TO: Commissioners Mital, Simpson, Helgeson, Manning and Brown
FROM: Dave Churchman, Power Operations Manager, and Patty Boyle, Generation Principal Project Manager
DATE: February 9, 2015
SUBJECT: Asset Sales – Smith Creek Hydro Facility
OBJECTIVE: Information Only

Issue

These materials are in response to Commissioner Brown’s request for information regarding the decision to pursue electric generating asset sales generally, and the Smith Creek Hydro Facility specifically.

Approximately two years ago at the direction of the Risk Management Committee staff embarked on a portfolio review with two primary goals: 1) to more closely align EWEB’s energy needs with its energy supply in order to moderate the volatile negative revenue impacts resulting from a falling wholesale power market; and 2) explore generation asset sale opportunities to improve the financial condition of the organization in support of EWEB’s ongoing efforts to offer more competitive electric rates to our customers. As a result of that process staff recommended investigating the viability of selling the Smith Creek Hydro Project because it was not needed to serve load and increased EWEB’s surplus energy during the traditionally low value spring runoff months. Additionally, because it is located far from EWEB’s other hydro assets, it presents unique costs and challenges to operate and maintain.

Background

The Smith Creek Project is a 38 MW plant located in the northern panhandle region of Idaho near the Canadian border. The project was originally developed and licensed until 2037 by Smith Falls Hydropower and financed by Westinghouse. EWEB has been involved in the project since development, first as the energy off-taker and subsequently the owner. EWEB’s energy off-take agreement included a first right of refusal to purchase the plant, which it exercised in 1993. The project and FERC license (was transferred to EWEB in late 2001. Annual generation from Smith Creek is estimated at 9 aMW, although this energy is predominantly generated during spring months.

EWEB’s projected 2015 retail load is 285 aMW, while the total available resources to serve that load are 340 aMW in firm resources and an additional 58 aMW in non firm-resources. This means EWEB has an average surplus of 45 aMW on an annual firm basis and significantly more annually on an expected basis. EWEB has, and will continue to have significant surplus firm and non firm
resources, until the mid to late 2020’s. Considering peak needs, when firm supply is not as strong, production at the Project has typically been offline because the creek supplying water to the turbines is either frozen or not sufficient to meet minimum flow requirements.

The graph below provides a visual representation the project’s generation compared to retail load and all other sources of surplus generation.

Surplus power is sold in the wholesale markets by the Power Operations Department, guided by the Risk Management Policies put in place by EWEB management and the Board. These policies help protect ratepayers from large swings in power value in the 1-5 year timeframe but do not mitigate the exposure to long-term prices changes or operational risk such as generator failure. Additionally, being an owner/operator requires resources throughout the organization such as Engineering and Environmental to manage the day-to-day operations and long term maintenance of those resources.

The most recent update to the Long-Term Financial Plan as presented to the Board in October 2014, identified debt service coverage below its target in all scenarios for the period of 2017-2021. Selling as Smith Creek allows the proceeds to be used to defease any outstanding debt on the resource which will positively impact debt service coverage for the periods in which outstanding debt exists. Proceeds above the amount required to defease the debt can then contribute to the other financial initiatives as directed by the Board.

**Discussion**

In 2013, staff in the Power and Strategic Planning department completed an analysis to determine if there were opportunities to restructure the resource portfolio to decrease the long-term financial and operational risk associated with surplus resources. The highest level goal that results in risk reduction is the alignment of power supply with power need. Each resource (owned or contracted) was evaluated on the following criteria.
- Portfolio fit from a power and regulatory standpoint
- Legal or regulatory restrictions to sale
- Relationship to the BPA contracts
- Resource cost/ability to have a positive impact on EWEB’s financial condition
- Perceived marketability
- Perceived complexity to sell

Based on that evaluation, the Smith Creek Project was identified as the strongest resource candidates for portfolio restructuring. Some of the characteristics that stood out in this determination include the following:

