

B O N N E V I L L E P O W E R A D M I N I S T R A T I O N

BP-24 Rate Proceeding

Final Proposal

Power Loads and Resources Study Documentation

BP-24-FS-BPA-03A

July 2023



POWER LOADS AND RESOURCES STUDY DOCUMENTATION
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COMMONLY USED ACRONYMS AND SHORT FORMS

AAC	Anticipated Accumulation of Cash
ACNR	Accumulated Calibrated Net Revenue
ACS	Ancillary and Control Area Services
AF	Advance Funding
AFUDC	Allowance for Funds Used During Construction
AGC	automatic generation control
aMW	average megawatt(s)
ANR	Accumulated Net Revenues
ASC	Average System Cost
BAA	Balancing Authority Area
BiOp	Biological Opinion
BPA	Bonneville Power Administration
BPAP	Bonneville Power Administration Power
BPAT	Bonneville Power Administration Transmission
Bps	basis points
Btu	British thermal unit
CAISO	California Independent System Operator
CIP	Capital Improvement Plan
CIR	Capital Investment Review
CDQ	Contract Demand Quantity
CGS	Columbia Generating Station
CHWM	Contract High Water Mark
CNR	Calibrated Net Revenue
COB	California-Oregon border
COI	California-Oregon Intertie
Commission	Federal Energy Regulatory Commission
Corps	U.S. Army Corps of Engineers
COSA	Cost of Service Analysis
COU	consumer-owned utility
Council	Northwest Power and Conservation Council (see also "NPCC")
COVID-19	coronavirus disease 2019
CP	Coincidental Peak
CRAC	Cost Recovery Adjustment Clause
CRFM	Columbia River Fish Mitigation
CSP	Customer System Peak
CT	combustion turbine
CWIP	Construction Work in Progress
CY	calendar year (January through December)
DD	Dividend Distribution
DDC	Dividend Distribution Clause
dec	decrease, decrement, or decremental
DERBS	Dispatchable Energy Resource Balancing Service
DFS	Diurnal Flattening Service

DNR	Designated Network Resource
DOE	Department of Energy
DOI	Department of Interior
DSI	direct-service industrial customer or direct-service industry
DSO	Dispatcher Standing Order
EE	Energy Efficiency
EESC	EIM Entity Scheduling Coordinator
EIM	Energy imbalance market
EIS	environmental impact statement
EN	Energy Northwest, Inc.
ESA	Endangered Species Act
ESS	Energy Shaping Service
e-Tag	electronic interchange transaction information
FBS	Federal base system
FCRPS	Federal Columbia River Power System
FCRTS	Federal Columbia River Transmission System
FELCC	firm energy load carrying capability
FERC	Federal Energy Regulatory Commission
FMM-IIE	Fifteen Minute Market – Instructed Imbalance Energy
FOIA	Freedom of Information Act
FORS	Forced Outage Reserve Service
FPS	Firm Power and Surplus Products and Services
FPT	Formula Power Transmission
FRP	Financial Reserves Policy
F&W	Fish & Wildlife
FY	fiscal year (October through September)
G&A	general and administrative (costs)
GARD	Generation and Reserves Dispatch (computer model)
GDP	Gross Domestic Product
GI	generation imbalance
GMS	Grandfathered Generation Management Service
GSP	Generation System Peak
GSR	Generation Supplied Reactive
GRSPs	General Rate Schedule Provisions
GTA	General Transfer Agreement
GWh	gigawatthour
HLH	Heavy Load Hour(s)
HYDSIM	Hydrosystem Simulator (computer model)
IE	Eastern Intertie
IIE	Instructed Imbalance Energy
IM	Montana Intertie
inc	increase, increment, or incremental
IOU	investor-owned utility
IP	Industrial Firm Power
IPR	Integrated Program Review

IR	Integration of Resources
IRD	Irrigation Rate Discount
IRM	Irrigation Rate Mitigation
IRPL	Incremental Rate Pressure Limiter
IS	Southern Intertie
kcf ^s	thousand cubic feet per second
kW	kilowatt
kWh	kilowatthour
LAP	Load Aggregation Point
LD ^D	Low Density Discount
LGIA	Large Generator Interconnection Agreement
LLH	Light Load Hour(s)
LMP	Locational Marginal Price
LPP	Large Project Program
LT	long term
LT ^F	Long-term Firm
Maf	million acre-feet
Mid-C	Mid-Columbia
MMBtu	million British thermal units
MNR	Modified Net Revenue
MO	market operator
MRNR	Minimum Required Net Revenue
MW	megawatt
MWh	megawatthour
NCP	Non-Coincidental Peak
NEPA	National Environmental Policy Act
NERC	North American Electric Reliability Corporation
NFB	National Marine Fisheries Service (NMFS) Federal Columbia River Power System (FCRPS) Biological Opinion (BiOp)
NLSL	New Large Single Load
NMFS	National Marine Fisheries Service
NOAA Fisheries	National Oceanographic and Atmospheric Administration Fisheries
NOB	Nevada-Oregon border
NORM	Non-Operating Risk Model (computer model)
NWPA	Northwest Power Act/Pacific Northwest Electric Power Planning and Conservation Act
NWPP	Northwest Power Pool
NP-15	North of Path 15
NPCC	Northwest Power and Conservation Council
NPV	net present value
NR	New Resource Firm Power
NRFS	NR Resource Flattening Service
NRU	Northwest Requirements Utilities
NT	Network Integration

