Major Capital Projects ¹ - End-of-Project	Target Performance								Q2 2024	
			Direc	t C	apital (\$	In-Service Date				
Project	Description	Au	thorized	F	orecast	A	ctual ³	Authorized	Forecast	
Transmission	In the state of th	1				ı		, , , , , , , , , , , , , , , , , , ,		
Ross-Schultz Fiber	Replace the obsolete and limited 36 strand fiber with standard 72 strand fiber.	\$	34.0	\$	49.4	\$	43.9	09/15/18	11/29/24	
MREDI VHF System Replacement P01237	Replace and upgrade the existing VHF radio system.	\$	96.2	\$	107.2	\$	79.7	09/01/26	02/04/28	
Quenett Creek Substation L0380	Construct new substation and associated line work to serve additional N. Wasco PUD load.	\$	44.9	\$	55.8	\$	46.4	06/24/22	08/18/28	
Badger Canyon II G0559	Interconnection for Badger Canyon II wind project.	\$	24.5	\$	19.6	\$	3.4	03/11/22	12/31/26	
Schultz Wautoma 500kV Series Caps	Install series capacitors	\$	52.9	\$	47.7	\$	21.6	03/15/24	09/30/24	
Midway Ashe 230kV Double Circuit	230kV double circuit transmission line from Midway to Ashe Tap	\$	31.2	\$	38.1	\$	27.6	03/31/26	12/01/25	
Richland Stevens Dr 115kV Line	Rebuild existing 115kV transmission line, add additional line, rebuild substations		N/A ⁴	·	N/A ⁴	\$	4.4			
Conkelley Substation Retirement	Retire the Conkelley substation	\$	29.6	\$	30.1	\$	16.1	09/30/25	12/31/26	
Columbia Basin Hydro G0560	To interconnect 500 MW to BPA's transmission system at the Grand Coulee 500 kV switchyard.	\$	21.6	Ė	-	\$	-	07/30/26	01/00/00	
Ross Station Service	Replacement of the Ross Substation Service	\$	22.0	\$	21.1	\$	8.1	12/06/26	04/14/25	
Carlton Sub PCB Bus Tie Addition	Add PCB and bus ties to the Carlton Substation	\$	15.4	\$			2.6	09/03/24	01/24/25	
South Tri Cities Reinforcement	Execute the South Tri-Cities Reinforcement (including building of new Webber Canyon substation)	\$	112.0	\$			10.7	03/30/25	09/28/25	
Big Eddy Station Service	Replacement of the Big Eddy substation station service	\$	20.2	\$	29.5	\$	2.7	08/18/28	08/18/28	
Longview Transformer Bank Addition	To install a new 230/115 kV Longview Transformer, bus breaker, and upgrade disconnects.	\$	12.2	\$		\$	11.0	12/23/22	08/30/24	
Longhorn Substation	Build new Longhorn Substation	\$	235.0	\$	197.6	\$	76.1	12/02/24	03/31/25	
Schultz Raver Series Cap	Install new capacitors at the Schultz Substation	\$	62.6	\$	48.2	\$	0.1	12/31/25	12/31/25	
G0585 G0645 Crider Valley Wind and Solar	Build the Crider Valley Substation to interconnect 513MW of renewable energy (wind and solar)		N/A ⁴		N/A ⁴	\$	-			
Grand Coulee 230kV CLR	To install a current limiting reactor at the GC 230 kV switchyard.	\$	11.2	\$	7.4	\$	0.1	11/30/25	08/02/27	
McNary 230 kV Section Bay Addition L0481	To add a new 230 kV section bay at the McNary dam.	\$	27.5	\$	25.5	\$	16.7	12/24/24	04/30/25	
McNary Peterson Tap L0405	To install a new 115kV bay at position 11 at McNary substation and installation of new 115kV line segments to existing line.	\$	11.5	\$	20.2	\$	10.1	09/30/24	12/31/24	
Bridge Substation	To provide and install a new 230 kV line		N/A ⁴		N/A ⁴	\$	0.7			
Columbia Falls Kalispel-Kerr and Kalispel - Hot Springs fiber	Install fiber optic cable between the Kalispell and Kerr substations, and 22 miles of fiber between the Elmo and Hot Springs substations.		N/A ⁴		N/A ⁴	\$	-			
EGP - Buckley Substation	Replace existing Buckley GIS with new AIS 500kV Substation		N/A ⁴		N/A ⁴	\$	-			
EGP - West of Boardman	Build a New 500/230kV substation for additional 1000MW of UEC load		N/A ⁴		N/A ⁴	\$	-			
EGP - Bonanza Substation	Build a New 500/230/115kV hub substation in Central Oregon		N/A ⁴		N/A ⁴	\$	-			
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 ⁴		N/A ⁴	\$	-			
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 ⁴		N/A ⁴	\$	-			
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 ⁴		N/A ⁴	\$	-			
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.		N/A ⁴		N/A ⁴	\$	0.1			

