and prepare preliminary environmental reviews, feasibility studies, preliminary design and other work (collectively, the "Studies and Work") for a period of three (3) years from the date of issuance of such Permit relative to the construction and operation of a hydroelectric generating facility (the "Project" or the "Monroe Drop Project") to be located at approximately mile 37 on the District canal and as more particularly described in Exhibit A, attached hereto and incorporated herein (the "Project Site");

WHEREAS, the Project Company intends to apply for a license from FERC (the "License") during the term of the Permit or subsequent terms as allowed by this Agreement;

WHEREAS, Natel applied for and received a grant from the U.S. Department of Energy to assist in development of the Project;

WHEREAS, District uses and operates the Project Site for the delivery of water to be used for irrigation and other related purposes in its service area;

WHEREAS, District could file with FERC a Notice of Intent to File a Competing Application for a Preliminary Permit with respect to the Project Site (a "Competing Application"); and

WHEREAS, District is willing to forego its right to file a Competing Application in consideration of Natel's obligations as set forth below.

NOW, THEREFORE, in consideration of the above recitals, the covenants and conditions hereinafter set forth and other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Natel and District do hereby agree as follows:

ARTICLE I **OBLIGATIONS OF NATEL**

1.01. Reimbursement for Consulting Fees. To reimburse District for its retention of third-party engineers, attorneys or other consultants or professionals in order to review Natel's design drawings, submissions to FERC or other regulatory agencies, and other Project-related documents, Natel shall pay to District (1) \$5,000 on the Effective Date, and (2) \$5,000 on each

subsequent anniversary date of the Effective Date until the Commercial Operation Date (defined below); provided, however, that Natel shall not be required to make continued payments under (2), above, after it withdraws its application for the Permit or FERC revokes the Permit if already granted. The term “Commercial Operation Date” means the date of the first production and sale of electricity by Natel or its successors or assigns from the Project.

1.02. Permit and Exemption Documentation. Natel shall provide to District copies of all FERC correspondence relating to the Permit and the License, including any underlying documentation referred to therein, as and when sent to or received from FERC, as and when requested by District; provided, however, that (a) District shall not be entitled to receive any such correspondence or documents covered by the attorney-client privilege; (b) the receipt of any correspondence or documents shall be covered by the provisions of Section 3.03 below; and (c) upon termination of this Agreement for any reason, all such correspondence or documents shall be returned to Natel.

1.03. Payments to District. On an annual basis and from the Commercial Operation Date, Natel shall pay to District (in arrears) an amount equal to \$0.003 per kWh generated by the Project until the fifth (5th) anniversary of the Commercial Operation Date. On an annual basis and for the ten (10) years following the fifth (5th) anniversary of the Commercial Operation Date, Natel shall pay to District (in arrears) an amount equal to \$0.004 per kWh generated by the Project. On an annual basis and for the ten (10) years following the fifteenth (15th) anniversary of the Commercial Operation Date, Natel shall pay to District (in arrears) an amount equal to \$0.005 per kWh generated by the Project. District acknowledges and agrees that the issuance of the License is subject to the outcome of the Studies and Work and neither Natel, its agents or employees, nor any other person or entity, can offer any assurance to District that such License will ultimately be issued relative to the Project, or that the Project will ultimately be placed into operation and generate any electricity or revenues. Notwithstanding any other provision of this Section 1.03, Natel's annual payment to District shall be no less than ten percent (10%) of the gross revenues received by Natel from the sale of electricity and any environmental attributes generated by the Project, including without limitation Renewable Energy Certificates.

1.04. Ownership Option and Resulting Payments to District.

A. Ownership. Natel shall be the sole managing member of the Project Company until at least the Commercial Operation Date. Natel may bring in other qualified investors, as passive members, to the project as needed prior to the Commercial Operation Date. Between the Commercial Operation Date and the date that is ninety (90) days prior to the end date of the Pilot Operation Phase defined in Section 1.06, District shall have the right, but not the obligation, to become a non-voting joint owner of the Project Company by agreeing to contribute, either cash or in-kind, up to 50 percent of the total of the Project cost plus a fee equal to the amount necessary to deliver a 15 percent return on Natel's investment up to the point the District exercises its right to become a non-voting joint owner of the Project (excluding any environmental attributes, including without limitation Renewable Energy Certificates, grants, or other incentives). Upon District's contribution of the amount defined above, District shall own a percentage of the Project Company equal to the percentage of the total Project cost to be contributed by District (the “District Ownership Percentage”); provided, however, that such

investment shall be structured in a manner that does not affect the availability or value of state or federal tax benefits available to the Project Company or its members, and shall further be structured in a manner consistent with applicable law.

B. Payments to District. On an annual basis and from the Commercial Operation Date, in addition to payments pursuant to Section 1.03 above, the District shall be entitled to a distribution from the Project Company in accordance with the District Ownership Percentage. District acknowledges and agrees that the issuance of the License is subject to the outcome of the “Studies and Work” and neither Natel, its agents or employees, nor any other person or entity, can offer any assurance to District that such License will ultimately be issued relative to the Project, or that the Project will ultimately be placed into operation and generate any electricity or revenues.

C. Ownership Option Not Exercised. If District does not invest in the Project Company, Natel shall pay the District pursuant to Section 1.03 above without any additional distribution or payment provided for in Section 1.04.B.

1.05. District Buy-out Option. District shall have the right, but not the obligation, to purchase the Project Company from Natel (the “Buy-Out Option”) at any point after the Commercial Operation Date. The purchase price under the Buy-Out Option shall be the total Project cost paid by Natel, plus an additional amount that brings the return on investment to Natel, calculated at the time of exercise of the Buy-Out Option, equal to 15 percent. This Agreement will terminate upon District’s exercise of the Buy-Out Option.

1.06. Pilot Operation Phase. The term “Pilot Operation Phase” means a period of between twelve (12) and twenty-four (24) months after the Commercial Operation Date during which Natel will conduct testing of the Project. Natel shall not interfere with District’s operation of its irrigation system during the Pilot Operation Phase. The end date of the Pilot Operation Phase shall be mutually agreed upon by District and Natel after the Project has operated for an entire irrigation season.

1.07. Maintenance of Books and Records. Natel shall maintain complete and accurate books and records for the Project Company to enable all payments due to be verified. Natel shall keep a copy of all such books and records for a minimum of three (3) years after their creation and shall provide to District, upon District’s request, copies of such books and records for purposes of verifying Natel’s compliance with its obligations related to the Project under this Agreement.

1.08. Water Supply; Project Impacts. The District agrees, to the best of its ability, to assist Natel and the Project Company in obtaining the necessary permits consistent with Oregon Revised Statutes (“ORS”) 543.765. Natel covenants and agrees that the Project, consistent with ORS 543.765, shall use existing irrigation diversion flows at the Project Site, such that (a) the use of water by the Project will be limited to periods when the existing irrigation water rights are put to beneficial use without waste, (b) the amount used by the Project is not greater than the quantity of water diverted to satisfy the irrigation use under the existing water rights, and (c) the use of water for the Project will be limited by rate, duty, season and any other limitations of the existing irrigation water rights. Natel further agrees that the Project will not compromise the

Project Site's infrastructure, impair the delivery of water by District to its service area, reduce or affect the quantity of water available to District (with quantity defined to include the rate of water available to the District, the volume of water available to the District, and the period of time in which water is available to the District), degrade or affect the quality of water available to the District, or interfere with District's operation and maintenance activities. District shall have sole control over the dates in which irrigation deliveries begin and end. District shall continue its normal, customary, and emergency operations and maintenance of storage and diversion structures and facilities (including the North Canal Diversion Dam, the Crooked River pumps, Haystack Reservoir, or other structures or facilities) and delivery systems as District determines necessary. Natel agrees that these District operations and maintenance functions may temporarily, for undetermined periods of time, reduce or terminate flows at the Project due to reasonable operation and maintenance. To the extent that access to and use of the Project Site requires agreement with the U.S. Bureau of Reclamation or some other entity or entities other than District, Natel agrees that District is not responsible in any way for securing such access to or right to use the Project Site, and Natel further agrees that it will not pursue access to or the right to use the Project Site in a manner that will interfere with the District's existing agreements with the U.S. Bureau of Reclamation or any other entity with which District has an existing agreement.

Natel shall request that FERC include these covenants as binding articles in any License for the Project. If the License conditions from other federal, state, tribal or local entities, or any other act or event causes or would cause Natel to violate its obligations under this Section 1.08, Natel agrees that, if such act or event occurs prior to commencing Project construction, Natel shall not pursue construction or operation of the Project.

1.09. Fish Passage and Fish Screening Expenses.

A. Fish Passage Expenses. In the event that the Project requires the District, either before or after issuance of the License for the Project, to participate in the design, construction, operation, or maintenance of fish passage at the North Canal Diversion Dam ("NCDD"), or requires the District to provide funds to a federal or state agency or third party for such purposes, then upon FERC's issuance of the License for the Project, Natel shall share in the cost of such actions, including actions taken before the License issuance, at a rate of fifty percent (50%) of District's expense, with Natel's share in the cost of such actions not to exceed the amount of \$10,000. Natel shall reimburse District within thirty (30) days of receiving notice from District of the cost of such activity, or if such notice arrives prior to the License issuance, within thirty (30) days after License issuance. Nothing in this Agreement requires District to undertake or fund the design, construction, operation, or maintenance of fish passage at the NCDD. Further, nothing in this Agreement precludes District from undertaking or funding the design, construction, operation, or maintenance of fish passage at the NCDD should District choose such undertaking or funding, whether in furtherance of a hydroelectric development project or for any other purpose, in which event Natel shall have no obligation to fund such efforts if they are unrelated to the Monroe Drop Project. The District's current agreement with the Oregon Department of Fish and Wildlife regarding fish passage at the NCDD for which Natel would pay fifty percent (50%) of District's expense (with Natel's share not to exceed \$10,000) is attached hereto as Exhibit B.

B. Fish Screening Expenses. In the event that the Project requires the District, either before or after issuance of the License for the Project, to participate in the design, construction, operation, or maintenance of upgraded fish screens at the District diversion at the NCDD, or requires the District to provide funds to a federal or state agency or third party for such purposes, then upon FERC's issuance of the License for the Project, Natel shall share in the cost of such actions, including actions taken before License issuance, at a rate of fifty percent (50%) of District's expense, with Natel's share in the cost of such actions not to exceed the amount of \$10,000. Natel shall reimburse District within thirty (30) days of receiving notice from District of the cost of such activity, or if such notice arrives prior to License issuance, within thirty (30) days after License issuance. Nothing in this Agreement requires District to undertake or fund the design, construction, operation, or maintenance of upgraded fish screens at the District diversion at the NCDD. Further, nothing in this Agreement precludes District from undertaking or funding the design, construction, operation, or maintenance of upgraded fish screens at the District diversion at the NCDD should District choose such undertaking or funding, whether in furtherance of a hydroelectric development project or for any other purpose, in which event Natel shall have no obligation to fund such efforts, if they are unrelated to the Monroe Drop Project.