NTSA	Non-Treaty Storage Agreement
NUG	non-utility generation
OATT	Open Access Transmission Tariff
O&M	operations and maintenance
OATI	Open Access Technology International, Inc.
ODE	Over Delivery Event
OS	oversupply
OY	operating year (August through July)
P10	tenth percentile of a given dataset
PDCI	Pacific DC Intertie
PF	Priority Firm Power
PFp	Priority Firm Public
PFx	Priority Firm Exchange
PNCA	Pacific Northwest Coordination Agreement
PNRR	Planned Net Revenues for Risk
PNW	Pacific Northwest
POD	Point of Delivery
POI	Point of Integration or Point of Interconnection
POR	point of receipt
PPC	Public Power Council
PRSC	Participating Resource Scheduling Coordinator
PS	Power Services
PSC	power sales contract
PSW	Pacific Southwest
PTP	Point-to-Point
PUD	public or people's utility district
RAM	Rate Analysis Model (computer model)
RAS	Remedial Action Scheme
RCD	Regional Cooperation Debt
RD	Regional Dialogue
RDC	Reserves Distribution Clause
REC	Renewable Energy Certificate
Reclamation	U.S. Bureau of Reclamation
REP	Residential Exchange Program
REPSIA	REP Settlement Implementation Agreement
RevSim	Revenue Simulation Model
RFA	Revenue Forecast Application (database)
RHWM	Rate Period High Water Mark
ROD	Record of Decision
RPSA	Residential Purchase and Sale Agreement
RR	Resource Replacement
RRHL	Regional Residual Hydro Load
RRS	Resource Remarketing Service
RSC	Resource Shaping Charge
RSS	Resource Support Services

RT1SC	RHWM Tier 1 System Capability
RTD-IIE	Real-Time Dispatch – Instructed Imbalance Energy
RTIEO	Real-Time Imbalance Energy Offset
SCD	Scheduling, System Control, and Dispatch Service
SCADA	Supervisory Control and Data Acquisition
SCS	Secondary Crediting Service
SDD	Short Distance Discount
SILS	Southeast Idaho Load Service
Slice	Slice of the System (product)
SMCR	Settlements, Metering, and Client Relations
SP-15	South of Path 15
T1SFCO	Tier 1 System Firm Critical Output
TC	Tariff Terms and Conditions
TCMS	Transmission Curtailment Management Service
TDG	Total Dissolved Gas
TGT	Townsend-Garrison Transmission
TOCA	Tier 1 Cost Allocator
TPP	Treasury Payment Probability
TRAM	Transmission Risk Analysis Model
Transmission System Act	Federal Columbia River Transmission System Act
Treaty	Columbia River Treaty
TRL	Total Retail Load
TRM	Tiered Rate Methodology
TS	Transmission Services
TSS	Transmission Scheduling Service
UAI	Unauthorized Increase
UDE	Under Delivery Event
UFE	unaccounted for energy
UFT	Use of Facilities Transmission
UIC	Unauthorized Increase Charge
UIE	Uninstructed Imbalance Energy
ULS	Unanticipated Load Service
USFWS	U.S. Fish & Wildlife Service
VER	Variable Energy Resource
VERBS	Variable Energy Resource Balancing Service
VOR	Value of Reserves
VR1-2014	First Vintage Rate of the BP-14 rate period (PF Tier 2 rate)
VR1-2016	First Vintage Rate of the BP-16 rate period (PF Tier 2 rate)
WECC	Western Electricity Coordinating Council
WPP	Western Power Pool
WRAP	Western Resource Adequacy Program
WSPP	Western Systems Power Pool

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1. DOCUMENTATION FOR – POWER LOADS AND RESOURCES STUDY

Table 1.1.1
Load Following Service Customers

	A	B	C
1	Albion, City of	Ellensburg, City of	Milton, Town of
2	Alder Mutual	Elmhurst Mutual P & L	Minidoka, City of
3	Ashland, City of	Energy Northwest	Mission Valley Power
4	Asotin County PUD #1	Fairchild AFB	Missoula Elec Coop
5	Bandon, City of	Fall River Rural Elec Coop	Modern Elec Coop
6	Benton PUD	Farmers Elec Coop	Monmouth, City of
7	Benton REA	Ferry County PUD #1	Nespelem Valley Elec Coop
8	Big Bend Elec Coop	Flathead Elec Coop	Northern Lights
9	Blachly-Lane Electric Coop	Forest Grove, City of	Northern Wasco County PUD
10	Blaine, City of	Glacier Elec Coop	Ohop Mutual Light Company
11	Bonners Ferry, City of	Grant County PUD #2	Orcas P & L
12	Burley, City of	Grays Harbor	Oregon Trail Coop
13	Canby, City of	Harney Elec Coop	Pacific
14	Cascade Locks, City of	Hermiston, City of	Parkland L & W
15	Central Lincoln	Heyburn, City of	Peninsula Light Company
16	Central MT Elec Power Coop	Hood River Elec Coop	Plummer, City of
17	Centralia, City of	Idaho County L & P	Port Angeles, City of
18	Cheney, City of	Inland P & L	Port of Seattle
19	Chewelah, City of	Jefferson County PUD	Puget Sound Naval Shipyard (Bremerton)
20	Clallam County PUD #1	Kalispel Tribe Utility	Raft River Rural Elec Coop
21	Clearwater Power	Kittitas County PUD #1	Ravalli Elec Coop
22	Columbia Basin Elec Coop	Klickitat	Richland, City of
23	Columbia Power Coop	Kootenai Electric Coop	Riverside Elec Coop
24	Columbia REA	Lakeview L & P (WA)	Rupert, City of
25	Columbia River PUD	Lane Elec Coop	Salem Elec Coop
26	Consol Irrig Dist #19	Lincoln Elec Coop	Salmon River Elec Coop
27	Consumer's Power	Lost River Elec Coop	Skamania County PUD #1
28	Coos-Curry Electric Coop	Lower Valley P & L	Soda Springs, City of
29	Coulee Dam, City of	Mason County PUD #1	South Side Elec
30	Declo, City of	Mason County PUD #3	Springfield Utiltiy Board
31	Douglas Electric Coop	McCleary, City of	Steilacoom, Town of
32	Drain, City of	McMinnville, City of	Sumas, Town of
33	East End Mutual Electric	Midstate Elec Coop	Surprise Valley Elec Coop
34	Eatonville, City of	Milton Freewater, City of	Wahkiakum County PUD #1
35	Tanner Elec Coop	Umpqua Indian Utility Cooperative	Wasco Elec Coop
36	Tillamook PUD #1	United Electric Coop	Weiser, City of
37	Troy, City of	USBIA Wapato	Wells Rural Elec Co
38	U.S. Bureau of Reclamation (Roza)	USDOE-Albany	West Oregon Elec Coop
39	U.S. Naval Station, Everett (Jim Creek)	USDOE-Richland	Whatcom County PUD #1
40	U.S. Naval Submarine Base (Bangor)	Vera Irrigation District	Yakama Power