- Spring-heavy generation added to extreme spring surplus with little and sometimes no generation in late summer and winter peaks when the loads/need are higher.
- Ownership structure (EWEB-only) made it less complex to sell
- Locational issues and level of contract employees made labor/maintenance savings more direct
- EWEB was present during the building of the plant and has had a relationship with the project throughout its life, leading to good data availability and simpler risk/counterparty structure
- Outstanding debt on asset made it a clear lever for the DSC financial metric
- Low environmental impacts of the project
- Reduced perceived complexity to sell and increased perceived marketability

Based on this evaluation, a request for proposal to purchase the Smith Creek Hydro power facility was issued in 2014.

In order to prepare to issue the RFP, EWEB contracted with HDR Engineering Inc. to complete a Condition Assessment Report and separately, a financial analysis of expected market value. HDR found the plant to be in good condition, with a few minor recommendations for improvements and additional inspection of the penstock. The penstock was subsequently inspected and the information shared with bidders.

The RFP to purchase the facility was issued in May 2014 accompanied by the Smith Creek Project Manual, attachment A to this memo. Although not required to be compliant with Oregon Public Purchasing laws, staff believed that a competitive process by which a broad range of interested parties had the opportunity to bid on the plant would result in the highest value for EWEB. The RFP included an extensive project manual and supporting contracts and documents to ensure that bidders had as much information as possible to submit an informed bid. Interested parties were invited to tour the plant and facilities in the early summer while the plant was in operation.

Following the plant tours and after responding to follow-up questions, EWEB received multiple bids for the plant and has worked with several of them to provide access to the plant in order to complete more detailed engineering level inspections. Throughout the fall of 2014, EWEB continued to support the bidders in their due diligence to develop a best and final offer. Final offers are currently being evaluated by staff representing Power and Strategic Planning, Financial Services and Power Operations.
When complete, Staff will return in executive session to make a recommendation to proceed or not with the sale.

**TBL Assessment**

Because this transaction would dispose of an asset, no TBL has been completed.

**Requested Board Action**

This memo is for informational purposes only. Questions regarding this effort can be directed to Dave Churchman or Patty Boyle.
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GENERAL DESCRIPTION

General Data

License Issued April 10, 1987, Expires March 31, 2037
FERC Dam Number: 08436-01-01
USGS Quad Map: Smith Falls
Lat/Long: 48.929746, -116.656008 (Diversion)
Completion Date: 1990
Minimum Flow Required: 27 cfs
Reservoir (Run of River): 2 ac; Maximum Pool 3442 ft, Normal Pool 3440 ft;
Storage 7 ac-ft
Safety: Low Hazard, EAP Exempt
Generating Units: 3 Horizontal Pelton
Water Right: 370 cfs
Original Licensee: ID Natural Energy
Transfer to EWEB: 50-31-2000

EWB is selling the Project on an "AS-IS" basis. All potential Proposers will be afforded a reasonable opportunity to inspect the physical condition of the Project, as well as its maintenance and performance records, as set forth in this RFP. Proposers shall be responsible for conducting and relying upon its own examination of the Project prior to making a Proposal. Each Proposal shall be based solely on the Proposer's own examination of the condition and performance Project and not on any other representations, statements or assertions concerning the Project made by any other person. The Finalist selected by EWEB to be awarded a contract will have a reasonable opportunity to conduct further inspections of, and due diligence on, the Project prior to executing a final purchase agreement. Aside from any required disclosure of known defects, the final agreement for the purchase of the Project will not include any express or implied warranties, covenants or representations concerning the present or future condition or performance of the Project."

Important Note: All questions regarding the project during the RFP process MUST go through the Purchasing office at this point, so please be sure to contact the RFP Purchasing Analyst, Sandra Hahn at 541-685-7163 or
Please refrain from contacting other EWEB associates, departments, or the personnel at Smith Creek.

