

Major Capital Projects ^{1,4} - End-of-Project Target Performance					Quarterly Status Report - Q4 2024	
Project	Description	Direct Capital (\$M) ²			In-Service Date	
		Authorized	Forecast	Actual ³	Authorized	Forecast
Transmission						
Ross-Schultz Fiber	Replace the obsolete and limited 36 strand fiber with standard 72 strand fiber.	\$ 34.00	\$ 48.65	\$ 47.57	9/15/2018	12/20/2024
MREDI VHF System Replacement P01237	Replace and upgrade the existing VHF radio system.	\$ 96.20	\$ 158.22	\$ 85.44	9/1/2026	9/27/2029
Quenett Creek Substation L0380	Construct new substation and associated line work to serve additional N. Wasco PUD load.	\$ 44.90	\$ 56.06	\$ 46.76	6/24/2022	8/18/2028
Badger Canyon II G0559	Interconnection for Badger Canyon II wind project.	\$ 24.50	\$ 19.86	\$ 3.99	3/11/2022	6/30/2027
Schultz Wautoma 500kV Series Caps	Install series capacitors	\$ 52.90	\$ 45.18	\$ 44.35	3/15/2024	10/18/2024
Midway Ashe 230kV Double Circuit	230kV double circuit transmission line from Midway to Ashe Tap	\$ 31.20	\$ 15.67	\$ 10.61	3/31/2026	12/1/2025
Richland Stevens Dr 115kV Line	Rebuild existing 115kV transmission line, add additional line, rebuild substations	N/A	N/A	\$ 4.90		
Conkelley Substation Retirement	Retire the Conkelley substation	\$ 29.63	\$ 29.49	\$ 19.63	9/30/2025	12/31/2026
Columbia Basin Hydro G0560	To interconnect 500 MW to BPA's transmission system at the Grand Coulee 500 kV switchyard.	\$ 21.60	\$ -	\$ -	7/30/2026	
Columbia Falls Transformer Upgrade and Spare	To replace and upgrade the existing 115/34.5kV transformer bank with a new 3-phase transformer rated 37.5/50/62.5 MVA, as well as replace the existing spare with an upgraded transformer.	N/A	N/A	\$ 0.00		
Ross Station Service	Replacement of the Ross Substation Service	\$ 22.04	\$ 20.55	\$ 15.52	12/6/2026	12/4/2026
Carlton Sub PCB Bus Tie Addition	Add PCB and bus ties to the Carlton Substation	\$ 15.40	\$ 15.57	\$ 3.20	9/3/2024	1/26/2026
South Tri Cities Reinforcement	Execute the South Tri-Cities Reinforcement (including building of new Webber Canyon substation)	\$ 112.00	\$ 91.46	\$ 15.78	3/30/2025	12/31/2027
Big Eddy Station Service	Replacement of the Big Eddy substation station service	\$ 20.20	\$ 20.91	\$ 4.16	8/18/2028	8/18/2028
Longview Transformer Bank Addition	To install a new 230/115 kV Longview Transformer, bus breaker, and upgrade disconnects.	\$ 12.20	\$ 11.73	\$ 11.74	12/23/2022	8/30/2024
Longhorn Substation	Build new Longhorn Substation	\$ 235.00	\$ 195.40	\$ 149.70	12/2/2024	3/31/2025
Schultz Raver Series Cap	Install new capacitors at the Schultz Substation	\$ 62.60	\$ 48.27	\$ 0.05	12/31/2025	2/4/2028
G0585 G0645 Crider Valley Wind and Solar	Build the Crider Valley Substation to interconnect 513MW of renewable energy (wind and solar)	N/A	N/A	\$ -		
Grand Coulee 230kV CLR	To install a current limiting reactor at the GC 230 kV switchyard.	\$ 11.20	\$ 7.37	\$ 0.09	11/30/2025	9/24/2027
McNary 230 kV Section Bay Addition L0481	To add a new 230 kV section bay at the McNary dam.	\$ 27.50	\$ 22.52	\$ 21.23	12/24/2024	4/30/2025
McNary Paterson Tap L0405	To install a new 115kV bay at position 11 at McNary substation and installation of new 115kV line segments to existing line.	\$ 21.00	\$ 19.45	\$ 12.61	12/30/2024	4/30/2025
Bridge Substation	To provide and install a new 230 kV line	N/A	N/A	\$ 1.13		
Columbia Falls Kalispell-Kerr SONET RAS and TT Addition	Install fiber optic cable between the Kalispell and Kerr substations, and 22 miles of fiber between the Elmo and Hot Springs substations.	N/A	N/A	\$ 10.17		
Targhee Breaker Installation and Yard Expansion		N/A	N/A	\$ 2.18		
EGP - Buckley Substation	Replace existing Buckley GIS with new AIS 500kV Substation	N/A	N/A	\$ -		
EGP - West of Boardman	Build a New 500/230kV substation for additional 1000MW of UEC load	N/A	N/A	\$ -		
EGP - Bonanza Substation	Build a New 500/230/115kV hub substation in Central Oregon	N/A	N/A	\$ -		



