

Major Capital Projects¹ - End-of-Project Target Performance

Q4 2020

| Project | Description | Direct Capital (\$M) ² | | | In-Service Date | |
|---|---|-----------------------------------|------------------|---------------------|-----------------|----------|
| | | Authorized | Forecast | Actual ³ | Authorized | Forecast |
| Transmission | | | | | | |
| Sustain Steel Program Defective Damper Replacements | Replace approximately 1,700 miles of defective PPI spacer dampers. | \$ 34.4 | \$ 32.7 | \$ 32.3 | 9/30/14 | 9/30/20 |
| Fleet Mobile Equipment Replacement FY17-19 | Heavy duty and specialized vehicle replacement program for FY17-19 | \$ 16.4 | \$ 16.4 | \$ 15.4 | 4/1/20 | 9/1/21 |
| Ross - Schultz Fiber Replacement | Replace the obsolete and limited 36 strand fiber with standard 72 strand fiber. | \$ 34.0 | \$ 39.4 | \$ 31.1 | 9/15/18 | 12/21/21 |
| MREDI VHF System Replacement | Replace and upgrade the existing VHF radio system. | \$ 96.2 | \$ 92.8 | \$ 37.0 | 9/1/26 | 10/4/25 |
| Puget Sound Area Northern Intertie (PSANI) | Install a 500/230 kV transformer bank addition at Raver Substation. | \$ 56.4 | \$ 64.9 | \$ 54.7 | 9/30/16 | 3/1/21 |
| Operational Multi-Gigabit Ethernet Transport (OMET) | Communications upgrade and replacement to ensure adequate capacity and compatibility for emerging requirements. | \$ 43.5 | \$ 28.4 | \$ 28.2 | 9/30/17 | 12/31/20 |
| Spare Transformers for Hub Wind Sites | Add a spare 500/230 kV single phase transformer at John Day, Rock Creek, Slatt and Central Ferry substations. | \$ 21.4 | \$ 23.9 | \$ 21.9 | 4/1/19 | 7/1/21 |
| Quenett Creek Substation L0380 | Construct new substation and associated line work to serve additional N. Wasco PUD load. | \$ 44.9 | \$ 51.4 | \$ 45.7 | 6/24/22 | 6/24/22 |
| Wheatridge Wind | Interconnection for NextEra's Wheatridge wind project. | \$ 10.1 | \$ 8.2 | \$ 4.9 | 12/31/19 | 10/30/20 |
| Fairview Reactor and Transformer | Install a reactor to address high voltages on the Fairview 230 kV bus and replace an aging transformer. | \$ 14.3 | \$ 10.9 | \$ 1.9 | 12/31/22 | 12/31/22 |
| Mission Critical IT Infrastructure | Completely replace the Dittmer Data Center IT infrastructure. | \$ 15.9 | \$ 13.8 | \$ 6.1 | 12/30/22 | 6/30/22 |
| Anaconda-Dixon-Silverbow Transformer | Install a transformer at Dixon, move an existing transformer from Dixon to Anaconda and retire the transformer at Silver Bow. | \$ 14.0 | \$ 10.5 | \$ 6.0 | 12/31/20 | 9/1/23 |
| Badger Canyon II | Interconnection for Badger Canyon II wind project. | N/A ⁴ | N/A ⁴ | \$ - | 3/11/22 | 3/11/22 |
| Schultz-Wautoma 500kV Series Caps | Install series capacitors | N/A ⁴ | N/A ⁴ | \$ - | 3/31/22 | 3/31/22 |
| Steel Lines Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 33.7 | \$ 33.7 | \$ 22.0 | 9/30/21 | 9/30/21 |
| Wood Pole Lines Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 33.7 | \$ 33.7 | \$ 19.4 | 9/30/21 | 9/30/21 |
| Access Roads Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 22.5 | \$ 22.5 | \$ 9.8 | 9/30/21 | 9/30/21 |
| Land and Land Rights Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 4.5 | \$ 4.5 | \$ 1.2 | 9/30/21 | 9/30/21 |
| AC Substations Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 78.7 | \$ 78.7 | \$ 33.5 | 9/30/21 | 9/30/21 |
| Line Ratings Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 4.3 | \$ 1.8 | \$ 0.4 | 9/30/21 | 9/30/21 |
| DC Substations Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 22.5 | \$ 22.5 | \$ 14.2 | 9/30/21 | 9/30/21 |
| System Telecommunications Sustain Program | Two-year asset replacement plan based on asset strategy analysis. | \$ 22.5 | \$ 9.8 | \$ 2.5 | 9/30/21 | 9/30/21 |
| Power Systems Control Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 29.0 | \$ 29.0 | \$ 8.9 | 9/30/21 | 9/30/21 |
| System Protection and Control Sustain Program | Two-year asset replacement plan based on asset strategy analysis. | \$ 33.7 | \$ 33.7 | \$ 7.4 | 9/30/21 | 9/30/21 |
| Control Center Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 9.0 | \$ 10.5 | \$ 4.5 | 9/30/21 | 9/30/21 |
| TEAP Tools Sustain Program FY20-21 | Two-year asset replacement plan based on asset strategy analysis. | \$ 5.8 | \$ 8.4 | \$ 2.7 | 9/30/21 | 9/30/21 |