LOCATION

Address: 22176 Westside Rd, Bonners Ferry, ID 83805

The Smith Creek Hydro-Generation Facility is located in the northern panhandle region of Idaho, about 4 miles southwest of Porthill, Idaho, near the Canadian Border. It lies near the town of Bonners Ferry, in the Kaniksu National Forest.

The location can also be viewed on GoogleEarth, using the following coordinates:
   Longitude: -116.421598   Latitude: 48.827012

Project Origination

The Smith Creek project was originally developed in 1989 by Smith Falls Hydropower of Utah and financed by Westinghouse. EWEB has been involved in the project since development, first as the energy off-taker and subsequently the owner. EWEB’s energy off-take contract included a first right of refusal to purchase the plant which it exercised in 1993. The title, the project, and the FERC licenses were transferred to EWEB in late 2001.

Project Condition

In February 2014 HDR Engineering, Inc completed a Condition Assessment Report for the Project. The report, in its entirety has been included as Exhibit A – HDR Condition Report, and is summarized here. EWEB intends to sell the project as described below, in its entirety, to one buyer.
Smith Creek Hydroelectric Project
Idaho
General Location Map
FEATURES

Diversion Structure

The Project includes a 12 foot-high, 95 foot wide reinforced concrete gravity diversion dam with 3 sluice gates, trash racks, fish screens, a fish bypass, with very little storage capacity. The top of the dam is at elevation 3,440 feet msl.
Fish Ladder

Diversion Dam with New Trash Rack
Penstock
A reinforced concrete intake structure is located at the left abutment and connects to an approximately 27,400 foot-long buried steel penstock that varies from 57-inches to 72-inches in diameter. There is a 700-foot-long, 14-foot-wide access road from Forest Service road #281 to the diversion structure and entrance to the Penstock.
Unit 1 and 2 Typical Penstock Bifurcation for Upper and Lower Nozzle Flow Diversion

Typical Unit Penstock Penetration into Powerhouse

Unit 1 Turbine and Generator
Powerhouse

The penstock terminates in a powerhouse (124 foot long, 80 foot wide, 42 foot high) with a reinforced concrete substructure and metal frame superstructure that contains three Pelton-type generating units with a static head of 1,583 ft.

<table>
<thead>
<tr>
<th>Units 1 and 2 - Andritz VAtech Hydro</th>
<th></th>
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<tbody>
<tr>
<td>Type</td>
<td>Pelton</td>
</tr>
<tr>
<td>Turbine Runner Serial No.</td>
<td>1010 and 2020 (2007)</td>
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<td>Rated Flow &amp; Net Head</td>
<td>170.3 @ 1407.k ft</td>
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<tr>
<td>Rated Trubine Shaft Output</td>
<td>23870 HP</td>
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<tr>
<td>Rated Speed</td>
<td>514 RPM</td>
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<td>Capacity</td>
<td>18.0603 MW</td>
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</table>

<table>
<thead>
<tr>
<th>Unit 3 Ateliers Bouvier</th>
<th></th>
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<tbody>
<tr>
<td>Ref:</td>
<td>1989/9.1.008.00</td>
</tr>
<tr>
<td>H:</td>
<td>480 m</td>
</tr>
<tr>
<td>Q:</td>
<td>0.546 cms</td>
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<tr>
<td>P:</td>
<td>2233 kW</td>
</tr>
<tr>
<td>N:</td>
<td>1200 rpm</td>
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<tr>
<td>Capacity</td>
<td>2.15</td>
</tr>
</tbody>
</table>

A 62-foot-wide, 30-foot-long tailrace, at an elevation of 1,840.47 feet msl, discharges water into Smith Creek above Smith Falls.
Substation

The substation at the project consists of an SF6 115kV breaker, a single generator step up transformer, and associated overhead bus work with associated air switches and instrument transformers. The substation is surrounded by chain link fencing. The Project substation connects to 30 miles of 115-kV transmission line that terminates with the Bonneville Power Administration Bonners Ferry substation. The sale includes the transmission line.
Transmission Line