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EGP - New La-Pine-Bonanza 23kV Line	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	N/A	N/A	\$ -		
Tier 1 EGP Big Eddy – Chemawa 500kV Rebuild	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	N/A	N/A	\$ -		
Tier 1 EGP Chehalis-Cowlitz Tap 230kV Rebuild	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	N/A	N/A	\$ -		
Tier 1 EGP Keeler 500kV Expansion/Transformer	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	\$ 36.00	\$ 2.26	\$ 0.21	3/31/2029	12/31/2027
Tier 1 EGP Pearl-Sherwood-McLoughlin	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	\$ 7.00	\$ 7.00	\$ 1.66	6/30/2025	5/29/2026
Tier 1 EGP PGE Keeler-Horizon	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	N/A	N/A	\$ 5.70		
Tier 1 EGP Rock Creek – John Day Upgrade	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	N/A	N/A	\$ 0.50		
Tier 1 EGP Ross-Rivergate 230kV Rebuild	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	N/A	N/A	\$ -		
Tier 1 EGP Schultz-Raver Reconductor	To bring planned renewable energy resources from the east-side to Western Washing and Oregon to meet clean energy targets due to State mandates, including all retails sales carbon neutral by 2030, and all retails sales being 100% renewable and non-carbon-emitting by 2045.	N/A	N/A	\$ -		
Tucannon River 115 kV Shunt Reactor	This is a compliance project. Project will keep the voltages at Tucannon River, Walla Walla and Dayton Substations at or below 1.0 PU for all non outage conditions and at or below 1.05 PU at least 25% of the time in general.	N/A	N/A	\$ 8.80		
ADD BANK 5 SPARE XFMR (P06297)	Replaces a system spare used in emergency response. Supports two 500/230kV transformer banks at Big Eddy in the event the failure of one phase.	N/A	N/A	\$ 0.02		
MCIT Replatforming	Final project of the MCIT Project to replace the legacy TT infrastructure. This project will roll our new infrastructure and platform services and deploy all application from the legacy environment to the new platform.	N/A	N/A	\$ 16.99		
Vancouver Control Center Total	Replacement of the Dittmer Control Center	\$ 947.90	\$ 901.30	\$ 92.65	8/28/2031	7/30/2031
Celilo SCM LAN Upgrade (P06161)	Enhance functionality, efficiency, and cyber security of the asset by moving to a virtualized environment.	N/A	N/A	\$ -		
FY24 Steel Lines Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 40.00	\$ 17.98	\$ 17.78	9/30/2024	9/30/2024
FY24 Wood Lines Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 51.00	\$ 38.94	\$ 38.08	9/30/2024	9/30/2024
FY24 Access Roads Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 19.50	\$ 24.99	\$ 25.40	9/30/2024	9/30/2024



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FY24 Real Property	Two-year asset replacement plan based on asset strategy analysis.	\$ 1.10	\$ 5.94	\$ 5.18	9/30/2024	9/30/2024
FY24 Subs AC Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 72.00	\$ 88.34	\$ 90.24	9/30/2024	9/30/2024
FY24 Line Ratings Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 5.00	\$ 5.43	\$ 5.39	9/30/2024	9/30/2024
FY24 DC Substation Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ -	\$ 3.18	\$ 2.96	9/30/2024	9/30/2024
FY24 System Telecom Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 36.00	\$ 38.93	\$ 28.88	9/30/2024	9/30/2024
FY24 PSC Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 20.30	\$ 46.25	\$ 45.89	9/30/2024	9/30/2024
FY24 SPC Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 13.90	\$ 22.74	\$ 23.28	9/30/2024	9/30/2024
FY24 Control Centers Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 20.30	\$ 15.74	\$ 15.77	9/30/2024	9/30/2024
FY24 TEAP Tools Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 2.00	\$ 4.01	\$ 3.60	9/30/2024	9/30/2024
FY24 Aircraft Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 9.00	\$ 13.33	\$ 13.14	9/30/2024	9/30/2024