Table 1.1.2
Tier 1 Block Service Customers

	A	B	C
1	Okanogan PUD	Pend Oreille	Seattle

Table 1.1.3
Slice Service Customers

	A	B	C
1	Clark	EWEB	Lewis
2	Clatskanie	Franklin	Snohomish
3	Cowlitz	Idaho Falls	Tacoma
4	Emerald		

Table 1.1.4
USBR Obligation Customers

	A	B	C
1	USBR Chief Joseph Project	USBR Rathdrum Prairie Project	USBR Tualatin Valley Project
2	USBR Columbia Basin Project	USBR Southern Idaho Projects	USBR Owyhee Project
3	USBR Crooked River Project	USBR Spokane Indian Development Project	USBR Umatilla Project
4	USBR The Dalles Reclamation Project	USBR Spokane Valley Project	USBR Yakima Project

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Table 1.2.1 BPA Sales to Preference and Legacy Customers Fiscal Year 2024 Water Year: P10 BP24 Final Proposal Report Date: 11/9/2022															
A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Pacific Northwest															
1 DSI Obligation	11														
2 Direct Service Industry	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
3 Load Following	3,308	3,740	4,484	4,518	4,112	3,750	3,478	3,478	3,360	3,577	3,815	3,717	3,722	3,317	3,766
4 Cooperative	1,619	1,838	2,228	2,231	2,038	1,843	1,730	1,730	1,755	1,914	2,048	1,983	1,985	1,748	1,915
5 Municipality	505	568	678	693	627	573	516	516	471	486	525	522	523	477	554
6 Public Utility District	1,056	1,188	1,401	1,413	1,286	1,185	1,099	1,099	1,015	1,058	1,113	1,081	1,083	969	1,156
7 Federal Entities	129	146	177	180	161	149	133	133	119	119	129	131	131	122	141
8 Slice Block	1,136	1,322	1,510	1,494	1,331	1,276	1,178	1,178	1,133	1,084	1,120	1,113	1,113	1,094	1,233
9 Municipality	261	309	375	373	343	341	302	302	261	251	275	269	269	268	302
10 Public Utility District	875	1,013	1,135	1,121	988	934	875	875	873	832	845	844	844	825	930
11 Slice Output from T1 System	1,120	1,473	1,540	1,599	1,475	1,506	1,257	1,170	1,597	1,535	1,283	1,279	1,257	1,199	1,401
12 Municipality	301	396	414	430	396	404	338	314	429	412	345	344	338	322	376
13 Public Utility District	819	1,077	1,126	1,170	1,079	1,101	920	856	1,168	1,123	939	936	919	877	1,024
14 Tier 1 Block	488	808	808	891	810	793	386	386	139	21	316	355	355	585	533
15 Municipality	436	713	702	762	693	687	343	343	109	0	261	310	310	523	461
16 Public Utility District	52	95	106	129	117	107	43	43	30	21	55	45	45	62	72
17 Tier 2 - Load Growth	14														
18 Cooperative	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
19 Municipality	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
20 Public Utility District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Federal Entities	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
22 Tier 2 - Short Term	196														
23 Cooperative	132	132	132	132	132	132	132	132	132	132	132	132	132	132	132
24 Municipality	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
25 Public Utility District	37	37	37	37	37	37	37	37	37	37	37	37	37	37	37
26 Federal Entities	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
27 USBR Obligation	123	10	11	8	18	61	234	234	345	395	427	330	329	286	188
28 USBR	123	10	11	8	18	61	234	234	345	395	427	330	329	286	188
Total Power Sales Contracts															
29 Cooperative	1,753	1,971	2,361	2,365	2,172	1,977	1,864	1,864	1,889	2,048	2,182	2,116	2,119	1,882	2,049
30 Direct Service Industry	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
31 Federal Entities	142	159	190	193	174	162	147	147	132	133	142	144	144	136	155
32 Municipality	1,528	2,012	2,195	2,283	2,084	2,032	1,525	1,501	1,295	1,175	1,432	1,471	1,466	1,617	1,719
33 Public Utility District	2,839	3,410	3,805	3,870	3,507	3,364	2,974	2,911	3,123	3,072	2,989	2,943	2,928	2,771	3,219
34 USBR	123	10	11	8	18	61	234	234	345	395	427	330	329	286	188
35 Total Power Sales Contracts	6,395	7,573	8,574	8,731	7,967	7,606	6,754	6,667	6,795	6,833	7,183	7,016	6,997	6,702	7,340