The 30 mile Smith Falls (transmission) Line (115kV), is an integral part of the Project and included in the sale. Most of the structures are configured in a pole-top delta configuration, with a vertical post insulator and two horizontally opposed post insulators. The majority of the transmission line route includes a 14.4 kV distribution under build owned by Northern Lights Electrical Cooperative. Northern Lights has contracted with EWEB for up to 3 MW of capacity on the transmission line for $21,000 per year, with additional load capacity above the limit allowed for an additional fee. See Exhibit B – NLI Contract for a copy of the transmission agreement with Northern Lights, as well as Exhibit C – NLI Joint Use of Pole Agreement. Total capacity of the line is currently rated for 76 MVA in the summer months and 119 MVA in the winter.

Access along the transmission line is good; the great majority being adjacent to existing road right of way. Project staff have generally performed tree trimming in low-risk/low-height situations. All other vegetation management is contracted out to local contractors. NERC related tree trimming was partially completed in 2013, with the remaining work scheduled for completion in the summer of 2014. Approximately 15 miles of the 30 mile transmission line is over farmland with no trees or shrubbery.
The most recent pole inspection was completed in 2010, with no notable findings and no internal decay detected. Testing included visual inspection of poles and attached hardware, sampling to determine effects from insect damage or decay, and treatment where required. There is a current project to relocate a tower at the crossing of the Kootenai River adjacent to the plant, which has shown signs of guy wire anchor erosion.

The Smith Creek Project is in full compliance with NERC regulations, as they apply to EWEB. Any future owner will be responsible for all regulatory compliance.
Real Estate

Four parcels of land are included in the sale. Parcels 1-3 are located at the powerhouse and the fourth is adjacent to the Bonneville Power Administration’s Bonners Ferry Substation.

Parcel 1 – 2.7 acres. SEC 26 T65N R2W LOT 1, Smith Falls Subdivision. This small parcel contains the powerhouse, substation, and terminus of the penstock. It is bordered by Parcel 2 to the north and Parcel 3 to the south.

Parcel 2 – 78.54 acres. SEC 26 T65N R2W LOT 2 Smith Falls Subdivision. This large parcel contains the first portion of the transmission line, the powerhouse and substation access road, a portion of the penstock immediately upstream of the plant, before it enters the national forest, the equipment storage yards, an equipment storage shed/barn, a fuelling station, and the remaining residential garage. It extends from West Side Road on the eastern side to Smith Creek Road on the western side. This parcel also contains timber.

Parcel 3 – 36.38 acres. SEC 26 T65N R2W Tax 5. This medium parcel is located to the south of the powerhouse, with Smith Creek running through the middle. It abuts national forest to the west and south, and also contains timber.

Parcel 4 - 1.45 acres. SEC 35 T62N R1E Tax 16 Less Tax 21. This parcel contains the switchyard near Bonners Ferry and is adjacent to Smith Creek substation.

Other Fixed Assets

Bridge crane with electric gantry and trolley travel, modernized in 2006.

- 50 Ton manual hoist
- 7 Ton electric auxiliary hoist
**Equipment List and Rolling Stock**

Below is a potential list of equipment that will be included in the purchase of the Project. The list below includes more costly and/or specialty items and is not an all-inclusive representation of items included in the sale. In addition, an extensive spare parts inventory exists for the plant, including protective relay, automation, incidental mechanical and electrical components for operation of the facility. (As part of the operations and maintenance contract, Dominion Power Services has provided certain tools and equipment used in the day to day operation of the project. These items are itemized in Exhibit D – Dominion Equipment List and are NOT included in the sale.)