1.10. Abandonment of Project. Natel shall have no obligation to pursue the License or to construct the Project, and may abandon the Project at any time in its sole and absolute discretion; provided, however, that in the event Natel abandons the Project by failing to apply for the License within two (2) years of the date this Agreement is signed, or ceasing to pursue the Project prior to that time, Natel shall provide to District copies of all feasibility studies, design drawings and other materials related to the development of the Project within three (3) months of such abandonment.

1.11. Reservation of Rights. Notwithstanding any other provision of this Agreement, Natel and its successors and assigns shall have the right to perform any and all acts required by an order of FERC or its successor affecting the Project without the prior approval of any party to this Agreement or any other person. Nothing in this Section 1.11 limits District from pursuing any remedies it may have for a violation of Section 1.08 of this Agreement by Natel for any reason.

1.12. Project Design; Review by District. Natel shall design and construct the Project to comply with Section 1.08 of this Agreement and to keep the Project canal systems and District irrigation system operations separate. Natel shall provide District with Project design plans as soon as made available from the Project designer and engineers. Natel shall use commercially reasonable efforts to address the District's concerns.

1.13. Insurance. Natel shall maintain insurance during construction and operation of the Project at the levels acceptable to the District and sufficient to reimburse the District for damages as a result of any violation of this Agreement.

ARTICLE II

OBLIGATIONS OF DISTRICT

2.01. Non-Pursuit of Competing Application. District covenants and agrees that it shall not pursue, alone or in cooperation with any other party, a Competing Application or any other competing application with respect to the Project, so long as Natel does not abandon its effort as

described in Section 1.10 and meets the milestones set forth below; provided, however, that this Section 2.01 will cease to apply if Natel fails to submit to FERC an application for License prior to the expiration of the second of two concurrent Permit terms. The milestones agreed upon by District and Natel are as follows:

Task	Estimated Completion Date
Complete Preliminary Design	January 31, 2012
Complete Detailed Design	March 15, 2012
Complete Interconnection Application	February 15, 2012
Negotiate Power Sales Agreement	March 31, 2012
File for Oregon Water Right	April 1, 2012
File FERC Pre-Permit Application	March 15, 2012
Obtain all necessary permits	November 1, 2012
Obtain interconnection agreement	March 1, 2013
Construction of powerhouse & civil works	January 31, 2013
Installation of SLH100 system	March 31, 2013
Complete Pilot Period Operation	April 1, 2013
Commence Commercial Operation	April 1, 2014

2.02. Grant Application. District agrees that it will support an application for an Energy Trust of Oregon Project Development Grant for the Project.

ARTICLE III **REPRESENTATIONS AND WARRANTIES**

3.01. Natel Representations, Warranties and Covenants. Natel hereby represents and warrants to, and covenants with, District as follows:

(a) As of the date hereof, Natel is a corporation duly organized and validly existing under the laws of the State of Delaware and has the power and authority to enter into, and to perform its obligations under, this Agreement, and further is authorized to do business in the State of Oregon;

(b) As of the date hereof, there are no existing or threatened actions, suits or claims pending, the adverse determination of which would reasonably be expected to materially affect the right of Natel to enter into and perform its obligations under this Agreement;

(c) Natel has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement;

(d) This Agreement has been duly executed and delivered on behalf of Natel and constitutes a legal, valid, binding obligation of Natel, enforceable against Natel in accordance with its terms; and

(e) Natel's execution and delivery of this Agreement and the performance of its obligations under this Agreement do not conflict with or violate any requirement of applicable

laws or regulations and do not conflict with, or constitute a default under, any of Natel's organizational documents or any contractual or other obligation of Natel.

3.02. District's Representations and Warranties. District hereby represents and warrants to Natel as follows:

(a) As of the date hereof, District is an irrigation district, duly organized and validly existing under the laws of the State of Oregon and has the power and authority to enter into, and to perform its obligations under, this Agreement;

(b) As of the date hereof, there are no existing or threatened actions, suits or claims pending, the adverse determination of which would reasonably be expected to materially affect the right of District to enter into and perform its obligations under this Agreement;

(c) District has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement;

(d) District has not entered into any written or oral agreement, undertaking or contract, that is currently in effect, that would preclude Natel from having the rights under this Agreement, from obtaining the hydroelectric water rights contemplated in this Agreement, or from the right to file for a License;

(e) This Agreement has been duly executed and delivered on behalf of District, and constitutes a legal, valid, binding obligation of District, enforceable against District in accordance with its terms; and

(f) District's execution and delivery of this Agreement and the performance of its obligations under this Agreement do not conflict with or violate any requirement of applicable laws or regulations and do not conflict with, or constitute a default under, any of District's organizational documents or any contractual or other obligation of District.

3.03. Confidentiality.

(a) Definition of Confidential Information. As used in this Agreement, the term "Confidential Information" shall mean all technical, financial, commercial and other information with respect to Natel, the Project, or District, as applicable, irrespective of the form of communication, other than information that was generally known or otherwise generally available to the public or the industry prior to disclosure to the other party, or information that becomes generally known to the public or the industry after such disclosure through no wrongful act or omission of the receiving party. Failure to mark or otherwise identify any information as confidential or proprietary shall not adversely affect its status as Confidential Information.

(b) Obligations of Confidentiality and Non-Use. Subject to Oregon's Public Records Law, neither Natel nor District shall disclose any of the other party's Confidential Information. The foregoing shall not prohibit disclosures made to such party's employees or agents who have a "need to know" the other party's Confidential Information to the extent necessary to perform such party's duties and obligations under this Agreement, made to enforce such party's rights under this Agreement, or compelled to be made by any requirement of law or

pursuant to any legal or investigative proceeding before any court, or governmental or regulatory authority, agency or commission so long as the party so compelled to make disclosure of Confidential Information pertaining to the other party provides prior written notice to such other party and uses its commercially reasonable efforts to cooperate with such other party to obtain a protective order or other similar determination with respect to such Confidential Information. Neither Natel nor District shall use any of the other party's Confidential Information for its own direct or indirect benefit, or the direct or indirect benefit of any third party, except that each of Natel and District may use the other party's Confidential Information to the extent necessary to perform its duties and obligations, or to enforce such party's rights, under this Agreement. Each of Natel and District shall take reasonable steps, whether by instruction, agreement, or otherwise, to cause its employees, contractors, and others under its control who may have access to Confidential Information of the other party, to comply with its obligations under this Section 3.03.

(c) Exceptions. Section 3.03(b) shall not apply to information that (a) is available from governmental agencies under the United States Freedom of Information Act or Oregon Public Records Law, (b) a party can prove on the basis of the written record, was known by the receiving party at time of disclosure, (c) the receiving party can prove on the basis of the written record to have been independently developed for the receiving party after the time of disclosure by employees or third parties who have not had access to corresponding Confidential Information, (d) was received by the receiving party, without restriction, from a third party not under any obligation to the other party not to disclose it and otherwise not in violation of the other party's rights, (e) is received and retained by District pursuant to Section 1.10 of this Agreement, or (f) is provided to the Bureau of Reclamation ("Reclamation") as part of District's obligation to confer and consult with Reclamation regarding District irrigation agreements.

ARTICLE IV

INDEMNIFICATION

4.01. Indemnification by District. District shall indemnify and hold Natel and its shareholders, partners, members, directors, officers and employees harmless from and against all claims, suits, losses, obligations, damages, deficiencies, costs, penalties, liabilities (including, without limitation, strict liabilities), assessments, judgments, amounts paid in settlement, fines and expenses (including, without limitation, court costs and reasonable fees of attorneys and other professionals) (individually and collectively, "Losses") arising out of the failure by District to perform any of its covenants, agreements or undertakings contained in this Agreement, and the acts or omissions of District or any of District's subcontractors or any other third parties for whose actions District is legally liable.

4.02. Indemnification by Natel. Natel shall indemnify and hold District and its shareholders, partners, members, directors, officers, and employees harmless from and against all Losses arising out of (a) the failure by Natel to perform any of its covenants, agreements or undertakings contained in this Agreement, (b) the acts or omissions of Natel or any of Natel's subcontractors for whose actions Natel is legally liable, and (c) the acts or omissions of any other person with respect to Natel's pursuit of the Project, this Agreement, or the Project itself, other than those acts and omissions caused by the negligence or willful misconduct of District.

ARTICLE V
TERM, TERMINATION, DEFAULTS, AND REMEDIES

5.01. If the Project qualifies for an in-lieu grant from the U.S. Treasury Department under section 1603(a) of the American Recovery and Reinvestment Act of 2009, this Agreement shall continue for twenty (20) years from the Commercial Operation Date, unless otherwise terminated pursuant to the specific terms of this Agreement. If the Project does not qualify for such grant, this Agreement shall continue for twenty-five (25) years from the Commercial Operation Date, unless otherwise terminated pursuant to the specific terms of this Agreement.

5.02 Upon termination of this Agreement, which shall occur no later than the date set forth in Section 5.01, the District shall own all improvements made by Natel pursuant to this Agreement. Natel agrees that, upon termination, Natel shall direct the Project Company to assign to District, or any other entity of District's choosing, all assets associated with the design and construction of the Project (including, without limitation, all feasibility studies, design drawings, and other materials related to the Project's development) and all permits and permit applications (including, without limitation, the License). In the event of the assignment of all Project assets, Natel agrees not to interfere with the Project or any other project of District.

5.03 Defaults and Remedies.

A. Defaults. The occurrence of any of the following shall constitute a default by Natel if not cured within twenty (20) days after written notice has been given by District to Natel specifying the failure: (i) Failure to make when due any payment required under Section 1.01, any payment required under Section 1.03, any distribution required under Section 1.04, or any other payment required to be made by Natel under this Agreement; or (ii) abandonment of the Project Site (except as provided for herein); or (iii) any violation of the provisions of Section 1.08; or (iv) failure to perform, observe or honor any other provision of this Agreement; provided, however, that if the failure to perform, observe or honor any other provision under clause (iv) cannot reasonably be cured within said twenty-day (20-day) period, Natel will not be in default of this Agreement if Natel commences to cure the failure within the twenty-day (20-day) period and diligently and in good faith continues to cure the failure as soon as reasonably possible.

B. Termination of Agreement Due to Default and Remedies. In the event of any default by Natel, District will have the right, in addition to any and all other rights and remedies available to District at law or in equity, to immediately terminate this Agreement and all rights of Natel hereunder by giving written notice to Natel of such election by District. If District elects to terminate this Agreement, District may recover the following from Natel: (i) The amount at the time of the award of the unpaid payments that had been earned at the time of termination of this Agreement; and (ii) any other amount, including attorneys' fees and costs incurred by District in investigation, at trial and on appeal, necessary to compensate for all detriment proximately caused by Natel's default. "The amount at the time of the award," as used in subparagraph (i) above, is to be computed by allowing interest at the lesser of ten percent (10%) per annum or the maximum rate District is permitted by law to charge.

C. Right of Possession. In the event of any default set forth in Section 5.03.A by Natel, District will also have the right, with or without terminating this Agreement, to take possession of the Project.