Federal Hydro						
Albeni Falls // ALB Bridge Crane Rehabilitation	Rehabilitate bridge crane	N/A	N/A	\$ 1.00		
Libby // LIB Intake Gantry Crane	Replace Intake Gantry Crane	\$ 12.80	\$ 17.80	\$ 7.40	11/30/2022	6/3/2025
Libby // Libby Unit 6	Complete the sixth generating unit at Libby dam.	N/A	N/A	\$ 4.10		
Grand Coulee // GCL Units G11-G18 Transformer Replacements	Replace 24 single-phase transformers in the Right Powerhouse.	N/A	N/A	\$ 1.20		
Grand Coulee John W. Keys PGP // Keys PGP Reliability Replacements	Replacements and upgrades to maintain current station capability.	\$ 66.30	\$ 72.14	\$ 45.40	9/30/2024	9/30/2032
Grand Coulee // GCL Firehouse	Build a stand-alone fire station to replace the facility currently housed in the pump-generating plant.	\$ 15.10	\$ 17.60	\$ 17.30	5/14/2018	5/1/2024
Grand Coulee // GCL LPH/RPH Bridge Crane Replacements	Replace the four bridge cranes in the left and right powerhouses.	\$ 25.20	\$ 34.40	\$ 21.10	7/3/2020	7/29/2024
Grand Coulee // GCL LPH/RPH Cyclops Semi-Gantry Crane Replacement		N/A	N/A	\$ 21.10		
Grand Coulee // GCL K22 Transformer Replacement	Replace the bank of transformers associated with unit G22	N/A	N/A	\$ 5.00		
Grand Coulee John W. Keys PGP // PGP Crane Controls	Upgrade two cranes within the pump generating plant	N/A	N/A	\$ 0.11		
Chief Joseph // CHJ Intake Gantry Crane	Replace the intake gantry crane	\$ 19.20	\$ 19.20	\$ 13.00	1/31/2023	12/31/2024
Chief Joseph // CHJ Station Service Units	Rehabilitate the Station Service units.	\$ 12.80	\$ 19.98	\$ 10.00	9/30/2024	4/30/2027
Chief Joseph // CHJ Powerbus Units 1-16	Refurbish and replace portions of the power bus	N/A	N/A	\$ 1.20		
Chief Joseph // CHJ Units 1-16 Generator Rewinds	Rewind units 1-16	\$ 200.80	\$ 200.80	\$ 17.50	9/30/2030	9/30/2030
Chief Joseph // CHJ SU1-4	Upgrade 480V Station Power SU1-4 MCC Boards	\$ 11.30	\$ 12.50	\$ 2.40	9/9/2023	7/30/2027
Chief Joseph // CHJ Exciter Units 1-16	Replace exciters on units 1-16	N/A	N/A	\$ 0.93		
John Day // JDA Turbine Hub Upgrades and Fixed Blade Conversions	Rebuild and upgrade up to five turbine runner hubs. Four additional hubs may be rebuilt under a future amendment to this project.	\$ 40.90	\$ 34.20	\$ 29.50	6/30/2019	10/31/2028