EWEB-Owned equipment included in the sale of the Project:

1. Kassbohrer Piston Bully 170D Snow Cat (1)
2. Spare turbine runners (2): Original Bouvier runners
4. Conex Storage Containers (2 each)
5. Welder (1)

**GENERATION**
The plant has a 38.5 MW nameplate capacity and a calculated capacity factor of 25% from EWEB operations. Actual hourly generation has been provided in Exhibit E of the Description Manual (per Attachment A of the RFP.) It’s important to note that EWEB has dispatched this plant primarily based on market conditions but is also influenced by BPA Oversupply Management Protocol and other operational and weather conditions. Calculation of the capacity factor, including all hours when the plant was available to generate energy, would result in a higher calculated capacity factor. It is also important to note that in 2007, the two original Bouvier turbine runners were replaced. The resulting increase in generation from 2008 forward should be factored into the analysis of this Project.

### Total MWH's of Production

<table>
<thead>
<tr>
<th>Year</th>
<th>Jan</th>
<th>Feb</th>
<th>Mar</th>
<th>Apr</th>
<th>May</th>
<th>Jun</th>
<th>Jul</th>
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<th>OCT</th>
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<td>578</td>
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<td>6</td>
<td>2364</td>
<td>14457</td>
<td>15443</td>
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<td>3</td>
<td>1217</td>
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<td>1528</td>
<td>23</td>
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<td>2010</td>
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<td></td>
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<td>682</td>
<td>287</td>
<td>0</td>
<td>2464</td>
<td>605</td>
<td>3786</td>
<td>570</td>
<td>0</td>
<td>97</td>
<td>265</td>
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<td>2012</td>
<td>HLH</td>
<td>583</td>
<td>25</td>
<td>477</td>
<td>3715</td>
<td>15884</td>
<td>11268</td>
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<td>1051</td>
<td>0</td>
<td>36</td>
<td>1559</td>
<td>957</td>
</tr>
</tbody>
</table>
Dominion Power Services, Inc. (Outsourced Operations Management) - EWEB presently contracts with Dominion Power Services (DPSI) to perform operation and maintenance services at the Project. DPSI has operated the Project since its construction in 1989. The current contract will expire September 6, 2017.

<table>
<thead>
<tr>
<th>Description</th>
<th>Note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yearly Labor Fee</td>
<td>Fixed yearly fee for personnel to operate and maintain facility, including operators, supervisor, administration etc.).</td>
</tr>
<tr>
<td>Overtime for Economic &amp; Environmental Unit Shutdowns</td>
<td>Estimation based on 2011 operator overtime hours for BPA required shutdowns using contractor operator overtime rate.</td>
</tr>
<tr>
<td>5 Year Escalation</td>
<td>Yearly Labor Rate. Escalations estimated at 2% and to be adjusted by yearly CPI percentage per contract.</td>
</tr>
<tr>
<td>Parts &amp; Materials</td>
<td>Estimated based on 3 year history</td>
</tr>
<tr>
<td>10% Contingency</td>
<td>Unanticipated maintenance and EWEB requested overtime</td>
</tr>
</tbody>
</table>

DPSI has over 20 years of experience operating the facility systems in a safe and efficient manner. They are also very familiar with environmental considerations, and they have developed positive relationships with the public and private agencies in the area, including the Forest Service and the local fisheries agencies. The two full time operators for the facility are residents of the nearby town of Bonners Ferry and each have SCADA terminals at their residence to receive alarms both through SCADA and via telephone.

DPSI's safety practices and safety record has been exceptional, mitigating risk of costly personal injury of operating staff. In DPSI’s over 20 year history operating the Project, EWEB has maintained a clean record in terms of FERC, personnel safety, public safety, and environmental violations. DPSI has long term, detailed familiarity with the facility systems, mitigating the risk of costly equipment damage property due to improper operations.

Please review Exhibit F – Dominion Contract and Section Four of Exhibit A – HDR Condition Report for more detail regarding this contract. At the buyer’s preference, EWEB will either provide notice to terminate that contract upon transfer and buyer may negotiate directly with DPSI, or, where allowable within EWEB’s contract with DPSI, negotiate an assumption agreement with the contractor.