Major Capital Projects ¹ - End-of-Pro	ject Target Performance					Q2 202
		Direc	t Capital (\$	In-Service Date		
Project	Description	Authorized	Forecast	Actual ³	Authorized	Forecast
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.	N/A ⁴	N/A ⁴	\$ 0.4		05/29/26
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 ⁴	N/A ⁴	\$ 0.2		
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 ⁴	N/A ⁴	\$ -		
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 ⁴	N/A⁴	\$ -		
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 ⁴	N/A ⁴	\$ -		
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 ⁴	N/A ⁴	\$ 8.8		

This information has been made publicly available by BPA on 5/1/2024 and contains information not sourced directly from BPA financial statements. Projects below \$10 million are not included

¹ Includes capital projects authorized at the agency level

³Actual costs are project costs to date.

²Direct capital costs exclude AFUDC and overhead

⁴Contracts have not been awarded - cost estimates are confidential

Major Capital Projects* - End-of-Project	Target Performance					Q2 2024	
		Direc	t Capital (\$	M) ²	In-Service Date		
Project	Description	Authorized	Forecast	Actual ³	Authorized	Forecast	
Transmission - continued							
ADD BANK 5 SPARE XFMR (P06297)	Replaces a system spare used in emergency response. Supports two 500/230kV tra	N/A ⁴	N/A ⁴	\$ 0.0			
MCIT Replatforming	Final project of the MCIT Project to replace the legacy TT infrastructure. This project	N/A ⁴	N/A ⁴	\$ 3.0			
Vancouver Control Center Total	Implement a modern control center with the necessary continuity, security and technology capabilities to support its critical functions through an all hazards event with flexibility for future growth and market opportunities.	\$ 947.9	\$ 922.2	\$ 61.9	08/28/31	07/30/31	
Celilo Converter Station System Control and Monitoring Local Area Network	Enhance functionality, efficiency, and cyber security of the asset by moving to a virtual	N/A ⁴	N/A ⁴	\$ -			
FY24 Steel Lines Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 40.0	\$ 24.3	\$ 5.3	09/30/24	09/30/24	
FY24 Wood Lines Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 51.0	\$ 64.6	\$ 8.8	09/30/24	09/30/24	
FY24 Access Roads Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 19.5	\$ 53.6	\$ 7.3	09/30/24	09/30/24	
FY24 Real Property	Two-year asset replacement plan based on asset strategy analysis.	\$ 1.1	\$ 10.9	\$ 2.4	09/30/24	09/30/24	
FY24 Subs AC Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 72.0	\$ 116.1	\$ 41.8	09/30/24	09/30/24	
FY24 Line Ratings Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 5.0	\$ 5.5	\$ 1.7	09/30/24	09/30/24	
FY24 DC Substation Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ -	\$ 6.1	\$ 1.9	09/30/24	09/30/24	
FY24 System Telecom Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 36.0	\$ 37.2	\$ 20.7	09/30/24	09/30/24	
FY24 PSC Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 20.3	\$ 55.5	\$ 22.6	09/30/24	09/30/24	
FY24 SPC Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 13.9	\$ 20.7	\$ 9.0	09/30/24	09/30/24	
FY24 Control Centers Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 20.3	\$ 17.8	\$ 7.1	09/30/24	09/30/24	
FY24 TEAP Tools Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 2.0	\$ 6.0	\$ 2.8	09/30/24	09/30/24	
FY24 Aircraft Sustain	Two-year asset replacement plan based on asset strategy analysis.	\$ 9.0	\$ 12.7	\$ 0.0	09/30/24	09/30/24	