ARTICLE VI

MISCELLANEOUS

6.01. Force Majeure. Except for the obligation to make payments when due hereunder, all other obligations under this Agreement shall be suspended for so long as one or both parties hereto are prevented from complying with the provisions hereof by acts of God, the elements, riots, war, acts of Federal, state or local governments, agencies or courts, strikes, lock-outs, damage to or destruction or unavoidable shut-down of necessary facilities, or other matters beyond their reasonable control (specifically excluding, however, matters of mere financial exigency) ("Force Majeure Events"); provided, however, that any party so prevented from complying with its obligations hereunder shall promptly notify the other party in writing of the existence of a Force Majeure Event and shall exercise all due diligence to resume normal operations and performance of obligations at the earliest practicable date.

6.02. Non-Fiduciary Relationship. The parties hereto expressly disclaim and disavow any partnership, joint venture or fiduciary status or relationship between them and expressly affirm that they have entered into this Agreement as independent contractors and that the same is in all respects an "arms-length" transaction.

6.03. Notices. Any notice, election, payment, report or other correspondence required or permitted hereunder shall be deemed to have been properly given or delivered when made in writing and delivered personally to an officer of the party to whom directed, or when sent by United States mail with all necessary postage or charges fully prepaid, return receipt requested, and addressed to the party to whom directed at its below specified address. Any party may at any time change its address for purposes of this Agreement by giving written notice of such change of address to all other parties.

If to Natel:

NATEL ENERGY, INC.
2175 Monarch Street
Alameda, CA 94501
Attn: Gia Schneider

If to District:

NORTH UNIT IRRIGATION DISTRICT
2024 NW Beech Street
Madras, Oregon 97741
Attn: District Manager

With a copy to:

Attn: David E. Filippi
Stoel Rives LLP
900 SW Fifth Avenue, Ste. 2600
Portland, Oregon 97204

6.04. Attorneys' Fees. In the event suit or action is instituted to enforce or interpret any of the terms of this Agreement (including any attachments), or to enforce any right arising out of or in any way connected with this Agreement, the prevailing party will be entitled to recover from the other party such sums as the court may adjudge reasonable as attorneys' fees and costs whether incurred by the prevailing party during investigation, at trial or on appeal of such suit or action, in addition to all other sums provided by law, including reasonable and necessary expert witness fees.

6.05. Further Instruments. The parties hereto agree that they will execute any and all other documents or legal instruments that may be necessary or required to carry out and effectuate all of the provisions hereof.

6.06. Waiver. Any failure of either party to exercise any power given to such party under this Agreement or to insist upon strict compliance with any obligation specified in this Agreement, and any customs, practices or course of dealings between the parties at variance with the terms of this Agreement, do not constitute a waiver of either party's right to demand exact compliance with the terms of this Agreement. The parties hereto agree that any waiver by a party in a particular instance, whether in writing or by course of conduct or otherwise, is not a waiver by such party in any other instance.

6.07. Paragraph Headings. The paragraph headings of this Agreement are inserted only for convenience and in no way define, limit or describe the scope or intent of this Agreement nor affect its terms and provisions.

6.08. Preparation of Agreement. The parties hereto acknowledge that they have both participated in the preparation of this Agreement and, in the event that any question arises regarding its interpretation, no presumption shall be drawn in favor of or against any party hereto with respect to the drafting hereof.

6.09. Governing Law. This Agreement, and all matters relating hereto, including any matter or dispute arising out of this Agreement, shall be interpreted, governed, and enforced according to the laws of the State of Oregon, and the parties hereto consent to the jurisdiction of any appropriate court in the State of Oregon to resolve such disputes.

6.10. Amendments. This Agreement may be amended at any time upon unanimous agreement of the parties hereto, which amendment(s) must be reduced to writing and signed by all parties in order to become effective.

6.11. Severability. In the event that any provision of this Agreement, or any operation contemplated hereunder, is found by a court of competent jurisdiction to be inconsistent with or contrary to any law, ordinance, or regulation, the latter shall be deemed to control and the Agreement shall be regarded as modified accordingly and, in any event, the remainder of this Agreement shall continue in full force and effect.

6.12. Enforceability. This Agreement is intended to be performed in accordance with, and only to the extent permitted by, all applicable laws and regulations. If any provision of this Agreement or the application thereof to any person or circumstance, for any reason and to any

extent, shall be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, but rather shall be enforced to the greatest extent permitted by law.

6.13. Entire Agreement. This Agreement constitutes and represents the entire agreement of the parties hereto with respect to the subject matter hereof, and all other prior agreements, covenants, promises and conditions, verbal or written, between these parties are incorporated herein. No party hereto has relied upon any other promise, representation or warranty, other than those contained herein, in executing this Agreement.

6.14. Assignment. This Agreement shall be binding upon and inure to the benefit of the parties thereto, their heirs, personal representatives, successors and assigns. Natel shall not assign any interest in this Agreement, in whole or in part, to any person without the prior written consent of District, which may not be unreasonably withheld, conditioned or delayed. Any assignment by Natel made without District's prior written consent is a material breach of this Agreement and will be null and void and of no force or effect; provided, however, that Natel shall have the right to assign this Agreement to an affiliate or subsidiary, or make a collateral assignment of this Agreement for financing purposes, without the prior written consent of the District.

6.15. Incorporation of Recitals, Exhibits and Schedules. The above recitals are incorporated herein by this reference and expressly made a part of this Agreement.

6.16. Other Agreements. Except for its obligations under Section 2.01, nothing in this Agreement prevents District from entering into similar agreements with other entities that may propose hydroelectric projects at the Project Site (other than Competing Applications) (on account that some entity other than Natel could be awarded the License or other Permit leading to the development of a project at the Project Site) or elsewhere.

6.17. Signing in Counterparts. This Agreement may be executed in counterparts, and each executed counterpart shall have the same force and effect as an original instrument as if both signatories had signed the same instrument.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives on the date first above written, with this Agreement effective beginning as of the date that Natel submits its application for Permit to FERC and only if Natel is the first in time to apply for the Permit from FERC for the Project at the Project Site (the "Effective Date").

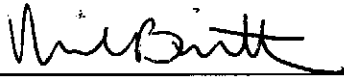
NATEL:

NATEL ENERGY, INC., a Delaware corporation

By: _____
Name: Gia Schneider
Its: CEO

DISTRICT:

NORTH UNIT IRRIGATION DISTRICT

By: 
Mike Britton
Secretary-Manager

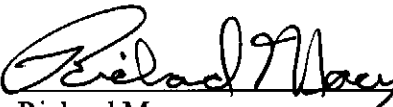
By: 
Richard Macy
Chairman, Board of Directors

EXHIBIT A: MAP SHOWING PROJECT LOCATION

The project is located at latitude / longitude: +44° 27' 43.16", -121° 14' 48.14"

<http://maps.google.com/maps?q=44.461989,+/-121.246705&num=1&vpsrc=0&ie=UTF8&t=m&z=17&iwloc=A>



EXHIBIT B: FISH PASSAGE PLAN AGREEMENT

FISH PASSAGE PLAN AGREEMENT

This FISH PASSAGE PLAN AGREEMENT (this "Agreement"), is made and entered into this 1st day of February, 2010, by and between the CENTRAL OREGON IRRIGATION DISTRICT, an irrigation district with offices in Redmond, Oregon ("COID"), SWALLEY IRRIGATION DISTRICT, an irrigation district with offices in Bend, Oregon ("SID"), and NORTH UNIT IRRIGATION DISTRICT, an irrigation district with offices in Madras, Oregon ("NUID") (each referred to as a "District" and collectively as the "Districts"), each organized pursuant to Oregon Revised Statutes ("ORS") chapter 545, and the OREGON DEPARTMENT OF FISH AND WILDLIFE, a subdivision of the State of Oregon ("ODFW").

RECITALS

WHEREAS, the Districts use and operate the North Canal Diversion Dam ("NCDD") for the diversion of water into their respective water delivery systems for irrigation of lands within their respective service areas and other related purposes; and COID and SID have applied to and received authorization from the Oregon Water Resources Department ("OWRD") to use water diverted at the NCDD for hydroelectric purposes within their respective water delivery systems pursuant to ORS 543.765 (OWRD Certificate Nos. 86026 and 86003); and NUID will apply for such authorization in the event it pursues in-conduit hydroelectric projects to be located within NUID's current water delivery system; and

WHEREAS, the Parties agree that fish passage at the NCDD would benefit native migratory fish populations; and

WHEREAS, ODFW is charged with authority to approve plans and specifications for fish passage and screening pursuant to ORS 543.765(5)(a) (which requires that water right certificates issued under ORS 543.765 include a condition for fish screens, by-pass devices and fish passage as required by ODFW), and pursuant to ORS 509.585 for artificial obstructions more generally; and

WHEREAS, the Parties agree that the full execution of this Agreement satisfies any legal requirements for fish passage at the NCDD, pursuant to ORS 543.765 and ORS 508.585, and further agree that this Agreement does not constitute an enforcement order, a mitigation requirement, or a legal judgment, but rather is an agreement being voluntarily entered into by the Parties;

NOW, THEREFORE, the Districts and ODFW hereby agree as follows:

ARTICLES

I. Fish Passage

- A. The Districts agree to secure \$400,000 toward the construction of a fish passage facility at the NCDD, and ODFW agrees to secure \$600,000 toward the construction of a fish passage facility at the NCDD.

- a. The Districts shall deposit at least 20% of the funds they are contributing in an interest bearing account in the Districts' name per year, with the first deposit (of at least \$80,000) due no later than April 1, 2011, and the final deposit (to bring the total deposit to \$400,000) due no later than April 1, 2015.
- b. Any funds over which the Districts have direct control and which are in a form that can be deposited, such as funds derived from District assessments or charges to District patrons or grant monies which are issued directly to the Districts, shall be placed in this dedicated, interest-bearing account. Any funds over which the Districts do not have direct control or which are not in a form that can be deposited, such as grant monies that are not made available in advance, do not need to be placed in the account, but shall only be credited toward the Districts' funding commitment upon approval by ODFW. Similarly, to the extent allowed by applicable law, any funds over which ODFW has direct control and which are in a form that can be deposited shall be placed in the same dedicated, interest-bearing account. The Parties agree to provide regular reports to each other with respect to the disposition of these funds, and an accounting upon request.
- c. For District funds, funds may be derived from District assessments or charges to District patrons; local, state, or federal grants; loan proceeds; or revenues or proceeds from any other sources. The Districts will strive to secure funds that may be used as a match for further state or federal funds.
- d. The account to which funds are deposited will be mutually agreed upon by the Districts and ODFW, with any interest earned to be added to the account balance and made available for fish passage-related costs. Upon completion of the fish passage facility, all unspent account balances shall be returned to the Parties in amounts proportional to their contributions.
- e. Prior to the completion of a 100 percent design for the fish passage facility, the Districts and ODFW will collaborate on design work, with such design work not subject to reimbursement from the contributed funds. (To date, such collaboration has included the work of Mike Lambert (ODFW) and Bob Beal (COID).) It is anticipated that the Parties will reach a point at which it will be necessary to engage the services of a professional engineering firm to complete a 100 percent design for the fish passage facility. Such work may be paid from the contributed funds, and with the concurrence of ODFW, the Districts may contract for such services as soon as sufficient funds are deposited in the Districts' account to pay for such services or are otherwise made available, such as through the Restoration and Enhancement ("R&E") Fund or similar sources.
- f. Once a 100 percent design for the fish passage facility is completed, then based on this 100 percent design, the Parties will generate a bid-equivalent project budget, from which the Parties will allocate values for any in-kind services to be credited toward the respective contributions of the Parties. Any cost values for in-kind services for securing permits or administrative services, whether provided by the Districts or ODFW, shall not be subject to reimbursement from contributed funds.