**Other Miscellaneous Contracts**
**Bonneville Power Administration** – Emergency Transmission Tap Agreement to establish a temporary connection between BPA’s North Bench Substation and the Bonners Ferry-Smith Creek 115 kV line for planned maintenance and emergency purposes. Please refer to Exhibit G – BPA Tap Agreement for a copy of the executed contract.

**Natural Resource Conservation Service (Snotel)** - The site, located at 988 Hidden Lake, measures snow water content, accumulated precipitation, air temperature and snow depth. The hourly data is used to forecast yearly water supplies and other climate information. Please refer to Exhibit H – NRCS Snotel Contract for a copy of EWEB’s current agreement.
IMPORTANT NOTE: IT IS THE BUYER’S RESPONSIBILITY TO UNDERSTAND AND COMPLY WITH THE REGULATORY AGENCY STANDARDS APPLICABLE TO THEIR OWN ORGANIZATION.

Federal Energy Regulatory Commission (FERC)

FERC is an independent agency that regulates the interstate transmission of electricity, natural gas, and oil. They license and inspect private, municipal, and state hydropower projects, such as the Smith Creek Project.

- For a detailed inspection of the FERC data, please refer to the following link:
  
  https://ferconline.ferc.gov/FERCOnline.aspx

- For historical information, click on “eLibrary” at left of page. Choose a date range, insert FERC license number P-8436 in the “Docket Number” field, and click on “Submit”.

- To obtain notifications of new postings, register at “eSubscription”.

- For a summary of FERC compliance, as of February 15, 2013, please refer to Exhibit I – FERC Compliance.

Low Hazard Dam classification - EWEB has been afforded an annual exemption from certain regulations due to the Project’s low hazard classification. (Indicated on Exhibit J – FERC Report Indicating Low Hazard Status.)

Safety of Dam - Please refer to Exhibit K – Dam Safety Report for the latest FERC safety inspection report from 2010. (The most recent report will be made available when published by FERC.)

North American Electric Reliability Corporation (NERC)

NERC is a nonprofit corporation based in Atlanta, Georgia, whose major responsibilities include working with all stakeholders to develop standards for power system operation, monitoring, and enforcing compliance with those standards, assessing resource adequacy, and providing educational and training resources as part of an accreditation program to ensure power system operators remain qualified and proficient. Smith Creek is currently integrated in EWEB’s NERC Compliance program and is in compliance with all standards.

U.S. Forest Service Permits
**Special Use Permit** - The Forest Service manages over 912 million acres of national forests and grasslands that comprise the National Forest System (NFS). The Agency’s special-uses program authorizes users on NFS land that provide a benefit to the general public and protect public and natural resources values. The Project is partially located on NFS land (the diversion area), therefore, EWEB has complied with SUP (the Special Uses Program).

A copy of EWEB’s Special Use Permit is attached as Exhibit L – Special Use Permit.

**Flushing Flow Requirement** – Stemming from Article 103 of EWEB’s FERC license, the intent of this requirement is to imitate natural processes (high spring flows) in order to keep sediments, gravels, and material moving through the system. Please refer to Exhibit M – Flushing Flow Requirement and Exhibit N – Flushing Flow Decision Chart.
Over the next 5 years, certain Capital and Operating improvements are scheduled for the Smith Creek Project. The following provides a description, schedule and cost estimate of those projects. The cost estimates provided are preliminary estimates based on EWEB practices and should be verified by bidders based on their own experience.