02 2024

This information has been made publicly available by BPA on 5/1/2024 and contains information not sourced directly from BPA financial statements. Projects below \$10 million are not included

¹ Includes capital projects authorized at the agency level

²Direct capital costs exclude AFUDC and overhead ³Actual costs are project costs to date. ⁴Contracts have not been awarded - cost estimates are confidential

Major Capital Projects ¹ - End-of-Project Target Performance						Q2 2024
		Direc	ct Capital (\$	In-Service Date		
Project	Description	Authorized	Forecast	Actual ³	Authorized	Forecast
Fodoval Hydro						
Federal Hydro Libby // LIB Intake Gantry Crane	Replace Intake Gantry Crane	\$ 12.8	¢ 170	\$ 4.4	11/20/22	02/20/24
	Complete the sixth generating unit at Libby dam.			•	11/30/22	02/29/24
Libby // Libby Unit 6		N/A ⁴	N/A ⁴	\$ 3.9		
Grand Coulee // GCL Units G11-G18 Transformer Replacements	Replace 24 single-phase transformers in the Right Powerhouse.	N/A ⁴	N/A ⁴	\$ 1.0		
Grand Coulee John W. Keys PGP // Keys PGP Reliability Replacements	Replacements and upgrades to maintain current station capability.	\$ 66.3	\$ 72.1	\$ 44.1	09/30/24	09/30/28
Grand Coulee // GCL Firehouse	Build a stand-alone fire station to replace the facility currently housed in the pump- generating plant.	\$ 15.1	\$ 17.6	\$ 17.3	05/14/18	05/01/24
Grand Coulee // GCL LPH/RPH Bridge Crane Replacements	Replace the four bridge cranes in the left and right powerhouses.	\$ 25.2	\$ 34.4	\$ 11.9	07/03/20	07/29/24
Grand Coulee // GCL LPH/RPH Cyclops Semi-Gantry	Replacement of 2 cranes, associated components of the power delivery and control					
Crane Replacement	systems, runway rail and refurbish the existing concrete corbels.	N/A ⁴	N/A ⁴	\$ 0.7		
Grand Coulee // GCL K22 Transformer Replacement	Replace the bank of transformers associated with unit G22	N/A ⁴	N/A ⁴	\$ 1.4		
Chief Joseph // CHJ Intake Gantry Crane	Replace the intake gantry crane	\$ 19.2		\$ 7.8	01/31/23	12/31/24
Chief Joseph // CHJ Station Service Units	Rehabilitate the Station Service units.	\$ 12.8		\$ 8.2	09/30/24	03/31/26
Chief Joseph // CHJ Powerbus Units 1-16	Refurbish and replace portions of the power bus	N/A ⁴	N/A ⁴	\$ 1.0	00/00/21	00/01/20