- g. If a granting agency allows costs for permits or administrative services to be counted for matching purposes, then such costs can be used for matching purposes as long as such an allowance does not increase ODFW's share of the cost of the construction of the fish passage facility.
 - h. No funds from obligations of the Districts to mitigate prior impacts or settlements to compensate for such impacts may be used by the Districts as part of the Districts' share of the cost of the fish passage facility.
 - i. In the event that the total project cost exceeds \$1 million, the Parties agree to revisit this Agreement to identify additional sources of money, or to modify the agreed-upon design if such modification could be accomplished while still providing adequate fish passage and reducing project costs.
- B. The Districts and ODFW agree to coordinate with and support one another in seeking public grants and low- or no-interest financing. In the event that the Districts and ODFW work together in securing such public funding (for example, a grant from the Oregon Watershed Enhancement Board ("OWEB") or funding from the Oregon legislature), then:
 - a. The Districts and ODFW agree that such funding will be allocated 40% to the Districts and 60% to ODFW.
 - b. The Districts' contributions under this Agreement may be used as matching money for any grants received for this project.
 - c. In the event that particular public funding is only available to certain parties under this Agreement (for example, only to the Districts but not to ODFW), then such funding shall be allocated solely to the eligible Party or Parties.
- C. The Districts shall implement and construct fish passage consistent with the design plans mutually agreed upon by the Districts and ODFW, with the preliminarily agreed upon design concept attached hereto as **Exhibit A** to this Agreement. Consistent with Section I.A.e above, the Districts and ODFW agree to continue to refine the plans and may mutually agree in writing to the final fish passage design. The Districts and ODFW shall mutually agree on a schedule for implementation and construction of fish passage with construction to be completed within 2 years of the final funding package, unless the Parties mutually agree to modify the schedule.
- D. The Districts shall be responsible for engineering and designing the facility, acquiring the necessary permits, easements and authorizations, and administering and managing the construction project. The costs associated with these efforts will be the responsibility of the Districts.
- E. The Districts shall be responsible for securing any permits or authorizations necessary for this project issued by any local, state, or federal governmental entity.
- F. In the event that the fish passage facility does not operate or function as designed or as intended, the Parties will meet and determine any redesign or

modifications to the fish passage facility necessary to successfully pass fish. ODFW commits to working in good faith with the Districts to correct any deficiencies.

- G. The Districts shall be the owners of the fish passage facility and responsible for maintaining and operating the fish passage facility as intended following completion of construction.
- H. Upon execution of this Agreement, ODFW shall notify OWRD that the Districts have satisfied the requirement of fish passage as set forth in ORS 543.765(5)(a), with respect to the water right certificates currently held by COID and SID (OWRD Certificate Nos. 86026 and 86003, respectively), and with respect to any additional water right applications submitted to OWRD by a District pursuant to ORS 543.765, so long as such applications are submitted prior to the completion of construction of the fish passage facility, or April 1, 2017, whichever is later. ODFW shall forward a copy of this Agreement to OWRD as proof of satisfaction of the requirement contained in ORS 543.765(5)(a) for the subject water rights.
- I. The Parties agree that the full execution of this Agreement satisfies any legal requirements for fish passage, pursuant to ORS 543.765 and ORS 508.585, at the NCDD related to the Districts' use and operation of the NCDD for diversion of water into their respective water delivery systems for hydroelectric purposes pursuant to ORS 543.765, so long as water right applications are submitted to OWRD pursuant to ORS 543.765 prior to the completion of construction of the fish passage facility, or April 1, 2017, whichever is later. This Agreement does not satisfy the legal requirements for fish passage for other projects or activities that may require fish passage, such as the construction and operation of a hydroelectric project at the NCDD site itself. If other projects or activities require fish passage, then the Parties may renegotiate this Agreement to reflect the rights and responsibilities of the additional parties to satisfy their fish passage obligations.

II. Representations and Warranties

A. The Districts' Representations and Warranties. Each District hereby represents and warrants to ODFW as follows with respect to that District:

1. As of the date hereof, the District is an irrigation district, duly organized and validly existing under the laws of the State of Oregon, and the District has the power and authority to enter into, and to perform its respective obligations under, this Agreement;

2. As of the date hereof, there are no existing or threatened actions, suits or claims pending, the adverse determination of which would reasonably be expected to materially affect the right of the District to enter into and perform its respective obligations under this Agreement;

3. The District has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement;

4. This Agreement has been duly executed and delivered on behalf of the District, and constitutes a legal, valid, binding obligation, enforceable against the District in accordance with its terms; and

5. The District's execution and delivery of this Agreement and the performance of its obligations under this Agreement do not conflict with or violate any requirement of applicable laws or regulations and do not conflict with, or constitute a default under, any of its organizational documents or any contractual or other obligation of the District.

B. ODFW Representations and Warranties. ODFW hereby represents and warrants to the Districts as follows:

1. As of the date hereof, ODFW is a subdivision of the State of Oregon and has the power and authority to enter into, and to perform its obligations under, this Agreement;

2. As of the date hereof, there are no existing or threatened actions, suits or claims pending, the adverse determination of which would reasonably be expected to materially affect the right of ODFW to enter into and perform its obligations under this Agreement;

3. ODFW has taken all necessary action on its part to authorize the execution and delivery of this Agreement and the performance of its obligations under this Agreement.

4. Available Funding. Subject to Article XI section 7 of the Oregon Constitution, ODFW's payments under this Agreement are contingent upon ODFW receiving funding, appropriations, limitations, allotments, or other expenditure authority sufficient to allow ODFW to satisfy its obligations under this Agreement and ODFW shall employ good-faith efforts to request and seek funding, appropriations, limitations, allotments, or other expenditure authority sufficient to allow ODFW to perform its payment obligations throughout the term of this Agreement;

5. This Agreement has been duly executed and delivered on behalf of ODFW and constitutes a legal, valid, binding obligation, enforceable against ODFW in accordance with its terms; and

6. ODFW's execution and delivery of this Agreement and the performance of its obligations under this Agreement do not conflict with or violate any requirement of applicable laws or regulations and do not conflict with, or constitute a default under, any contractual or other obligation of ODFW.

III. Indemnification

A. Indemnification by Each District. To the extent allowed by applicable law, each District shall indemnify and hold ODFW, its directors, officers and employees harmless from and against all claims, suits, losses, obligations, damages, deficiencies, costs, penalties, liabilities (including, without limitation, strict liabilities), assessments, judgments, amounts paid in settlement, fines and expenses (including, without limitation, court costs and reasonable fees of

attorneys and other professionals) (individually and collectively, "Losses") arising out of the failure by each District to perform any of its covenants, agreements or undertakings contained in this Agreement, and the acts or omissions of the District or any of the District's subcontractors or any other third parties for whose actions the District is legally liable.

B. Indemnification by ODFW. To the extent allowed by Article XI, section 7 of the Oregon Constitution and the Oregon Tort Claims Act, ODFW shall indemnify and hold the Districts and their shareholders, partners, members, directors, officers, and employees harmless from and against all Losses arising out of the failure by ODFW to perform any of its covenants, agreements or undertakings contained in this Agreement, and the acts or omissions of ODFW or any of ODFW's subcontractors or other third parties for whose actions ODFW is legally liable.

IV. Miscellaneous

A. Force Majeure. Except for the obligation to make funds available when due hereunder, all other obligations under this Agreement shall be suspended for so long as one or more Parties hereto are prevented from complying with the provisions hereof by acts of God, the elements, riots, war, acts of Federal, state or local governments, agencies or courts, strikes, lock-outs, damage to or destruction or unavoidable shut-down of necessary facilities, or other matters beyond their reasonable control (specifically excluding, however, matters of mere financial exigency); provided, however, that any Party so prevented from complying with its obligations hereunder shall promptly notify the other Parties thereof and shall exercise all due diligence to remove and overcome the cause of such inability to comply as soon as practicable.

B. Non-Fiduciary Relationship. The Parties hereto expressly disclaim and disavow any partnership, joint venture or fiduciary status or relationship between them and expressly affirm that they have entered into this Agreement as independent contractors and that the same is in all respects an "arms-length" transaction.

C. Notices. Any notice, election, payment, report or other correspondence required or permitted hereunder shall be deemed to have been properly given or delivered when made in writing and delivered personally to an officer of the Party to whom directed, or when sent by United States mail with all necessary postage or charges fully prepaid, return receipt requested, and addressed to the Party to whom directed at its below specified address. Any Party may at any time change its address for purposes of this Agreement by giving written notice of such change of address to all other Parties.

CENTRAL OREGON IRRIGATION DISTRICT:

Steve Johnson
District Manager
Central Oregon Irrigation District
1055 SW Lake Court
Redmond, OR 97756

SWALLEY IRRIGATION DISTRICT:

Suzanne Butterfield
District Manager
Swalley Irrigation District
64672 Cook Avenue, Suite 1
Bend, OR 97701

NORTH UNIT IRRIGATION DISTRICT:

Mike Britton
District Manager
North Unit Irrigation District
2024 NW Beech Street
Madras, OR 97741

OREGON DEPARTMENT OF FISH AND WILDLIFE

Chip Dale
ODFW High Desert Region Manager
61374 Parrell Road
Bend, OR 97702

D. Attorney's Fees. In the event that any Party hereto shall be in default or breach of this Agreement, said Party shall be liable to pay all reasonable attorney's fees, court costs and other related collection costs and expenses incurred by the non-defaulting or non-breaching Parties in prosecuting their rights hereunder. ODFW's obligation is subject to the limitations of Article XI, section 7 of the Oregon Constitution.

E. Further Instruments. The Parties hereto agree that they will execute any and all other documents or legal instruments that may be necessary or required to carry out and effectuate all of the provisions hereof.

F. Separate Counterparts. This Agreement may be executed in several counterparts, each one of which shall be considered an original and all of which when taken together shall constitute but one instrument.

G. Waiver. A waiver by any Party of any provision hereof, whether in writing or by course of conduct or otherwise, shall be valid only in the instance for which it is given, and shall not be deemed a continuing waiver of said provision, nor shall it be construed as a waiver of any other provision hereof.

H. Paragraph Headings. The paragraph headings of this Agreement are inserted only for convenience and in no way define, limit or describe the scope or intent of this Agreement nor affect its terms and provisions.

I. Preparation of Agreement. The Parties hereto acknowledge that they have all participated in the preparation of this Agreement and, in the event that any question arises regarding its interpretation, no presumption shall be drawn in favor of or against any Party hereto with respect to the drafting hereof.