BPA Sales to Preference and Legacy Customers Fiscal Year 2025 Water Year: P10 BP24 Final Proposal Report Date: 11/9/2022															
A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Pacific Northwest															
1 DSI Obligation	11														
2 Direct Service Industry	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
3 Load Following	3,481	3,915	4,659	4,701	4,352	3,934	3,665	3,665	3,541	3,763	4,006	3,924	3,885	3,500	3,951
4 Cooperative	1,778	1,999	2,390	2,401	2,239	2,010	1,898	1,898	1,917	2,083	2,215	2,165	2,142	1,917	2,083
5 Municipality	511	574	684	699	641	579	521	521	476	491	530	531	525	482	560
6 Public Utility District	1,055	1,187	1,400	1,414	1,302	1,189	1,104	1,104	1,021	1,065	1,126	1,091	1,082	972	1,160
7 Federal Entities	137	154	185	187	170	156	141	141	126	125	134	137	136	128	148
8 Slice Block	1,163	1,350	1,541	1,525	1,408	1,303	1,204	1,204	1,159	1,108	1,146	1,139	1,139	1,119	1,263
9 Municipality	266	313	380	378	360	346	306	306	264	255	279	273	273	272	308
10 Public Utility District	897	1,037	1,161	1,147	1,047	957	898	898	895	854	867	866	866	847	956
11 Slice Output from T1 System	1,118	1,473	1,540	1,602	1,471	1,505	1,256	1,220	1,347	1,573	1,328	1,268	1,246	1,201	1,387
12 Municipality	300	396	414	430	395	404	337	328	362	422	357	341	335	323	373
13 Public Utility District	818	1,077	1,127	1,171	1,076	1,100	919	892	985	1,150	971	927	911	878	1,015
14 Tier 1 Block	484	803	803	885	833	788	383	383	138	21	314	354	352	581	531
15 Municipality	432	708	697	757	712	682	341	341	108	0	259	309	307	519	459
16 Public Utility District	52	95	105	128	121	106	43	43	30	21	55	45	45	62	72
17 Tier 2 - Load Growth	17														
18 Cooperative	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
19 Municipality	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
20 Public Utility District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Federal Entities	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
22 Tier 2 - Short Term	378														
23 Cooperative	304	304	304	304	304	304	304	304	304	304	304	304	304	304	304
24 Municipality	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
25 Public Utility District	43	43	43	43	43	43	43	43	43	43	43	43	43	43	43
26 Federal Entities	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
27 USBR Obligation	123	10	11	8	18	61	234	234	345	395	427	326	333	286	188
28 USBR	123	10	11	8	18	61	234	234	345	395	427	326	333	286	188
Total Power Sales Contracts															
29 Cooperative	2,084	2,305	2,696	2,707	2,545	2,316	2,204	2,204	2,223	2,389	2,521	2,471	2,448	2,223	2,389
30 Direct Service Industry	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
31 Federal Entities	152	169	200	202	185	171	157	157	142	140	149	152	151	143	164
32 Municipality	1,541	2,022	2,206	2,295	2,140	2,042	1,537	1,527	1,241	1,199	1,456	1,485	1,471	1,627	1,730
33 Public Utility District	2,865	3,439	3,836	3,904	3,590	3,395	3,007	2,980	2,973	3,133	3,061	2,972	2,946	2,803	3,245
34 USBR	123	10	11	8	18	61	234	234	345	395	427	326	333	286	188
35 Total Power Sales Contracts	6,775	7,957	8,960	9,128	8,489	7,997	7,149	7,113	6,935	7,267	7,627	7,417	7,361	7,094	7,727