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| | | Authorized | Forecast | Actual ³ | Authorized | Forecast |
| Federal Hydro | | | | | | |
| Grand Coulee and Hungry Horse SCADA Replacement | Replace SCADA systems at Grand Coulee and Hungry Horse. | \$ 51.9 | \$ 70.6 | \$ 69.4 | 3/28/16 | 12/31/20 |
| Grand Coulee Transformer Replacements G11- | Replace 24 single-phase transformers in the Right Powerhouse. | \$ 33.3 | \$ 57.2 | \$ 0.8 | 3/20/19 | 1/31/26 |
| Grand Coulee - Keys Pump Generating Station - Reliability | Replacements and upgrades to maintain current station capability. | \$ 66.3 | \$ 72.1 | \$ 28.9 | 9/30/24 | 3/31/24 |
| Grand Coulee Firehouse | Build a stand-alone fire station to replace the facility currently housed in the pump-generating plant. | \$ 15.1 | \$ 17.6 | \$ 11.2 | 5/14/18 | 4/1/21 |
| Grand Coulee Left and Right Powerhouse Cranes | Replace the four bridge cranes in the left and right powerhouses. | \$ 25.2 | \$ 24.0 | \$ 0.4 | 7/30/20 | 6/30/23 |
| Grand Coulee Third Powerhouse Roof | Replace the third powerhouse roof, including seismic, lighting and safety upgrades. | \$ 14.2 | \$ 15.4 | \$ 9.2 | 12/29/19 | 12/31/20 |
| Chief Joseph CO2 System Replacement | Replace and upgrade the CO2 fire protection system. | \$ 10.9 | \$ 10.1 | \$ 7.2 | 4/30/21 | 3/17/21 |
| McNary Governor Replacement | Upgrade the 14 governors in the McNary powerhouse with digital controls. | N/A ⁴ | N/A ⁴ | \$ 2.7 | 2/22/24 | 9/30/25 |
| McNary Exciters Upgrade | Replace the exciters to ensure reliability and support the other electrical powertrain | N/A ⁴ | N/A ⁴ | \$ 1.1 | 8/24/24 | 9/30/25 |
| McNary Powerhouse Controls Upgrade | Replace the generally original controls to improve reliability and performance. | N/A ⁴ | N/A ⁴ | \$ 1.6 | 5/26/24 | 7/30/25 |
| McNary Turbine Design and Replacement | Replace turbine runners 1 - 14 and rewind units 5, 13 and 14. | \$ 533.1 | \$ 498.5 | \$ 10.2 | 10/7/33 | 6/30/31 |
| McNary Intake Gantry Crane 5 | Replace the 1953 vintage intake gantry crane. Upgrade the hoist capability to match current needs. | N/A ⁴ | N/A ⁴ | \$ 0.7 | 3/8/22 | 10/31/22 |
| John Day Turbine Hub Upgrades | Rebuild and upgrade up to five turbine runner hubs. Four additional hubs may be rebuilt under a future amendment to this project. | \$ 40.9 | \$ 34.2 | \$ 12.9 | 6/30/19 | 7/17/22 |
| John Day SQ Board Replacements | Replace SQ and SU electrical boards, switchgear and related equipment. | \$ 17.0 | \$ 16.5 | \$ 10.5 | 2/27/23 | 8/1/22 |
| John Day Control Room Fire Protection | Upgrade fire protection, ventilation and egress paths in the control room and powerhouse. | N/A ⁴ | N/A ⁴ | \$ 2.9 | 11/14/23 | 10/1/23 |
| The Dalles Transformer Replacements | Replace 7 transformer banks - TA, T1, T3, T5, T6, T7, T8 | \$ 41.9 | \$ 35.1 | \$ 33.6 | 7/2/20 | 6/4/21 |
| The Dalles Emergency Gantry Crane Replacement | Replace the emergency intake gantry crane. | \$ 19.4 | \$ 26.1 | \$ 1.5 | 2/1/23 | 9/1/23 |
| Bonneville Powerhouse 1 Main Unit Breakers and Station Service | Replace oil-filled original equipment breakers and reconfigure and modernize the station service. | \$ 46.4 | \$ 36.5 | \$ 32.5 | 3/15/19 | 10/1/23 |
| Ice Harbor Turbine Runner Replacement | Replace poor condition turbine runners in units 1, 2 & 3 with a more fish-friendly design. | \$ 113.8 | \$ 102.6 | \$ 80.4 | 3/31/21 | 1/31/24 |
| Ice Harbor Stator Winding Replacements | Replace the stator windings for units 1,2 and 3. | \$ 24.1 | \$ 27.2 | \$ 15.7 | 3/31/21 | 6/28/24 |
| Lower Granite DC System and LV Switchgear | Upgrade DC system, governor oil pump system and low voltage switchgear. | \$ 11.9 | \$ 9.6 | \$ 2.0 | 9/25/23 | 9/30/22 |
| Hungry Horse Crane Replacements | Replace two powerhouse bridge cranes, forebay gantry crane, machine shop crane and valve house crane. | N/A ⁴ | N/A ⁴ | \$ 1.0 | 4/30/21 | 8/1/23 |