J. Governing Law. This Agreement, and all matters relating hereto, including any matter or dispute arising out of the Agreement, shall be interpreted, governed, and enforced according to the laws of the State of Oregon, and the Parties hereto consent to the jurisdiction of any appropriate court in the State of Oregon to resolve such disputes.

K. Amendments. This Agreement may be amended at any time upon unanimous agreement of all Parties hereto, which amendment(s) must be reduced to writing and signed by all Parties in order to become effective.

L. Enforceability. This Agreement is intended to be performed in accordance with, and only to the extent permitted by, all applicable laws and regulations. If any fundamental provision of this Agreement or the application thereof to any person or circumstance, for any reason and to any extent, shall be invalid or unenforceable, the remainder of this Agreement shall not be affected thereby, but rather shall be enforced to the greatest extent permitted by law. If a fundamental provision of this Agreement is not enforceable, then the parties commit in good faith to renegotiate the Agreement to accomplish its purpose of providing for fish passage at the NCDD.

M. Entire Agreement. This Agreement constitutes and represents the entire agreement of the Parties hereto with respect to the subject matter hereof, and all other prior agreements, covenants, promises and conditions, verbal or written, between these Parties are incorporated herein. No Party hereto has relied upon any other promise, representation or warranty, other than those contained herein, in executing this Agreement.

N. Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties thereto, their heirs, personal representatives, successors, and assigns.

O. Incorporation of Recitals. The above recitals are incorporated herein by this reference and expressly made a part of this Agreement.

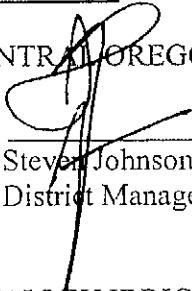
P. Other Agreements. Nothing in this Agreement prevents the Districts from entering into agreements with other entities that may propose hydroelectric projects at the NCDD or elsewhere.

[THE REMAINDER OF THIS PAGE IS INTENTIONALLY BLANK]


IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives effective as of the date first above written.

DISTRICTS:


CENTRAL OREGON IRRIGATION DISTRICT

By: 
Steven Johnson
District Manager

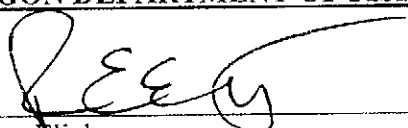
SWALLEY IRRIGATION DISTRICT

By: 
Suzanne Butterfield
District Manager

NORTH UNIT IRRIGATION DISTRICT

By: 
Mike Britton
District Manager

OREGON DEPARTMENT OF FISH AND WILDLIFE:

By: 
Roy Elicker
Director



United States Department of the Interior

BUREAU OF RECLAMATION
1150 North Curtis Road, Suite 100
Boise, ID 83706-1234



IN REPLY REFER TO:

PN-3500
2.2.2.10

January 22, 2020

Nathan Fleischer
1 Infinite Loop, MS 119-REF
Cupertino, CA 95014

Subject: Amended and Restated Contract for Construction, Coordination, and Completion of the Apple Inc. Monroe Drop Hydroelectric Project - Contract No. 12-07-10-P0059 (CCC contract), FERC P-14430.

Dear Mr. Fleischer:

Pursuant to your request and submitted plans and subsequent clarifications (submitted by Jessica Penrod, Natel Energy, Inc.), I am hereby providing approval of your plans for construction.

As discussed in my correspondence dated January 8, 2020, Reclamation will perform on-site construction inspection as appropriate. Providing us an accurate, updated construction schedule on a periodic basis will aid us in this effort and help to minimize costs associated with these inspections.

If you have any questions, and for continued coordination, please contact Project Manager Mark Pfeifer at (208) 378-5042 or mpfeifer@usbr.gov.

Sincerely,

Brandt Demars, P.E.
Manager, Construction Engineering
Columbia-Pacific Northwest Region

INTERIOR REGION 9 • COLUMBIA-PACIFIC NORTHWEST

IDAHO, MONTANA*, OREGON*, WASHINGTON

* PARTIAL



File Code: 2720

Date: March 20, 2014

Monroe Hydro LLC.
Atten: Gia Schneider
2175 Monarch Street
Alameda, CA 94501

Dear Ms. Schneider:

Enclosed is the fully executed Special Use Permit (CRG145) authorizing your existing use on the Crooked River National Grasslands administrated by the Ochoco National Forest. As a reminder, in accordance with the NEPA analysis and decision for this project, the following conditions of authorization were attached to and made a part of your permit and are in place to reduce or eliminate unwanted effects:

Invasive Plants: To reduce those risks of introducing invasive plants into the project area the following mitigations will be necessary:

1. The known knapweed population located at the existing communications site will be treated prior to project implementation.
2. Any fill material designated for the project will be examined by the district botanist or her designee for the presence of invasive plants, prior to bringing onto National Forest lands.
3. Machinery involved in project activities must be washed prior to entry into the project area.
4. As much as is practical, the cheatgrass patches will be avoided. The district botanist is available to help the proponent identify this common weedy species.
5. In order to assess whether these mitigations were successful, and to maintain the high quality of the plant community at and surrounding the site, the proponent will conduct post-project monitoring. This will entail annual weed monitoring in June or July at the site for the duration of the special use permit, beginning with the first growing season after the project is completed.

The survey of the area will include any non-native plants, with special emphasis on the weed list attached to this document and will include cheatgrass and mullein. If non-native plants are found, the method of eradication will be by hand-pulling only; there may eventually be an opportunity to use selected herbicides, but not at present. If the weeds are flowering or fruiting, they will be placed in a sack and disposed of off-site. Details can be discussed with the special uses coordinator and the district botanist. The proponent will send an annual notice to the special uses coordinator and the district botanist about the results of these monitoring visits. The proponent is responsible for maintaining the site in a weed-free condition.



Please contact the Special Use Administrator before proceeding with the construction. I expect Monroe Hydro LLC. to remove all equipment and any temporary construction equipment from the National Grassland and restore the site to its as close to the previous condition as possible.

Please contact Special Use Administrator Heidi Scott at (541) 416-6632, or email at hscott02@fs.fed.us, if you have any questions, or need clarification on any of the items discussed above.

Sincerely,

A handwritten signature in dark ink, appearing to read "Heidi Scott", written in a cursive style.

Heidi Scott
Special Use Administrator

Enclosed: Permit & OMP

Authorization ID: CRG145
Contact ID: 540663010602
Expiration Date: 12/31/2034
Use Code: 643, 612

FS-2700-4 (10/09)
OMB No. 0596-0082

**U.S. DEPARTMENT OF AGRICULTURE
FOREST SERVICE**

SPECIAL USE PERMIT

**Authority: FEDERAL LAND POLICY AND MGMT ACT,
AS AMENDED October 21, 1976**

MONROE HYDRO LLC of 2175 MONARCH STREET ALAMEDA CA 94501 (hereinafter "the holder") is authorized to use or occupy National Forest System lands in the Ochoco National Forest or The Crooked River National Grassland unit of the National Forest System, subject to the terms and conditions of this special use permit (the permit).

This permit covers 2.09 acres in the Sec. 12, T. 13 S., R. 12 E., WILLAMETTE MERIDIAN, ("the permit area"), as shown on the map attached as **Appendix A**. This permit issued for the purpose of:

- Temporary construction of a new low-head small hydropower facility on the westerly side of the North Unit Irrigation District's Main Canal at the drop near the intersection of the Main Canal and Monroe Lane in T. 13 S., R.12 E., sec. 12.
- Permit area for hydropower facilities 145' x 320' = .89 acres, which includes; 1 - 25' x 25' metal building to house the hydroelectric plant.
Permit area for power transmission line 1,304' x 43.3' = 1.2 acres, Monroe Lane to the hydropower facilities.

TERMS AND CONDITIONS

I. GENERAL TERMS

A. AUTHORITY. This permit is issued pursuant to **FEDERAL LAND POLICY AND MGMT ACT, AS AMENDED October 21, 1976** and 36 CFR Part 251, Subpart B, as amended, and is subject to their provisions.

B. AUTHORIZED OFFICER. The authorized officer is the Forest or Grassland Supervisor or a subordinate officer with delegated authority.

C. TERM. This permit shall expire at midnight on **12/31/2034**.

D. RENEWAL. This permit is not renewable. Prior to expiration of this permit, the holder may apply for a new permit that would renew the use and occupancy authorized by this permit. Applications for a new permit must be submitted at least 6 months prior to expiration of this permit. Renewal of the use and occupancy authorized by this permit shall be at the sole discretion of the authorized officer. At a minimum, before renewing the use and occupancy authorized by this permit, the authorized officer shall require that (1) the use

and occupancy to be authorized by the new permit is consistent with the standards and guidelines in the applicable land management plan; (2) the type of use and occupancy to be authorized by the new permit is the same as the type of use and occupancy authorized by this permit; and (3) the holder is in compliance with all the terms of this permit. The authorized officer may prescribe new terms and conditions when a new permit is issued.

E. AMENDMENT. This permit may be amended in whole or in part by the Forest Service when, at the discretion of the authorized officer, such action is deemed necessary or desirable to incorporate new terms that may be required by law, regulation, directive, the applicable forest land and resource management plan, or projects and activities implementing a land management plan pursuant to 36 CFR Part 215.

F. COMPLIANCE WITH LAWS, REGULATIONS, AND OTHER LEGAL REQUIREMENTS. In exercising the rights and privileges granted by this permit, the holder shall comply with all present and future federal laws and regulations and all present and future state, county, and municipal laws, regulations, and other legal requirements that apply to the permit area, to the extent they do not conflict with federal law, regulation, or policy. The Forest Service assumes no responsibility for enforcing laws, regulations, and other legal requirements that fall under the jurisdiction of other governmental entities.

G. NON-EXCLUSIVE USE. The use or occupancy authorized by this permit is not exclusive. The Forest Service reserves the right of access to the permit area, including a continuing right of physical entry to the permit area for inspection, monitoring, or any other purpose consistent with any right or obligation of the United States under any law or regulation. The Forest Service reserves the right to allow others to use the permit area in any way that is not inconsistent with the holder's rights and privileges under this permit, after consultation with all parties involved. Except for any restrictions that the holder and the authorized officer agree are necessary to protect the installation and operation of authorized temporary improvements, the lands and waters covered by this permit shall remain open to the public for all lawful purposes.

H. ASSIGNABILITY. This permit is not assignable or transferable.

I. CHANGE IN CONTROL OF THE BUSINESS ENTITY.

1. Notification of Change in Control. The holder shall notify the authorized officer when a change in control of the business entity that holds this permit is contemplated.

a. In the case of a corporation, control is an interest, beneficial or otherwise, of sufficient outstanding voting securities or capital of the business so as to permit the exercise of managerial authority over the actions and operations of the corporation or election of a majority of the board of directors of the corporation.

b. In the case of a partnership, limited partnership, joint venture, or individual entrepreneurship, control is a beneficial ownership of or interest in the entity or its capital so as to permit the exercise of managerial authority over the actions and operations of the entity.

c. In other circumstances, control is any arrangement under which a third party has the ability to exercise management authority over the actions or operations of the business.