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John Day // Control Room Fire Protection	Upgrade fire protection, ventilation and egress paths in the control room and powerhouse.	\$ 13.30	\$ 12.64	\$ 8.60	11/14/2023	9/30/2024
John Day // JDA Trashracks	Replace and refurbish the trashracks	\$ 19.50	\$ 43.30	\$ 3.10	4/15/2026	10/2/2028
John Day // JDA STS Crane	Replace the submerged traveling screens crane	\$ 14.40	\$ 14.40	\$ 8.80	12/2/2022	11/1/2024
John Day // JDA HVAC	Upgrade the HVAC system and fire protection systems in the powerhouse	N/A	N/A	\$ 2.60		
John Day // Turbine Runners and Generator Rewinds DESIGN	Replace 12 turbines and rewind units at John Day.	N/A	N/A	\$ 19.90		
The Dalles // TDA Emergency Gantry Crane	Replace the emergency intake gantry crane.	\$ 19.40	\$ 26.06	\$ 18.00	2/1/2023	8/20/2025
Bonneville // BON 1 Trashracks	Replace and refurbish the trashracks in Powerhouse 1	N/A	N/A	\$ 2.90		
BON // BON Main Unit Breaker Replacement	Replace the main unit breakers, as per the scope of the previous MUB and Station Service project.	N/A	N/A	\$ 0.80		
Lower Granite // LWG MU2 Blade Sleeve Upgrade and Rehabilitation	Upgrade each of the six blade packing sleeves on Main Unit 2.	N/A	N/A	\$ 1.20		
Ice Harbor // IHR Turbine Replacement	Replace poor condition turbine runners in units 1, 2 & 3 with a more fish-friendly design.	\$ 113.80	\$ 115.70	\$ 104.60	3/31/2021	6/30/2025
Ice Harbor // Ice Harbor Units 1-3 Stator Winding Replacements	Replace the stator windings for units 1,2 and 3.	\$ 24.10	\$ 33.90	\$ 27.40	3/31/2021	6/30/2025
Ice Harbor // Ice Harbor Intake Gate Hydraulic System Upgrade	Upgrade the hydraulic system at Ice Harbor	N/A	N/A	\$ 0.91		
Detroit // Transformers	Replace and relocate 6 transformers	N/A	N/A	\$ 1.95		
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	N/A	\$ 7.20		
Foster // Electrical Reliability Upgrades	Replace the station service distribution equipment, emergency generator and air compressors.	\$ 10.90	\$ 14.30	\$ 12.60	10/2/2023	4/5/2025
Foster // Turbine and Generator Rehabilitation	Rehabilitate turbine and generators on two units.	N/A	N/A	\$ 2.00		
McNary // MCN Headgate System Rehabilitation	Rehabilitate the Headgate System and purchase bulkheads	\$ 74.70	\$ 101.00	\$ 25.70	5/30/2031	5/30/2031
McNary // MCN IsoPhase Bus	Replace the isophase bus	\$ 46.10	\$ 69.50	\$ 9.10	12/31/2029	12/31/2029
McNary // MCN Station Service Turbines	Rehabilitate the two station service turbines at the dam	\$ 17.90	\$ 18.80	\$ 17.30	10/31/2023	9/30/2025
McNary // MCN Governors	Upgrade the 14 governors in the McNary powerhouse with digital controls.	\$ 21.20	\$ 20.81	\$ 13.30	2/22/2024	12/31/2026
McNary // MCN Exciters	Replace the exciters to ensure reliability and support the other electrical powertrain upgrades.	\$ 25.60	\$ 23.63	\$ 12.20	8/24/2024	12/31/2026
McNary // MCN Powerhouse Control System Upgrade	Replace the generally original controls to improve reliability and performance.	\$ 17.20	\$ 15.26	\$ 15.20	5/26/2024	12/31/2026
McNary // MCN Turbine Design and Replacement	Replace turbine runners 1 - 14 and rewind units 5, 13 and 14.	\$ 533.10	\$ 500.15	\$ 30.80	10/7/2033	12/7/2032
McNary // MCN Governor Mechanical System Rehabilitation	Upgrade the governor mechanical system	\$ 12.50	\$ 9.90	\$ 5.50	10/31/2025	10/31/2025
McNary // McNary Levee Drainage System Upgrades	Replace the existing pumps and electrical with new equipment at some or all 11 pumping plants.	N/A	N/A	\$ 4.50		
McNary // MCN Drainage, Unwatering and Equalization System Rehabilitation	Rehab the DUE system at McNary	\$ 14.60	\$ 14.30	\$ 7.90	6/28/2024	11/28/2025
McNary // MCN Spillway Gate Hoist Replacmeent	Replace Spillway Gate Hoist	N/A	N/A	\$ 1.10		
Hills Creek // HCR Main Unit Breakers	Replace Main Unit Breakers at Hills Creek	N/A	N/A	\$ 3.60		
Lower Monumental // LMN DC System and LV Switchgear Replacement	Replace the DC System and the LV Switchgear at Lower Monumental	\$ 17.50	\$ 18.50	\$ 12.30	9/16/2024	4/30/2025
Lower Monumental // LMN Bridge Crane Wheel and Drive System Upgrade		N/A	N/A	\$ 1.03		
Little Goose // LGS DC System and LV Switchgear Replacement	Replace the DC System and the LV Switchgear at Little Goose	\$ 24.90	\$ 24.90	\$ 3.20	3/30/2025	4/15/2026
Anderson // AND Turbine Runner Replacement	Replace the two turbine runners at Anderson Ranch.	\$ 20.00	\$ 22.80	\$ 2.30	5/1/2027	5/1/2027