Table 1.2.2 BPA Sales to Preference and Legacy Customers Fiscal Year 2024 Water Year: P10 BP24 Final Proposal Report Date: 11/9/2022																
A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum	
Pacific Northwest																2001
1 DSI Obligation	4,660	4,351	4,408	4,424	4,303	4,658	2,239	2,239	4,478	4,525	4,422	2,264	2,438	4,189	53,599	
2 Direct Service Industry	4,660	4,351	4,408	4,424	4,303	4,658	2,239	2,239	4,478	4,525	4,422	2,264	2,438	4,189	53,599	
3 Load Following	1,512,449	1,597,168	1,933,545	1,990,756	1,731,006	1,678,574	762,222	762,222	1,503,955	1,596,704	1,705,799	844,267	909,211	1,424,674	19,952,552	
4 Cooperative	745,628	782,504	962,264	979,496	854,965	828,601	373,245	373,245	780,488	865,366	901,843	449,963	484,576	756,918	10,139,101	
5 Municipality	232,898	246,858	295,674	310,461	268,851	258,607	116,409	116,409	216,920	218,821	244,700	121,248	130,575	207,061	2,985,492	
6 Public Utility District	477,266	507,610	601,731	624,362	542,025	527,608	244,404	244,404	455,449	460,997	502,463	244,360	263,157	410,393	6,106,229	
7 Federal Entities	56,657	60,195	73,876	76,438	65,165	63,757	28,165	28,165	51,098	51,520	56,794	28,696	30,903	50,302	721,730	
8 Slice Block	472,703	528,765	604,138	621,508	532,409	530,663	244,932	244,932	471,452	433,450	465,955	231,500	249,308	419,943	6,051,658	
9 Municipality	108,777	123,565	150,029	154,991	137,149	142,054	62,842	62,842	108,414	100,533	114,469	55,983	60,289	102,983	1,484,921	
10 Public Utility District	363,926	405,200	454,110	466,517	395,260	388,609	182,090	182,090	363,037	332,916	351,486	175,517	189,019	316,960	4,566,738	
11 Slice Output from T1 System	495,470	645,173	695,842	738,565	653,814	679,468	277,563	252,317	727,398	687,627	295,769	313,799	595,322	506,680	7,564,808	
12 Municipality	133,081	173,291	186,900	198,376	175,612	182,502	74,552	67,771	195,376	184,694	79,442	84,285	159,901	136,092	2,031,875	
13 Public Utility District	362,389	471,882	508,942	540,190	478,202	496,966	203,011	184,546	532,022	502,934	216,327	229,514	435,421	370,588	5,532,933	
14 Tier 1 Block	217,353	348,160	358,723	395,977	337,185	352,250	83,366	83,366	61,913	9,195	140,818	76,271	82,138	251,640	2,798,354	
15 Municipality	194,418	308,639	313,500	340,232	289,197	306,209	74,122	74,122	48,605	0	116,651	66,696	71,827	226,011	2,430,229	
16 Public Utility District	22,935	39,520	45,223	55,745	47,988	46,041	9,244	9,244	13,308	9,195	24,167	9,575	10,311	25,629	368,125	
17 Tier 2 - Load Growth	5,834	5,610	5,610	5,834	5,610	5,834	2,917	2,917	5,834	5,610	5,834	2,917	3,141	5,385	68,886	
18 Cooperative	739	711	711	739	711	739	370	370	739	711	739	370	398	682	8,729	
19 Municipality	886	852	852	886	852	886	443	443	886	852	886	443	477	818	10,463	
20 Public Utility District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21 Federal Entities	4,209	4,047	4,047	4,209	4,047	4,209	2,104	2,104	4,209	4,047	4,209	2,104	2,266	3,885	49,695	
22 Tier 2 - Short Term	81,478	78,344	78,344	81,478	78,344	81,478	40,739	40,739	81,478	78,344	81,478	40,739	43,873	75,210	962,064	
23 Cooperative	54,942	52,829	52,829	54,942	52,829	54,942	27,471	27,471	54,942	52,829	54,942	27,471	29,584	50,716	648,738	
24 Municipality	9,801	9,424	9,424	9,801	9,424	9,801	4,900	4,900	9,801	9,424	9,801	4,900	5,277	9,047	115,727	
25 Public Utility District	15,379	14,788	14,788	15,379	14,788	15,379	7,690	7,690	15,379	14,788	15,379	7,690	8,281	14,196	181,592	
26 Federal Entities	1,356	1,304	1,304	1,356	1,304	1,356	678	678	1,356	1,304	1,356	678	730	1,251	16,008	
27 USBR Obligation	36,170	3,142	4,693	3,510	4,970	17,537	42,097	42,097	125,849	132,650	143,339	47,371	51,014	84,254	738,691	
28 USBR	36,170	3,142	4,693	3,510	4,970	17,537	42,097	42,097	125,849	132,650	143,339	47,371	51,014	84,254	738,691	
Total Power Sales Contracts	2,826,118	3,210,711	3,685,303	3,842,052	3,347,640	3,350,461	1,456,074	1,430,828	2,982,356	2,948,104	2,843,414	1,559,129	1,936,446	2,771,975	38,190,612	
29 Cooperative	801,309	836,044	1,015,804	1,035,177	908,505	884,283	401,085	401,085	836,169	918,905	957,524	477,804	514,558	808,316	10,796,567	
30 Direct Service Industry	4,660	4,351	4,408	4,424	4,303	4,658	2,239	2,239	4,478	4,525	4,422	2,264	2,438	4,189	53,599	
31 Federal Entities	62,221	65,546	79,226	82,002	70,515	69,322	30,947	30,947	56,663	56,870	62,358	31,478	33,900	55,438	787,432	
32 Municipality	679,862	862,629	956,378	1,014,746	881,085	900,060	333,269	326,488	580,002	514,324	565,950	333,556	428,346	682,012	9,058,706	
33 Public Utility District	1,241,895	1,439,001	1,624,794	1,702,193	1,478,262	1,474,602	646,438	627,973	1,379,196	1,320,830	1,109,822	666,656	906,189	1,137,765	16,755,616	
34 USBR	36,170	3,142	4,693	3,510	4,970	17,537	42,097	42,097	125,849	132,650	143,339	47,371	51,014	84,254	738,691	
35 Total Power Sales Contracts	2,826,118	3,210,7														