Chief Joseph // CHJ Units 1-16 Generator Rewinds	Rewind units 1-16	\$ 200.8	-	\$ 6.6	09/30/30	09/30/30
Chief Joseph // CHJ SU1-4	Upgrade 480V Station Power SU1-4 MCC Boards	\$ 11.3	+	\$ 1.6	09/09/23	12/31/24
Chief Joseph // CHJ Exciter Units 1-16	Replace exciters on units 1-16	N/A ⁴	Ψ 12.5 N/A ⁴	\$ 0.7	09/09/23	12/31/24
,	Rebuild and upgrade up to five turbine runner hubs. Four additional hubs may be	IN/A	IN/A	φ 0.7		
John Day // JDA Turbine Hub Upgrades and Fixed Blade Conversions	rebuilt under a future amendment to this project.	\$ 40.9	\$ 34.2	\$ 26.2	06/30/19	10/31/28
John Day // Control Room Fire Protection	Upgrade fire protection, ventilation and egress paths in the control room and powerhouse.	\$ 13.3	\$ 12.6	\$ 8.4	11/14/23	02/29/24
John Day // JDA Trashracks	Replace and refurbish the trashracks	\$ 19.5	\$ 17.4	\$ 3.0	04/15/26	10/02/28
John Day // JDA STS Crane	Replace the submerged traveling screens crane	\$ 14.4	\$ 14.4	\$ 7.5	12/02/22	11/01/24
John Day // JDA HVAC	Upgrade the HVAC system and fire protection systems in the powerhouse	N/A ⁴	N/A ⁴	\$ 2.2		
John Day // Turbine Runners and Generator Rewinds DESIGN	Replace turbines and rewind generators on a TBD number of units at John Day (design work only)	N/A ⁴	N/A ⁴	\$ 18.2		
The Dalles // TDA Emergency Gantry Crane	Replace the emergency intake gantry crane.	\$ 19.4	\$ 26.1	\$ 17.3	02/01/23	08/20/25
Bonneville // BON 1 Trashracks	Replace and refurbish the trashracks in Powerhouse 1	N/A ⁴	N/A ⁴	\$ 2.8	02/01/20	00/20/20
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 ⁴	N/A ⁴	\$ 0.7		
Lower Granite // LWG MU2 Blade Sleeve Upgrade and Rehabilitation	Upgrade each of the six blade packing sleeves on Main Unit 2.	N/A ⁴	N/A ⁴	\$ 0.6		
Ice Harbor // IHR Turbine Replacement	Replace poor condition turbine runners in units 1, 2 & 3 with a more fish-friendly design.	\$ 113.8	\$ 115.7	\$ 99.6	03/31/21	06/30/25
Ice Harbor // Ice Harbor Units 1-3 Stator Winding Replacements	Replace the stator windings for units 1,2 and 3.	\$ 24.1	\$ 33.9	\$ 25.9	03/31/21	06/30/25
Ice Harbor // Ice Harbor Intake Gate Hydraulic System Upgrade	Upgrade the hydraulic system at Ice Harbor	N/A ⁴	N/A ⁴	\$ 0.9		
Detroit // Transformers	Replace and relocate 6 transformers	N/A ⁴	N/A ⁴	\$ 1.9		
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		
		l .	1			