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Security						
Midway Substation, Physical Security System	BPA seeks to mitigate security risk for critical field sites through the holistic approach of deter, detect, delay, communicate, assess, and respond, which considers the totality of security systems, procedures, policies, employee training, security outreach, continuous threat and intelligence awareness and other security related activities.	N/A	N/A	\$ 0.08		
Security Enhancement of the Keeler Substation	BPA seeks to mitigate security risk for critical field sites through the holistic approach of deter, detect, delay, communicate, assess, and respond, which considers the totality of security systems, procedures, policies, employee training, security outreach, continuous threat and intelligence awareness and other security related activities.	\$ 7.60	\$ 7.28	\$ 7.28	9/30/2024	9/30/2024
Security Enhancement of the Marion Substation	BPA seeks to mitigate security risk for critical field sites through the holistic approach of deter, detect, delay, communicate, assess, and respond, which considers the totality of security systems, procedures, policies, employee training, security outreach, continuous threat and intelligence awareness and other security related activities.	\$ 10.20	\$ 9.47	\$ 7.84	9/30/2024	11/13/2024
Olympia Sub and MHQ Physical Security System	This project is part of the ongoing critical infrastructure protection program supported by BPA's best security practices, Critical Infrastructure Protection (CIP) strategies, and DOE Design Basis Threat requirements (DBT).	N/A	N/A	\$ -		
Grand Coulee 500kV Sub NERC CIP 014 PSS	This project is part of the ongoing critical infrastructure protection program supported by BPA's best security practices, Critical Infrastructure Protection (CIP) strategies, and DOE Design Basis Threat requirements (DBT).	N/A	N/A	\$ -		
Monroe Sub Physical Security System	This project is part of the ongoing critical infrastructure protection program supported by BPA's best security practices, Critical Infrastructure Protection (CIP) strategies, and DOE Design Basis Threat requirements (DBT).	N/A	N/A	\$ -		

Facilities						
Ross Ampere Demo & Site Development	Demolition and removal of N/S Ampere, Untanking Tower, and decom Wash Rack facilities	\$ 27.90	\$ 30.68	\$ 12.00	12/27/2024	9/30/2025
Ross Chem Lab Replacement	Provide a lifecycle replacement of the N and S Ampere facilities to improve workplace safety and efficiency, and reduce O&M.	\$ 18.50	\$ 18.48	\$ 6.80	12/31/2024	9/30/2025
Ross Central Storm Water Facility	Build the Ross Central Storm Water Facility which will be a storm water detention and treatment facility to address current and future development projects on the Ross Complex	N/A	N/A	\$ -		

Fleet						
Fleet FY24	Fleet program capital asset purchases - this is a one year program extension from the FY21-FY23 program.	\$ 14.30	\$ 14.10	\$ 14.50	9/30/2024	9/30/2024

Information Technology						
Customer Billing Center Replacement (CBC)	The CBC is where the monthly bills for customers are handled, resulting in over \$4B annual revenue. System enhancements support production of timely and accurate bills.	N/A	N/A	\$ 13.60		

Summary			
Transmission	\$ 2,155.1	\$ 2,062.7	
Federal Hydro	\$ 1,445.1	\$ 1,528.5	
Security	\$ 17.8	\$ 16.8	
Facilities	\$ 46.4	\$ 49.2	
Fleet	\$ 14.3	\$ 14.1	
Information Technology	N/A	N/A	
Total	\$ 3,678.7	\$ 3,671.2	



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- ¹ Includes capital projects authorized at the agency level
- ² Direct capital costs exclude AFUDC and overhead
- ³ Actual costs are project costs to date
- ⁴ N/A indicates contracts have not been awarded - cost estimates are confidential