Table 1.2.2 BPA Sales to Preference and Legacy Customers Fiscal Year 2025 Water Year: P10 BP24 Final Proposal Report Date: 11/9/2022																
A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum	
Pacific Northwest																2001
1 DSI Obligation	4,660	4,351	4,408	4,424	4,155	4,658	2,239	2,239	4,478	4,525	4,422	2,351	2,351	4,189	53,450	
2 Direct Service Industry	4,660	4,351	4,408	4,424	4,155	4,658	2,239	2,239	4,478	4,525	4,422	2,351	2,351	4,189	53,450	
3 Load Following	1,605,095	1,668,399	2,003,621	2,068,272	1,762,497	1,756,455	801,276	801,276	1,581,182	1,674,418	1,786,057	911,970	911,970	1,507,209	20,839,697	
4 Cooperative	812,496	847,538	1,028,014	1,050,280	903,688	899,355	408,058	408,058	848,706	935,486	971,332	508,196	508,196	815,209	10,944,614	
5 Municipality	241,312	249,526	298,105	312,972	264,590	261,014	117,610	117,610	219,346	221,153	246,990	124,145	124,145	214,360	3,012,879	
6 Public Utility District	490,589	507,805	600,337	625,411	527,947	529,294	245,745	245,745	458,920	463,792	508,473	248,866	248,866	424,372	6,126,162	
7 Federal Entities	60,698	63,530	77,166	79,609	66,271	66,792	29,863	29,863	54,210	53,987	59,261	30,762	30,762	53,268	756,042	
8 Slice Block	502,268	540,147	616,509	634,363	540,646	542,094	250,503	250,503	482,000	443,389	476,738	236,906	236,906	447,753	6,200,723	
9 Municipality	114,761	125,219	152,084	157,253	138,406	144,024	63,736	63,736	109,851	101,954	116,214	56,874	56,874	108,888	1,509,873	
10 Public Utility District	387,507	414,928	464,425	477,110	402,241	398,070	186,767	186,767	372,149	341,435	360,524	180,032	180,032	338,865	4,690,850	
11 Slice Output from T1 System	511,927	643,369	693,771	736,001	626,444	682,272	277,340	267,289	603,506	717,551	615,208	292,139	289,571	525,417	7,481,805	
12 Municipality	137,501	172,806	186,344	197,687	168,260	183,255	74,492	71,793	162,099	192,731	165,242	78,467	77,777	141,125	2,009,581	
13 Public Utility District	374,426	470,563	507,427	538,315	458,184	499,017	202,847	195,496	441,407	524,820	449,966	213,672	211,793	384,293	5,472,224	
14 Tier 1 Block	216,056	345,830	356,342	393,376	334,848	349,920	82,807	82,807	61,527	9,170	139,912	78,584	78,584	250,334	2,780,097	
15 Municipality	193,019	306,417	311,243	337,783	287,116	304,004	73,588	73,588	48,255	0	115,811	68,763	68,763	224,384	2,412,735	
16 Public Utility District	23,037	39,413	45,100	55,593	47,732	45,916	9,219	9,219	13,272	9,170	24,101	9,821	9,821	25,950	367,362	
17 Tier 2 - Load Growth	7,246	6,709	6,709	6,977	6,440	6,977	3,489	3,489	6,977	6,709	6,977	3,489	3,489	6,709	82,384	
18 Cooperative	839	777	777	808	746	808	404	404	808	777	808	404	404	777	9,539	
19 Municipality	1,384	1,282	1,282	1,333	1,230	1,333	666	666	1,333	1,282	1,333	666	666	1,282	15,738	
20 Public Utility District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
21 Federal Entities	5,022	4,650	4,650	4,836	4,464	4,836	2,418	2,418	4,836	4,650	4,836	2,418	2,418	4,650	57,107	
22 Tier 2 - Short Term	163,380	151,278	151,278	157,329	145,227	157,329	78,665	78,665	157,329	151,278	157,329	78,665	78,665	151,278	1,857,694	
23 Cooperative	131,360	121,630	121,630	126,495	116,764	126,495	63,247	63,247	126,495	121,630	126,495	63,247	63,247	121,630	1,493,611	
24 Municipality	11,962	11,076	11,076	11,519	10,633	11,519	5,759	5,759	11,519	11,076	11,519	5,759	5,759	11,076	136,008	
25 Public Utility District	18,543	17,170	17,170	17,856	16,483	17,856	8,928	8,928	17,856	17,170	17,856	8,928	8,928	17,170	210,843	
26 Federal Entities	1,515	1,403	1,403	1,459	1,347	1,459	730	730	1,459	1,403	1,459	730	730	1,403	17,231	
27 USBR Obligation	36,251	3,142	4,693	3,510	4,797	17,537	42,097	42,097	125,849	132,650	143,339	49,029	49,029	84,454	738,472	
28 USBR	36,251	3,142	4,693	3,510	4,797	17,537	42,097	42,097	125,849	132,650	143,339	49,029	49,029	84,454	738,472	
Total Power Sales Contracts																
29 Cooperative	944,695	969,945	1,150,420	1,177,583	1,021,198	1,026,658	471,710	471,710	976,009	1,057,892	1,098,635	571,848	571,848	937,615	12,447,764	
30 Direct Service Industry	4,660	4,351	4,408	4,424	4,155	4,658	2,239	2,239	4,478	4,525	4,422	2,351	2,351	4,189	53,450	
31 Federal Entities	67,236	69,583	83,219	85,904	72,083	73,088	33,010	33,010	60,506	60,040	65,557	33,910	33,910	59,322	830,380	
32 Municipality	699,940	866,325	960,133	1,018,546	870,234	905,149	335,852	333,153	552,402	528,196	657,109	334,675	334,675	701,114	9,096,813	
33 Public Utility District	1,294,102	1,449,878	1,634,458	1,714,285	1,452,586	1,490,152	653,506	646,155	1,303,604	1,356,386	1,360,920	661,319	661,319	659,441	1,190,649	
34 USBR	36,251	3,142	4,693	3,510	4,797	17,537	42,097	42,097	125,849	132,650	143,339	49,029	49,029	84,454	738,472	
35 Total Power Sales Contracts	3,046,884	3,363,224	3,837,332	4,004,252	3,425,054	3,517,242	1,538,414	1,528,363	3,022,848	3,139,689 </						