This information has been made publicly available by BPA on 5/1/2024 and contains information not sourced directly from BPA financial statements. Projects below \$10 million are not included

¹ Includes capital projects authorized at the agency level

³Actual costs are project costs to date.

²Direct capital costs exclude AFUDC and overhead

⁴Contracts have not been awarded - cost estimates are confidential

								Q2 20	
Project			Direct		ct Capital (\$M) ²			In-Service Date	
	Description			Fo	recast	Ac	ctual ³	Authorized	Forecast
Foster // Electrical Reliability Upgrades	Replace the station service distribution equipment, emergency generator and air compressors.	\$	10.9	\$	11.6	\$	8.0	10/02/23	04/05/25
oster // Turbine and Generator Rehabilitation	Rehabilitate turbine and generators on two units.		N/A ⁴		N/A ⁴	\$	1.6		
McNary // MCN Headgate System Rehabilitation	Rehabilitate the Headgate System and purchase bulkheads	\$	74.7	\$	101.0	\$	9.3	05/30/31	05/30/31
McNary // MCN IsoPhase Bus	Replace the isophase bus	\$	46.1	\$	69.5	\$	3.0	12/31/29	12/31/29
McNary // MCN Station Service Turbines	Rehabilitate the two station service turbines at the dam	\$	17.9	\$	18.8	\$	13.6	10/31/23	09/30/24
McNary // MCN Governors	Upgrade the 14 governors in the McNary powerhouse with digital controls.	\$	21.2	\$	20.8	\$	5.0	02/22/24	12/31/26
McNary // MCN Exciters	Replace the exciters to ensure reliability and support the other electrical powertrain upgrades.	\$	25.6	\$	23.6	\$	10.7	08/24/24	12/31/26
McNary // MCN Powerhouse Control System Upgrade	Replace the generally original controls to improve reliability and performance.	\$	17.2	\$	15.3	\$	13.5	05/26/24	12/31/26
McNary // MCN Turbine Design and Replacement	Replace turbine runners 1 - 14 and rewind units 5, 13 and 14.	\$	533.1	\$	500.2	\$	25.5	10/07/33	12/07/32
McNary // MCN Governor Mechanical System Rehabilitation	Upgrade the governor mechanical system	\$	12.5	\$	9.9	\$	4.5	10/31/25	10/31/25
AcNary // McNary Levee Drainage System Upgrades	Replace the existing pumps and electrical with new equipment at some or all 11 pumping plants.		N/A ⁴		N/A ⁴	\$	4.2		
AcNary // MCN Drainage, Unwatering and Equalization System Rehabilitation	Rehab the DUE system at McNary	\$	14.6	\$	14.3	\$	4.8	06/28/24	11/28/25
Hills Creek // HCR Main Unit Breakers	Replace Main Unit Breakers at Hills Creek		N/A ⁴		N/A ⁴	\$	3.6	1	
ower Monumental // LMN DC System and LV Switchgear Replacement	Replace the DC System and the LV Switchgear at Lower Monumental	\$	17.5	\$	18.5	\$	6.6	09/16/24	04/30/25
ower Monumental // LMN Bridge Crane Wheel and Orive System Upgrade	Restore reliability to the bridge crane, increase worker safety while using the crane, provide upgraded wheel drive control systems, and replace all crane wheels.		N/A ⁴		N/A ⁴	\$	0.9		
ittle Goose // LGS DC System and LV Switchgear	Replace the DC System and the LV Switchgear at Little Goose	\$	24.9	\$	24.9	\$	2.4	03/30/25	04/15/26
Anderson // AND Turbine Runner Replacement	Replace the two turbine runners at Anderson Ranch.	\$	20.0	\$	16.0	\$	1.6	05/01/27	05/01/27

¹ Includes capital projects authorized at the agency level

²Direct capital costs exclude AFUDC and overhead

³Actual costs are project costs to date.

⁴Contracts have not been awarded - cost estimates are confidential

Major Capital Projects ¹ - End-of-Proj	ect Target Performance					Q2 2024	
Project		Dir	ect Capital (\$	SM) ²	In-Service Date		
	Description	Authorize			Authorized	Forecast	
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 ⁴	N/A ⁴	\$ -			
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.	6 \$ 7.3	\$ 0.1	09/30/24	09/30/24	
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.	N/A ⁴	N/A ⁴	\$ 0.0			
Facilities							
Ross Ampere Demo & Site Development	Demolition and removal of N/S Ampere, Untanking Tower, and decom Wash Rack facilities	\$ 27.	9 \$ 24.3	\$ 2.7	12/27/24	09/30/25	
Ross Chemistry and Calibration Lab	Provide a lifecycle replacement of the N and S Ampere facilities to improve workplace safety and efficiency, and reduce O&M.	N/A ⁴	N/A ⁴	\$ 2.8			
Fleet							
Fleet FY24	Fleet program capital asset purchases - this is a one year program extension from the FY21-FY23 program.	\$ 14.	3 \$ 14.1	\$ 4.1	09/30/24	09/30/24	
Information Technology							
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 ⁴	N/A ⁴	\$ 9.2			
		1		<u> </u>	<u> </u>		
	Summary			1			
	Transmission	\$ 2,102.	6 \$ 2,165.7				
	Federal Hydro	\$ 1,425.	1 \$ 1,477.1				
	Security	\$ 7.	6 \$ 7.3				
	Facilities	\$ 27.	9 \$ 24.3				
	Fleet	\$ 14.	3 \$ 14.1				
	Information Technology	N/A ⁴	N/A ⁴				
	Total		5 \$ 3,688.4	1			

This information has been made publicly available by BPA on 5/1/2024 and contains information not sourced directly from BPA financial statements. Projects below \$10 million are not included ¹ Includes capital projects authorized at the agency level ²Direct capital costs exclude AFUDC and overhead

³Actual costs are project costs to date.

⁴Contracts have not been awarded - cost estimates are confidential