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
<th>Cost Estimate</th>
<th>Year</th>
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</thead>
<tbody>
<tr>
<td>Penstock Inspection</td>
<td>Dewater the penstock and complete inspection. Inspect/refurbish vacuum valves and cathodic measurement stations.</td>
<td>$30,000</td>
<td>2014</td>
</tr>
<tr>
<td>Crane Refurbishment</td>
<td>Disassemble hook swivel for inspection and greasing and add grease fitting. Modify crab stops.</td>
<td>$9,900</td>
<td>2014</td>
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<tr>
<td>PLC/HMI Power plant</td>
<td>Ensure all needed spares are on hand and in good condition. Perform assessment to installed system.</td>
<td>$10,200</td>
<td>2014</td>
</tr>
<tr>
<td>Transmission Pole</td>
<td>Repair/replace tower 391 guy wires.</td>
<td>$47,000</td>
<td>2014</td>
</tr>
<tr>
<td>Transmission Vegetation</td>
<td>Perform right of way clearing on balance of transmission line.</td>
<td>$40,000</td>
<td>2014</td>
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<tr>
<td>Management</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>Generator PD Couplers</td>
<td>Install couplers on units 1 &amp; 2 to allow for partial discharge monitoring.</td>
<td>$90,000</td>
<td>2015</td>
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<tr>
<td>Medium Voltage</td>
<td>Install covers on underside would increase security and safety of facility.</td>
<td>$5,000</td>
<td>2015</td>
</tr>
<tr>
<td>Outdoor Cable Tray Improvements</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Unit 2 Heat Run</td>
<td>A heat run would verify adequate cooling to supply up to the designed nameplate instead of having a 19MW limit.</td>
<td>$10,000</td>
<td>2015</td>
</tr>
<tr>
<td>IR Monitoring</td>
<td>Additional condition assessment and effective way to track potential issues in low and medium voltage system.</td>
<td>$5,000</td>
<td>2015</td>
</tr>
<tr>
<td>High Voltage Warning Signs</td>
<td>Signage needs upgraded to current OSHA code.</td>
<td>$1,500</td>
<td>2015</td>
</tr>
</tbody>
</table>
Additionally, there are Capital and Operating improvements that are contemplated for 2019 or beyond. Many of these projects are discretionary and will be completed based on operational and financial needs criteria. The following table provides a brief description of those projects.

<table>
<thead>
<tr>
<th>Title</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Diversion Improvements</td>
<td>Investigate and implement solutions to reduce entry of sand and gravel through the penstock.</td>
</tr>
<tr>
<td>Equipment Repair and Storage Shop</td>
<td>Construct steel building on lower property for storage of large sized spare equipment and maintenance equipment. Will also provide area for repair and maintenance outside of power plant generator floor.</td>
</tr>
<tr>
<td>Penstock Refurbishment and Protection</td>
<td>Replace interior protective coating and perform minor repairs as identified in inspection.</td>
</tr>
<tr>
<td>Unit 3 Runner Replacement</td>
<td>Unit 3 Runner is reaching the end of its economic life and will be evaluated for replacement.</td>
</tr>
<tr>
<td>Voltage Regulator Upgrade</td>
<td>Upgrade the Voltage Regulator to digital.</td>
</tr>
<tr>
<td>Communication and Power Upgrades</td>
<td>Complete a condition assessment to optimize replacement timing.</td>
</tr>
<tr>
<td>Fish Ladder Extension</td>
<td>Addition of concrete apron on lower ladder segment to mitigate erosion.</td>
</tr>
<tr>
<td>TSV Replacement</td>
<td>End of life replacement.</td>
</tr>
</tbody>
</table>
EXHIBITS

Exhibit A – HDR Condition Report
Exhibit B – NLI Power Transfer Agreement
Exhibit C – NLI Join Use of Pole Agreement
Exhibit D – Dominion Equipment List
Exhibit E – Hourly Generation by Unit
Exhibit F – Dominion Contract
Exhibit G – BPA Tap Agreement
Exhibit H – NRCS Snotel Contract
Exhibit I – FERC Compliance
Exhibit J – FERC Report Indicating Low Hazard Status
Exhibit K – Dam Safety Report
Exhibit L – Special Use Permit
Exhibit M – Flushing Flow Requirement
Exhibit N – Flushing Flow Decision Chart