Table 1.2.3

BPA Sales to Preference and Legacy Customers
Fiscal Year 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Pacific Northwest															
1 DSI Obligation	3,524	3,580	3,776	3,760	3,353	3,516	1,721	1,721	3,706	3,395	3,762	1,696	1,785	3,731	43,025
2 Direct Service Industry	3,524	3,580	3,776	3,760	3,353	3,516	1,721	1,721	3,706	3,395	3,762	1,696	1,785	3,731	43,025
3 Load Following	948,941	1,099,073	1,402,302	1,370,387	1,131,212	1,107,399	490,020	490,020	995,595	978,891	1,132,612	493,948	519,946	963,751	13,124,097
4 Cooperative	458,705	542,400	695,006	680,686	563,614	540,587	249,567	249,567	524,992	512,766	621,957	263,778	277,661	501,882	6,683,168
5 Municipality	142,550	162,742	208,985	205,363	167,444	167,257	69,321	69,321	133,427	130,749	145,760	66,767	70,281	136,655	1,876,624
6 Public Utility District	308,447	348,826	440,615	427,051	353,246	352,774	151,349	151,349	299,686	300,953	325,949	144,959	152,588	287,386	4,045,177
7 Federal Entities	39,239	45,105	57,696	57,286	46,908	46,781	19,783	19,783	37,490	34,422	38,947	18,445	19,416	37,829	519,128
8 Slice Block	372,708	424,326	519,569	490,034	393,987	417,135	178,987	178,987	371,721	346,754	367,387	169,170	178,074	367,455	4,776,294
9 Municipality	85,766	99,159	129,027	122,205	101,492	111,664	45,922	45,922	85,480	80,425	90,254	40,910	43,063	90,112	1,171,401
10 Public Utility District	286,942	325,167	390,542	367,829	292,496	305,471	133,065	133,065	286,241	266,329	277,133	128,260	135,011	277,343	3,604,894
11 Slice Output from T1 System	337,468	416,519	449,943	451,411	372,553	439,171	175,076	168,974	460,895	417,591	359,352	164,706	168,827	356,701	4,739,188
12 Municipality	90,643	111,875	120,853	121,247	100,066	117,959	47,025	45,386	123,794	112,163	96,521	44,239	45,346	95,808	1,272,925
13 Public Utility District	246,826	304,644	329,090	330,164	272,487	321,212	128,051	123,588	337,101	305,428	262,832	120,466	123,481	260,892	3,466,262
14 Tier 1 Block	145,426	234,648	242,325	266,914	226,393	237,239	55,619	55,619	41,275	6,130	94,465	51,588	54,303	169,722	1,881,665
15 Municipality	129,612	205,759	209,000	226,822	192,798	204,139	49,415	49,415	32,403	0	77,767	44,990	47,358	150,674	1,620,153
16 Public Utility District	15,814	28,888	33,325	40,092	33,595	33,100	6,204	6,204	8,872	6,130	16,697	6,597	6,945	19,048	261,512
17 Tier 2 - Load Growth	4,600	4,502	4,824	4,600	4,151	4,586	2,132	2,132	4,600	4,488	4,600	2,132	2,244	4,712	54,301
18 Cooperative	583	570	611	583	526	581	270	270	583	569	583	270	284	597	6,881
19 Municipality	699	684	733	699	630	697	324	324	699	682	699	324	341	716	8,247
20 Public Utility District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Federal Entities	3,318	3,248	3,480	3,318	2,995	3,308	1,538	1,538	3,318	3,237	3,318	1,538	1,619	3,399	39,173
22 Tier 2 - Short Term	64,242	62,871	67,376	64,242	57,975	64,046	29,771	29,771	64,242	62,675	64,242	29,771	31,338	65,809	758,370
23 Cooperative	43,320	42,395	45,433	43,320	39,093	43,188	20,075	20,075	43,320	42,263	43,320	20,075	21,132	44,376	511,383
24 Municipality	7,728	7,563	8,105	7,728	6,974	7,704	3,581	3,581	7,728	7,539	7,728	3,581	3,770	7,916	91,224
25 Public Utility District	12,126	11,867	12,717	12,126	10,943	12,089	5,619	5,619	12,126	11,830	12,126	5,619	5,915	12,422	143,144
26 Federal Entities	1,069	1,046	1,121	1,069	965	1,066	495	495	1,069	1,043	1,069	495	521	1,095	12,619
27 USBR Obligation	55,196	3,832	3,351	2,731	7,575	27,751	42,181	42,181	130,878	151,514	174,521	71,547	75,312	121,653	910,223
28 USBR	55,196	3,832	3,351	2,731	7,575	27,751	42,181	42,181	130,878	151,514	174,521	71,547	75,312	121,653	910,223
Total Power Sales Contracts															
29 Cooperative	502,608	585,366	741,050	724,588	603,233	584,356	269,913	269,913	568,894	555,598	665,859	284,123	299,077	546,855	7,201,432
30 Direct Service Industry	3,524	3,580	3,776	3,760	3,353	3,516	1,721	1,721	3,706	3,395	3,762	1,696	1,785	3,731	43,025
31 Federal Entities	43,626	49,398	62,298	61,674	50,867	51,155	21,816	21,816	41,877	38,703	43,334	20,478	21,556	42,323	570,920
32 Municipality	456,998	587,782	676,702	684,063	569,404	609,421	215,588	213,949	383,531	331,558	418,728	200,811	210,159	481,881	6,040,574
33 Public Utility District	870,154	1,019,392	1,206,290	1,177,263	962,766	1,024,646	424,289	419,826	944,026	890,669	894,736	405,902	423,940	857,091	11,520,989
34 USBR	55,196	3,832	3,351	2,731	7,575	27,751	42,181	42,181	130,878	151,514	174,521	71,547	75,312	121,653	910,223
35 Total Power Sales Contracts	1,932,106	2,249,350	2,693,466	2,654,079	2,197,198	2,300,843	975,508	969,405	2,072,912	1,971,437	2,200,941	984,557	1,031,829	2,053,533	26,287,163

Table 1.2.3

BPA Sales to Preference and Legacy Customers
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Pacific Northwest															
1 DSI Obligation	3,524	3,580	3,776	3,760	3,237	3,516	1,721	1,721	3,706	3,395	3,762	1,613	1,868	3,731	42,910
2 Direct Service Industry	3,524	3,580	3,776	3,760	3,237	3,516	1,721	1,721	3,706	3,395	3,762	1,613	1,868	3,731	42,910
3 Load Following															
4 Cooperative	510,308	593,586	750,052	736,133	600,809	594,225	275,118	275,118	577,665	564,184	676,780	271,356	314,202	565,190	7,304,726
5 Municipality	139,027	164,599	210,725	207,136	166,395	168,913	70,083	70,083	135,051	132,242	147,281	66,880	77,440	132,865	1,888,719
6 Public Utility District	294,281	348,270	441,255	426,618	347,109	354,047	151,852	151,852	300,714	302,732	329,282	143,886	166,605	275,676	4,034,179
7 Federal Entities	41,039	47,751	60,464	59,748	48,050	49,196	21,064	21,064	39,878	36,137	40,699	18,612	21,551	39,056	544,308
8 Slice Block															
9 Municipality	82,882	100,486	130,795	123,988	103,804	113,212	46,576	46,576	86,613	81,562	91,630	41,562	48,124	87,109	1,184,917
10 Public Utility District	279,861	332,973	399,412	376,182	301,679	312,909	136,482	136,482	293,426	273,142	284,259	131,562	152,335	271,088	3,681,791
11 Slice Output from T1 System	320,175	418,600	452,321	455,660	362,215	435,639	174,856	171,857	398,377	414,891	372,621	164,290	188,760	339,237	4,669,498
12 Municipality	85,998	112,434	121,491	122,388	97,289	117,011	46,966	46,160	107,002	111,438	100,084	44,128	50,700	91,118	1,254,207
13 Public Utility District	234,177	306,166	330,829	333,272	264,926	318,628	127,890	125,697	291,374	303,453	272,536	120,162	138,060	248,119	3,415,291
14 Tier 1 Block															
15 Municipality	128,679	204,278	207,495	225,189	191,410	202,670	49,059	49,059	32,170	0	77,208	42,488	49,196	149,589	1,608,490
16 Public Utility District	15,606	28,810	33,235	39,983	33,627	33,010	6,187	6,187	8,848	6,113	16,652	6,346	7,348	18,604	260,556
17 Tier 2 - Load Growth															
18 Cooperative	606	623	668	637	559	635	295	295	637	621	637	295	342	621	7,473
19 Municipality	1,000	1,028	1,102	1,051	923	1,048	487	487	1,051	1,025	1,051	487	564	1,025	12,329
20 Public Utility District	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Federal Entities	3,627	3,732	3,999	3,813	3,348	3,802	1,767	1,767	3,813	3,720	3,813	1,767	2,046	3,720	44,737
22 Tier 2 - Short Term															
23 Cooperative	94,871	97,608	104,601	99,736	87,573	99,432	46,219	46,219	99,736	97,304	99,736	46,219	53,517	97,304	1,170,077
24 Municipality	8,639	8,888	9,525	9,082	7,974	9,054	4,209	4,209	9,082	8,860	9,082	4,209	4,873	8,860	106,547
25 Public Utility District	13,392	13,779	14,766	14,079	12,362	14,036	6,524	6,524	14,079	13,736	14,079	6,524	7,555	13,736	165,172
26 Federal Entities	1,094	1,126	1,207	1,151	1,010	1,147	533	533	1,151	1,123	1,151	533	617	1,123	13,499
27 USBR Obligation															
28 USBR	55,116	3,832	3,351	2,731	7,315	27,751	42,181	42,181	130,878	151,514	174,521	68,209	78,978	121,452	910,010