2. Effect of Change in Control. Any change in control of the business entity as defined in paragraph 1 of this clause shall result in termination of this permit. The party acquiring control must submit an application for a special use permit. The Forest Service is not obligated to issue a new permit to the party who acquires control. The authorized officer shall determine whether the applicant meets the requirements established by applicable federal regulations.

II. IMPROVEMENTS

A. LIMITATIONS ON USE. Nothing in this permit gives or implies permission to build or maintain any structure or facility or to conduct any activity, unless specifically authorized by this permit. Any use not specifically authorized by this permit must be proposed in accordance with 36 CFR 251.54. Approval of such a proposal through issuance of a new permit or permit amendment is at the sole discretion of the authorized officer.

B. PLANS. All plans for development, layout, construction, reconstruction, or alteration of improvements in the permit area, as well as revisions to those plans must be prepared by a professional engineer, architect, landscape architect, or other qualified professional based on federal employment standards acceptable to the authorized officer. These plans and plan revisions must have written approval from the authorized officer before they are implemented. The authorized officer may require the holder to furnish as-built plans, maps, or surveys upon completion of the work.

B. CONSTRUCTION. Any construction authorized by this permit shall commence by March 1, 2014 and shall be completed by May 1, 2015.

III. OPERATIONS.

A. PERIOD OF USE. Use or occupancy of the permit area shall be exercised at least 365 days each year.

B. CONDITION OF OPERATIONS. The holder shall maintain the authorized improvements and permit area to standards of repair, orderliness, neatness, sanitation, and safety acceptable to the authorized officer and consistent with other provisions of this permit. Standards are subject to periodic change by the authorized officer when deemed necessary to meet statutory, regulatory, or policy requirements or to protect national forest resources. The holder shall comply with inspection requirements deemed appropriate by the authorized officer.

C. OPERATING PLAN. There shall be prepared an operating plan and annually revised by December 31. The operating plan shall be prepared in consultation with the authorized officer or the authorized officer's designated representative and shall cover all operations authorized by this permit. The operating plan shall outline steps the holder will take to protect public health and safety and the environment and shall include sufficient detail and standards to enable the Forest Service to monitor the holder's operations for compliance with the terms and conditions of this permit. The operating plan is attached to this permit as **Appendix B**. The authorized officer may require an annual meeting with the holder to discuss the terms and conditions of the permit or operating plan, annual use reports, or other concerns either party may have.

D. INSPECTION BY THE FOREST SERVICE. The Forest Service shall monitor the holder's operations and reserves the right to inspect the permit area and transmission facilities at any time for compliance with the terms of this permit. The holder's obligations under this permit are not contingent upon any duty of the Forest Service to inspect the permit area or transmission facilities. A failure by the Forest Service or other governmental officials to inspect is not a justification for noncompliance with any of the terms and conditions of this permit.

IV. RIGHTS AND LIABILITIES

A. LEGAL EFFECT OF THE PERMIT. This permit, which is revocable and terminable, is not a contract or a lease, but rather a federal license. The benefits and requirements conferred by this authorization are reviewable solely under the procedures set forth in 36 CFR Part 251, Subpart C, and 5 U.S.C. 704. This permit does not constitute a contract for purposes of the Contract Disputes Act, 41 U.S.C. 601. The permit is

not real property, does not convey any interest in real property, and may not be used as collateral for a loan.

B. VALID OUTSTANDING RIGHTS. This permit is subject to all valid outstanding rights. Valid outstanding rights include those derived under mining and mineral leasing laws of the United States. The United States is not liable to the holder for the exercise of any such right.

C. ABSENCE OF THIRD-PARTY BENEFICIARY RIGHTS. The parties to this permit do not intend to confer any rights on any third party as a beneficiary under this permit.

D. SERVICES NOT PROVIDED. This permit does not provide for the furnishing of road or trail maintenance, water, fire protection, search and rescue, or any other such service by a government agency, utility, association, or individual.

E. RISK OF LOSS. The holder assumes all risk of loss associated with use or occupancy of the permit area, including but not limited to theft, vandalism, fire and any fire-fighting activities (including prescribed burns), avalanches, rising waters, winds, falling limbs or trees, and other forces of nature. If authorized temporary improvements in the permit area are destroyed or substantially damaged, the authorized officer shall conduct an analysis to determine whether the improvements can be safely occupied in the future and whether rebuilding should be allowed. If rebuilding is not allowed, the permit shall terminate.

F. DAMAGE TO UNITED STATES PROPERTY. The holder has an affirmative duty to protect from damage the land, property, and other interests of the United States. Damage includes but is not limited to fire suppression costs, damage to government-owned improvements covered by this permit, and all costs and damages associated with or resulting from the release or threatened release of a hazardous material occurring during or as a result of activities of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees on, or related to, the lands, property, and other interests covered by this permit. For purposes of clause IV.F and section V, "hazardous material" shall mean (a) any hazardous substance under section 101(14) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601(14); (b) any pollutant or contaminant under section 101(33) of CERCLA, 42 U.S.C. § 9601(33); (c) any petroleum product or its derivative, including fuel oil, and waste oils; and (d) any hazardous substance, extremely hazardous substance, toxic substance, hazardous waste, ignitable, reactive or corrosive materials, pollutant, contaminant, element, compound, mixture, solution or substance that may pose a present or potential hazard to human health or the environment under any applicable environmental laws.

1. The holder shall avoid damaging or contaminating the environment, including but not limited to the soil, vegetation (such as trees, shrubs, and grass), surface water, and groundwater, during the holder's use or occupancy of the permit area. If the environment or any government property covered by this permit becomes damaged during the holder's use or occupancy of the permit area, the holder shall immediately repair the damage or replace the damaged items to the satisfaction of the authorized officer and at no expense to the United States.

2. The holder shall be liable for all injury, loss, or damage, including fire suppression, prevention and control of the spread of invasive species, or other costs in connection with rehabilitation or restoration of natural resources associated with the use or occupancy authorized by this permit. Compensation shall include but not be limited to the value of resources damaged or destroyed, the costs of restoration, cleanup, or other mitigation, fire suppression or other types of abatement costs, and all administrative, legal (including attorney's fees), and other costs. Such costs may be deducted from a performance bond required under clause IV.I.

3. The holder shall be liable for damage caused by use of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees to all roads and trails of the United States to the same extent as provided under clause IV.F.1, except that liability shall not include reasonable and ordinary wear and tear

G. HEALTH, SAFETY, AND ENVIRONMENTAL PROTECTION. The holder shall promptly abate as completely as possible and in compliance with all applicable laws and regulations any activity or condition arising out of or relating to the authorized use or occupancy that causes or threatens to cause a hazard to public health or the safety of the holder's employees or agents or harm to the environment (including areas of vegetation or timber, fish or other wildlife populations, their habitats, or any other natural resources). The holder shall prevent impacts to the environment and cultural resources by implementing actions identified in the operating plan to prevent establishment and spread of invasive species. The holder shall immediately notify the authorized officer of all serious accidents that occur in connection with such activities. The responsibility to protect the health and safety of all persons affected by the use or occupancy authorized by this permit is solely that of the holder. The Forest Service has no duty under the terms of this permit to inspect the permit area or operations and activities of the holder for hazardous conditions or compliance with health and safety standards.

H. INDEMNIFICATION OF THE UNITED STATES. The holder shall indemnify, defend, and hold harmless the United States for any costs, damages, claims, liabilities, and judgments arising from past, present, and future acts or omissions of the holder in connection with the use or occupancy authorized by this permit. This indemnification provision includes but is not limited to acts and omissions of the holder or the holder's heirs, assigns, agents, employees, contractors, or lessees in connection with the use or occupancy authorized by this permit which result in (1) violations of any laws and regulations which are now or which may in the future become applicable, and including but not limited to those environmental laws listed in clause V.A of this permit; (2) judgments, claims, demands, penalties, or fees assessed against the United States; (3) costs, expenses, and damages incurred by the United States; or (4) the release or threatened release of any solid waste, hazardous waste, hazardous materials, pollutant, contaminant, oil in any form, or petroleum product into the environment. The authorized officer may prescribe terms that allow the holder to replace, repair, restore, or otherwise undertake necessary curative actions to mitigate damages in addition to or as an alternative to monetary indemnification.

I. BONDING. The authorized officer may require the holder to furnish a surety bond or other security for any of the obligations imposed by the terms and conditions of this permit or any applicable law, regulation, or order.

1. As a further guarantee of compliance with the terms and conditions of this permit, the holder shall deliver and maintain a surety bond or other acceptable security, such as cash deposited and maintained in a federal depository or negotiable securities of the United States, in the amount of \$50,000. The authorized officer may periodically evaluate the adequacy of the bond or other security and increase or decrease the amount as appropriate. If the bond or other security becomes unsatisfactory to the authorized officer, the holder shall within 30 days of demand furnish a new bond or other security issued by a surety that is solvent and satisfactory to the authorized officer. If the holder fails to meet any of the requirements secured under this clause, money deposited pursuant to this clause shall be retained by the United States to the extent necessary to satisfy the obligations secured under this clause, without prejudice to any other rights and remedies of the United States.

2. The bond shall be released or other security returned 30 days after (a) the authorized officer certifies that the obligations covered by the bond or other security are met and (b) the holder establishes to the satisfaction of the authorized officer that all claims for labor and material for the secured obligations have been paid or released.

3. Prior to undertaking additional construction or alteration not covered by the bond or other security, or when the authorized improvements are to be removed and the permit area restored the holder may be required to obtain additional bonding or security.

V. RESOURCE PROTECTION

A. COMPLIANCE WITH ENVIRONMENTAL LAWS. The holder shall in connection with the use or occupancy authorized by this permit comply with all applicable federal, state, and local environmental laws and regulations, including but not limited to those established pursuant to the Resource Conservation and Recovery Act, as amended, 42 U.S.C. 6901 et seq., the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq., the Oil Pollution Act, as amended, 33 U.S.C. 2701 et seq., the Clean Air Act, as amended, 42 U.S.C. 7401 et seq., CERCLA, as amended, 42 U.S.C. 9601 et seq., the Toxic Substances Control Act, as amended, 15 U.S.C. 2601 et seq., the Federal Insecticide, Fungicide, and Rodenticide Act, as amended, 7 U.S.C. 136 et seq., and the Safe Drinking Water Act, as amended, 42 U.S.C. 300f et seq.

B. VANDALISM. The holder shall take reasonable measures to prevent and discourage vandalism and disorderly conduct and when necessary shall contact the appropriate law enforcement officer.

C. PESTICIDE USE. Pesticides may not be used outside of buildings to control undesirable woody and herbaceous vegetation (including aquatic plants), insects, rodents, fish, and other pests and weeds without prior written approval from the authorized officer. A request for approval of planned uses of pesticides shall be submitted annually by the holder on the due date established by the authorized officer. The report shall cover a 12-month period of planned use beginning 3 months after the reporting date. Information essential for review shall be provided in the form specified. Exceptions to this schedule may be allowed, subject to emergency request and approval, only when unexpected outbreaks of pests or weeds require control measures that were not anticipated at the time an annual report was submitted. Only those materials registered by the U.S. Environmental Protection Agency for the specific purpose planned shall be considered for use on National Forest System lands. Label instructions and all applicable laws and regulations shall be strictly followed in the application of pesticides and disposal of excess materials and containers.