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| Federal Hydro - continued | | | | | | |
| Detroit Transformers | Replace and relocate 6 transformers | N/A ⁴ | N/A ⁴ | \$ 0.6 | 12/2/24 | 12/2/24 |
| Black Canyon Third Generating Unit | Add a third generating unit at Black Canyon. The capacity of the unit will be between 10 and 15 MW. | N/A ⁴ | N/A ⁴ | \$ 7.2 | N/A | N/A |
| Foster Electrical Reliability Upgrades | Replace the station service distribution equipment, emergency generator and air compressors. | N/A ⁴ | N/A ⁴ | \$ 2.4 | 10/2/23 | 3/1/23 |
| Foster Turbine and Generator Rehabilitation | Rehabilitate turbine and generators on two units. | N/A ⁴ | N/A ⁴ | \$ 1.5 | 9/11/24 | 9/11/24 |

| | | | | | | |
|-------------------------------------|---|------------------|------------------|--------|----------|----------|
| Fish & Wildlife | | | | | | |
| Steigerwald Floodplain Reconnection | Reconnect 900 acres of the Steigerwald Wildlife Refuge with the Columbia River. | N/A ⁴ | N/A ⁴ | \$ 8.0 | 11/30/22 | 11/30/22 |

| | | | | | | |
|-------------------|---|---------|---------|---------|----------|----------|
| Facilities | | | | | | |
| Ross HMEM Garage | Construct a Heavy Mobile Equipment Mechanic facility on the Ross Complex. | \$ 28.1 | \$ 25.0 | \$ 24.9 | 12/31/20 | 12/31/20 |

| Summary | | | |
|-----------------|-----------|----------------|-------------------|
| Transmission | \$ | 701.4 | \$ 682.1 |
| Federal Hydro | | 1,065.4 | 1,053.2 |
| Fish & Wildlife | | - | - |
| Facilities | | 28.1 | 25.0 |
| Total | \$ | 1,794.9 | \$ 1,760.3 |

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