D. ARCHAEOLOGICAL-PALEONTOLOGICAL DISCOVERIES. The holder shall immediately notify the authorized officer of all antiquities or other objects of historic or scientific interest, including but not limited to historic or prehistoric ruins, fossils, or artifacts discovered in connection with the use and occupancy authorized by this permit. The holder shall leave these discoveries intact and in place until directed otherwise by the authorized officer. Protective and mitigative measures specified by the authorized officer shall be the responsibility of the holder.

E. NATIVE AMERICAN GRAVES PROTECTION AND REPATRIATION. In accordance with 25 U.S.C. 3002(d) and 43 CFR 10.4, if the holder inadvertently discovers human remains, funerary objects, sacred objects, or objects of cultural patrimony on National Forest System lands, the holder shall immediately cease work in the area of the discovery and shall make a reasonable effort to protect and secure the items. The holder shall immediately notify the authorized officer by telephone of the discovery and shall follow up with written confirmation of the discovery. The activity that resulted in the inadvertent discovery may not resume until 30 days after the authorized officer certifies receipt of the written confirmation, if resumption of the activity is otherwise lawful, or at any time if a binding written agreement has been executed between the Forest Service and the affiliated Indian tribes that adopts a recovery plan for the human remains and objects.

F. PROTECTION OF HABITAT OF THREATENED, ENDANGERED, AND SENSITIVE SPECIES. The location of sites within the permit area needing special measures for protection of plants or animals listed as threatened or endangered under the Endangered Species Act (ESA) of 1973, 16 U.S.C. 1531 et seq., as amended, or identified as sensitive or otherwise requiring special protection by the Regional Forester under Forest Service Manual (FSM) 2670, pursuant to consultation conducted under section 7 of the ESA, may be shown on the ground or on a separate map. The map shall be attached to this permit as an appendix. The holder shall take any protective and mitigative measures specified by the authorized officer. If protective and mitigative measures prove inadequate, if other sites within the permit area containing threatened, endangered, or sensitive species or species otherwise requiring special protection are discovered, or if new species are listed as threatened or endangered under the ESA or identified as sensitive or otherwise requiring special

protection by the Regional Forester under the FSM, the authorized officer may specify additional protective and mitigative measures. Discovery of these sites by the holder or the Forest Service shall be promptly reported to the other party.

G. CONSENT TO STORE HAZARDOUS MATERIALS. The holder shall not store any hazardous materials at the site without prior written approval from the authorized officer. This approval shall not be unreasonably withheld. If the authorized officer provides approval, this permit shall include, or in the case of approval provided after this permit is issued, shall be amended to include specific terms addressing the storage of hazardous materials, including the specific type of materials to be stored, the volume, the type of storage, and a spill plan. Such terms shall be proposed by the holder and are subject to approval by the authorized officer.

H. CLEANUP AND REMEDIATION

1. The holder shall immediately notify all appropriate response authorities, including the National Response Center and the authorized officer or the authorized officer's designated representative, of any oil discharge or of the release of a hazardous material in the permit area in an amount greater than or equal to its reportable quantity, in accordance with 33 CFR Part 153, Subpart B, and 40 CFR Part 302. For the purposes of this requirement, "oil" is as defined by section 311(a)(1) of the Clean Water Act, 33 U.S.C. 1321(a)(1). The holder shall immediately notify the authorized officer or the authorized officer's designated representative of any release or threatened release of any hazardous material in or near the permit area which may be harmful to public health or welfare or which may adversely affect natural resources on federal lands.

2. Except with respect to any federally permitted release as that term is defined under Section 101(10) of CERCLA, 42 U.S.C. 9601(10), the holder shall clean up or otherwise remediate any release, threat of release, or discharge of hazardous materials that occurs either in the permit area or in connection with the holder's activities in the permit area, regardless of whether those activities are authorized under this permit. The holder shall perform cleanup or remediation immediately upon discovery of the release, threat of release, or discharge of hazardous materials. The holder shall perform the cleanup or remediation to the satisfaction of the authorized officer and at no expense to the United States. Upon revocation or termination of this permit, the holder shall deliver the site to the Forest Service free and clear of contamination.

I. CERTIFICATION UPON REVOCATION OR TERMINATION. If the holder uses or stores hazardous materials at the site, upon revocation or termination of this permit the holder shall provide the Forest Service with a report certified by a professional or professionals acceptable to the Forest Service that the permit area is uncontaminated by the presence of hazardous materials and that there has not been a release or discharge of hazardous materials upon the permit area, into surface water at or near the permit area, or into groundwater below the permit area during the term of the permit. This certification requirement may be waived by the authorized officer when the Forest Service determines that the risks posed by the hazardous material are minimal. If a release or discharge has occurred, the professional or professionals shall document and certify that the release or discharge has been fully remediated and that the permit area is in compliance with all federal, state, and local laws and regulations.

VI. LAND USE FEE AND ACCOUNTING ISSUES

A. HYDROLIC FEE. In consideration for this use, the holder shall pay to the Forest Service, U.S. Department of Agriculture, an annual fee equal to the percent shown in Table 1 (below) of that year's (or portion thereof) total gross revenues from the project, except in years where this amount is less than the minimum amount shown in Table 2 (below), in which case the minimum amount of Table 2 shall be the annual fee for that year. The minimum fee shall be due on January 1 and payable by January 1 each year based on a fiscal year from January 1 to December 31. Operation fees shown in Table 1, due in excess of the minimum fee, are due quarterly for the periods: January 1 to March 31; April 1 to June 30; July 1 to

September 30; and October 1 to December 31. The holder is responsible for each quarterly calculation of payment and shall make said payment to the Forest Service, U.S. Department of Agriculture, 3160 NE 3rd Street Prineville OR 97754, within 30 days of the close of each quarter listed above. The holder shall submit, annually, within 90 days after the end of the fiscal year, the records of the power produced, to whom it was sold, and gross revenues of that sale.

Provided, however, that the method of minimum fee determination may be adjusted by the Forest Service as of, and effective on, and each 5 years thereafter, in order to place the charges on a basis commensurate with the value of use authorized by this permit. The Forest Service shall establish fees for year 10 and beyond at that time, based on then current market data.

TABLE - HYDROELECTRIC FEE

<u>Time Period</u>	<u>Date From</u> <u>Mo Day Yr</u>	<u>Date To</u> <u>Mo Day Yr</u>	<u>% of Gross Sales Due</u> <u>to Forest Service</u>
a. Years 1 - 5	01/01/2015	12/31/2021	3
b. Years 6 - 10	01/01/2022	12/31/2032	5

TABLE 2 - MINIMUM FEE

<u>Time Period</u>	<u>Date From</u> (Now) <u>Mo Day Yr</u>	<u>Date To</u> (end of 1st fiscal) <u>Mo Day Yr</u>	<u>Amount Due as Minimum</u> if not exceeded by <u>Hydroelectric Fee</u>
a. 1st year (partial)	01/01/2015	12/31/2015	To be determined
b. Remainder of year 1 thru year 5	01/01/2016	12/31/2021	To be determined
c. Years 6 - 10	01/01/2022	12/31/2032	To be given at the time

B. MODIFICATION OF THE LAND USE FEE. The land use fee may be revised whenever necessary to reflect the market value of the authorized use or occupancy or when the fee system used to calculate the land use fee is modified or replaced.

C. FEE PAYMENT ISSUES.

1. Crediting of Payments. Payments shall be credited on the date received by the deposit facility, except that if a payment is received on a non-workday, the payment shall not be credited until the next workday.

2. Disputed Fees. Fees are due and payable by the due date. Disputed fees must be paid in full. Adjustments will be made if dictated by an administrative appeal decision, a court decision, or settlement terms.

3. Late Payments

(a) Interest. Pursuant to 31 U.S.C. 3717 et seq., interest shall be charged on any fee amount not paid within 30 days from the date it became due. The rate of interest assessed shall be the higher of the Prompt Payment Act rate or the rate of the current value of funds to the Treasury (i.e., the Treasury tax and loan account rate), as prescribed and published annually or quarterly by the Secretary of the Treasury in the Federal Register and the Treasury Fiscal Requirements Manual Bulletins. Interest on the principal shall accrue from the date the fee amount is due.

(b) Administrative Costs. If the account becomes delinquent, administrative costs to cover processing and handling the delinquency shall be assessed.

(c) Penalties. A penalty of 6% per annum shall be assessed on the total amount that is more than 90 days delinquent and shall accrue from the same date on which interest charges begin to accrue.

(d) Termination for Nonpayment. This permit shall terminate without the necessity of prior notice and opportunity to comply when any permit fee payment is 90 calendar days from the due date in arrears. The holder shall remain responsible for the delinquent fees.

4. Administrative Offset and Credit Reporting. Delinquent fees and other charges associated with the permit shall be subject to all rights and remedies afforded the United States pursuant to 31 U.S.C. 3711 et seq. and common law. Delinquencies are subject to any or all of the following:

(a) Administrative offset of payments due the holder from the Forest Service.

(b) If in excess of 60 days, referral to the Department of the Treasury for appropriate collection action as provided by 31 U.S.C. 3711(g)(1).

(c) Offset by the Secretary of the Treasury of any amount due the holder, as provided by 31 U.S.C. 3720 et seq.

(d) Disclosure to consumer or commercial credit reporting agencies.

VII. REVOCATION, SUSPENSION, AND TERMINATION

A. REVOCATION AND SUSPENSION. The authorized officer may revoke or suspend this permit in whole or in part:

1. For noncompliance with federal, state, or local law.
2. For noncompliance with the terms of this permit.
3. For abandonment or other failure of the holder to exercise the privileges granted.
4. With the consent of the holder.
5. For specific and compelling reasons in the public interest.

Prior to revocation or suspension, other than immediate suspension under clause VI.B, the authorized officer shall give the holder written notice of the grounds for revocation or suspension. In the case of revocation or suspension based on clause VII.A.1, 2, or 3, the authorized officer shall give the holder a reasonable time, typically not to exceed 90 days, to cure any noncompliance.

B. IMMEDIATE SUSPENSION. The authorized officer may immediately suspend this permit in whole or in part when necessary to protect public health or safety or the environment. The suspension decision shall be in writing. The holder may request an on-site review with the authorized officer's supervisor of the adverse conditions prompting the suspension. The authorized officer's supervisor shall grant this request within 48 hours. Following the on-site review, the authorized officer's supervisor shall promptly affirm, modify, or cancel the suspension.

C. APPEALS AND REMEDIES. Written decisions by the authorized officer relating to administration of

this permit are subject to administrative appeal pursuant to 36 CFR Part 251, Subpart C, as amended. Revocation or suspension of this permit shall not give rise to any claim for damages by the holder against the Forest Service.

D. TERMINATION. This permit shall terminate when by its terms a fixed or agreed upon condition, event, or time occurs without any action by the authorized officer. Examples include but are not limited to expiration of the permit by its terms on a specified date and termination upon change of control of the business entity. Termination of this permit shall not require notice, a decision document, or any environmental analysis or other documentation. Termination of this permit is not subject to administrative appeal and shall not give rise to any claim for damages by the holder against the Forest Service.

E. RIGHTS AND RESPONSIBILITIES UPON REVOCATION OR TERMINATION WITHOUT RENEWAL. Upon revocation or termination of this permit without renewal of the authorized use, the holder shall remove all structures and improvements, except those owned by the United States, within a reasonable period prescribed by the authorized officer and shall restore the site to the satisfaction of the authorized officer. If the holder fails to remove all structures and improvements within the prescribed period, they shall become the property of the United States and may be sold, destroyed, or otherwise disposed of without any liability to the United States. However, the holder shall remain liable for all costs associated with their removal, including costs of sale and impoundment, cleanup, and restoration of the site.

VIII. MISCELLANEOUS PROVISIONS

A. MEMBERS OF CONGRESS. No member of or delegate to Congress or resident commissioner shall benefit from this permit either directly or indirectly, except to the extent the authorized use provides a general benefit to a corporation.

B. CURRENT ADDRESSES. The holder and the Forest Service shall keep each other informed of current mailing addresses, including those necessary for billing and payment of land use fees.

C. SUPERIOR CLAUSES. If there is a conflict between any of the preceding printed clauses and any of the following clauses, the preceding printed clauses shall control.

1. FIRE PLAN PART OF AUTHORIZATION. A project fire plan describing the holder's responsibilities for prevention and suppression of fires, developed by the holder, and subject to Forest Service approval, is part of this authorization, as Exhibit B attached hereto. The holder shall obtain Forest Service approval for said plan before beginning any on-the-ground construction and shall strictly follow its terms.

2. DESIGNATION OF CONSTRUCTION MANAGER. The holder shall designate a construction manager for project construction. This individual shall be qualified to represent the holder and shall be present or have a qualified acting representative present at all times while project construction activities are taking place. This individual shall be the person who receives the on-the-ground approvals and directions from the designated Forest Service representative(s).

3. CONSTRUCTION INSPECTION BY HOLDER. The holder shall perform daily (or on a schedule otherwise agreed to by the Forest Service in writing) inspections of holder's operations while they are proceeding. The holder shall document these inspections (informal writing sufficient) and shall deliver such documentation to the Forest Service on a weekly basis. The inspections must specifically include fire plan compliance, public safety, and environmental protection. The holder shall act immediately to correct any items found to need correction.

A certified engineer shall regularly conduct construction inspections of structural improvements on a schedule approved by the forest Service.

4. PROTECTION OF WILDLIFE AND PLANT SPECIES. If threatened, endangered, or sensitive (as defined in the Forest Service manual) wildlife and plant species are found during use under this authorization, the holder shall notify the Forest Service and shall take immediate measures to protect said species as directed by the Forest Service.

5. ESTHETICS. The holder shall conserve the scenic and esthetic values of the area under this permit during construction, operation, and maintenance of the project improvements.

6. DAMAGE - HIGH HAZARD CLAUSE. The holder is hereby made liable for all injury, loss, or damage, including but not limited to fire suppression costs, directly or indirectly resulting from or caused by the holder's use and occupancy of the area covered by the permit, regardless of whether the holder is negligent or otherwise at fault, provided that the maximum liability without fault shall not exceed \$1,000,000 for any one occurrence, and provided further that the holder shall not be liable when such injury, loss, or damage results wholly, or in part, from negligent act of the United States, or from an act of a third party not involving the facilities of the holder.

Determination of liability for injury, loss, or damage, including fire suppression costs, in excess of the specified maximum, shall be according to the laws governing ordinary negligence.

7. SIGNS. The holder shall erect no signs or advertising devices on the area covered by this permit without prior approval of the Forest Service as to location, design, size, color, and message. The holder shall maintain or renew erected signs as necessary to meet neat and presentable standards.

8. PROJECT SAFETY. The holder shall carry out all operations in a skillful manner, having due regard for the safety of employees and the public, and shall safeguard unsafe areas. The holder shall regularly inspect its facilities and provide further effective safety measures as needed for safety protection.

9. SITE DEVELOPMENT SCHEDULE. As a part of this authorization, the holder shall, in consultation with the Forest Service, prepare a schedule for the progressive development of the permitted site and installation of facilities. Such a schedule shall be prepared by March 1, 2014, and shall set forth an itemized priority list of planned improvements and the planned dates for completion. This schedule shall be made a part of this authorization. The holder may accelerate the scheduled date for installation of any improvement authorized, provided the holder has met other scheduled priorities; and provided further, that the holder has completed all priority installations authorized to the satisfaction of the Forest Service prior to the scheduled due date.

The holder shall submit all construction plans to the Forest Service for approval a minimum of 45 days before anticipated start of construction. All plans for construction of facilities must have the approval with signature of a registered professional engineer of the appropriate specialty, and must have the approval of the Forest Service prior to the use of these plans in constructing this project. These plans shall then become part of this authorization as Exhibit C, to be attached hereto.

The holder shall ensure that construction bid invitations are in compliance with this authorization and with all applicable environmental protection standards.

In the actual layout on-the-ground, the holder shall use accurate mapping based on an adequate survey of the land, including the location of special areas such as water courses.

The holder shall furnish to officers of the United States such information as may be required concerning the construction, operation, and maintenance of the project, and any alteration thereof.

When asked by the Forest Service, the holder shall provide for an on-the-ground review with the Forest Service of the plans for any area of concern to the Forest Service at least 7 days prior to beginning

construction on that area.

10. EROSION CONTROL, TOPSOIL REVEGETATION. The holder shall be responsible for the prevention and control of soil erosion, caused either directly or indirectly by construction or operation of the project, and shall provide preventive and control measures as required by the Forest Service.

The holder shall strip topsoil from construction areas and deposit it in storage piles apart from other excavated material. After removing the desired amount of material, the holder shall evenly spread the stored topsoil over exposed subsoil in appropriate areas to the extent practicable, and shall revegetate the area disturbed.

To the extent practicable on National Forest System lands, the holder shall establish a vegetative cover on all cut and fill slopes, borrow areas, and other disturbed areas capable of growing a vegetative cover of grasses or other suitable vegetation, as required by the Forest Service. The holder shall seed or plant at a time of the year, in a manner, and with species that the Forest Service considers offer the best chance of success. The holder shall repeat such seeding and planting regularly, as conditions allow, until such areas are accepted in writing by the Forest Service as satisfactorily revegetated and stabilized.

11. PERMIT TERMINATION, EXEMPT PROJECTS. Unless sooner terminated by the Forest Service in accordance with the provisions of the permit, this permit shall, subject to annual revalidation by the Forest Service and payment of fees by the holder, expire and become void on December 31, 2032, but the Forest Service may grant a new permit to occupy and use the same National Forest land for project operation, provided the holder complies with the then existing laws and regulations governing the occupancy and use of National Forest lands.

12. RIGHT-OF-WAY CLEARING, POWERLINE. The holder shall clear designated parts of the powerline right-of-way and keep them clear as required by the Forest Service; shall trim all branches of trees in contact with or near the line; shall remove all dead snags and all trees on or adjacent to the right-of-way that are leaning toward or in danger of falling on the line; shall observe such other fire precautions as may be required by the Forest Service; and shall burn or otherwise dispose of all waste material to the satisfaction of the Forest Service. The holder shall restrict the clearing width to that necessary for safe transmission, unless it has obtained the specific permission of the Forest Service for a greater clearing width.

13. BUSINESS STATUS AND DOCUMENTATION. The holder, if a corporation or partnership, shall furnish the Forest Supervisor with a copy of official documentation to establish who has legal interest in the business under permit and to show officially who is authorized by the business to represent the holder in its dealing with the Forest Service. The holder also shall furnish the Forest Supervisor with a list of all officers and directors of the business and their addresses and shall promptly notify the Forest Supervisor of any changes in officers, directors, or persons holding interest in this permit and of any changes in their addresses. Upon request of the Forest Supervisor, the holder shall provide a certified list of the stockholders or partners and amount of stock owned or interest held by each. The holder also shall provide such a list upon any change in anyone's interest that gives them more than 50 percent of the corporate stock or partnership interest.

14. ROAD USE BY GOVERNMENT. The United States shall have unrestricted use of the said right-of-way and any road constructed thereon for all purposes deemed necessary or desirable in connection with the protection, administration, management, and utilization of Federal lands or resources and alone shall have the right to extend rights and privileges for use of the right-of-way and road thereon to States and local subdivisions thereof, as well as to other users, including members of the public, except contractors, agents, and employees of the holder; provided, that the agency having jurisdiction shall control such use so as not unreasonably to interfere with use of the road by the holder or cause the holder to bear a share of the cost of maintenance greater than the holder's use bears to all use of the road.

15. FISH AND WILDLIFE PROTECTION. The holder shall construct, maintain, and operate such protective devices and comply with such reasonable modifications of the project structures and operation in the interests

of fish and wildlife resources as may be prescribed hereafter by the Forest Service upon the recommendation of the Secretary of the Interior or the State fish and game agency.

16. PERMIT AMENDMENT, EXEMPTED PROJECT. The Forest Supervisor may after 90 days written notice to the holder, unilaterally amend, in the public interest, this special-use permit; provided, such amendment shall not unreasonably reduce the use herein authorized. Such modification may be made only after this permit has been in force for 5 years, or no sooner than 10 years from the date of the last modification. The holder shall have the opportunity to make input to the Forest Supervisor concerning the proposed change. The Forest Supervisor shall consider all relevant information concerning the environmental and economic impacts of such an amendment.

This permit is accepted subject to the conditions set out above.

HOLDER: MONROE HYDRO LLC

U.S. DEPARTMENT OF AGRICULTURE
Forest Service

By: 

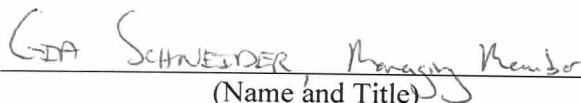
(Holder Signature)

By:



(Authorized Officer Signature)

By:



(Name and Title)

Title:

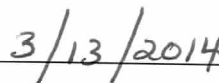
Kathleen Klein, Forest Supervisor

(Name and Title)

Date:



Date:



According to the Paperwork Reduction Act of 1995, an agency may not conduct or sponsor, and a person is not required to respond, to a collection of information unless it displays a valid OMB control number. The valid OMB control number for this information collection is 0596-0082. The time required to complete this information collection is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and, where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or part of an individual's income is derived from any public assistance. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at 202-720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, 1400 Independence Avenue, SW, Washington, DC 20250-9410 or call toll free (866) 632-9992 (voice). TDD users can contact USDA through local relay or the Federal relay at (800) 877-8339 (TDD) or (866) 377-8642 (relay voice). USDA is an equal opportunity provider and employer.

The Privacy Act of 1974 (5 U.S.C. 552a) and the Freedom of Information Act (5 U.S.C. 552) govern the confidentiality to be provided for information received by the Forest Service.