Total Power Sales Contracts

29 Cooperative	605,785	691,817	855,321	836,506	688,942	694,292	321,633	321,633	678,038	662,109	777,154	317,870	368,060	663,115	8,482,276
30 Direct Service Industry	3,524	3,580	3,776	3,760	3,237	3,516	1,721	1,721	3,706	3,395	3,762	1,613	1,868	3,731	42,910
31 Federal Entities	45,760	52,609	65,670	64,712	52,409	54,145	23,365	23,365	44,842	40,980	45,663	20,912	24,214	43,899	602,544
32 Municipality	446,223	591,714	681,134	688,834	567,795	611,907	217,379	216,574	370,969	335,128	426,336	199,752	230,897	470,567	6,055,210
33 Public Utility District	837,318	1,029,997	1,219,496	1,190,134	959,703	1,032,629	428,936	426,743	908,441	899,176	916,809	408,481	471,902	827,223	11,556,988
34 USBR	55,116	3,832	3,351	2,731	7,315	27,751	42,181	42,181	130,878	151,514	174,521	68,209	78,978	121,452	910,010
35 Total Power Sales Contracts	1,993,726	2,373,549	2,828,748	2,786,678	2,279,401	2,424,240	1,035,216	1,032,217	2,136,873	2,092,301	2,344,245	1,016,837	1,175,921	2,129,986	27,649,937

2. OTHER CONTRACT DELIVERIES AND PURCHASE FORECASTS

Table 2.1.1
Bonneville Power Administration - Power Services Exports
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Canada															
Contracts															
1 BPA-P to BCHP Trty CEA															
454	454	454	454	454	454	454	454	454	454	454	454	452	456	454	454
2 BPA-P to BCHP NTSA Del	0	0	0	0	0	0	0	0	0	0	28.7	111	188	0	15.2
3 Total Exports to CAN	454	483	563	645	454	470									
Total Exports															
4 Federal Entities															
454	454	454	454	454	454	454	454	454	454	454	483	563	645	454	470
5 Total Exports	454	483	563	645	454	470									

Table 2.1.1
Bonneville Power Administration - Power Services Exports
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Canada															
Contracts															
1 BPA-P to BCHP Trty CEA	454	454	454	454	454	454	454	454	454	454	454	469	440	454	454
2 BPA-P to BCHP NTSA Del	0	0	0	0	0	0	0	0	0	0	15.3	106	224	0	15.5
3 Total Exports to CAN	454	470	576	665	454	470									
Total Exports															
4 Federal Entities	454	454	454	454	454	454	454	454	454	454	470	576	665	454	470
5 Total Exports	454	470	576	665	454	470									

Table 2.1.2
Bonneville Power Administration - Power Services Exports
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BPA-P to BCHP Trty CEA	337,999	327,550	337,999	337,999	316,193	337,545	163,548	163,548	337,999	327,096	337,999	162,740	175,259	327,096	3,990,570
2 BPA-P to BCHP NTSA Del	0	0	0	0	0	0	0	0	0	0	11,939	23,088	42,179	0	77,206
3 Total Exports to CAN	337,999	327,550	337,999	337,999	316,193	337,545	163,548	163,548	337,999	327,096	349,938	185,828	217,438	327,096	4,067,777
Total Exports															
4 Federal Entities	337,999	327,550	337,999	337,999	316,193	337,545	163,548	163,548	337,999	327,096	349,938	185,828	217,438	327,096	4,067,777
5 Total Exports	337,999	327,550	337,999	337,999	316,193	337,545	163,548	163,548	337,999	327,096	349,938	185,828	217,438	327,096	4,067,777

Table 2.1.2
Bonneville Power Administration - Power Services Exports
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BPA-P to BCHP Trty CEA															
337,999	327,550	337,999	337,999	305,290	337,545	163,548	163,548	337,999	327,096	337,999	169,000	169,000	327,096	3,979,667	
0	0	0	0	0	0	0	0	0	0	0	6,365	22,131	46,675	0	75,171
3 Total Exports to CAN	337,999	327,550	337,999	337,999	305,290	337,545	163,548	163,548	337,999	327,096	344,364	191,131	215,675	327,096	4,054,838
Total Exports															
4 Federal Entities	337,999	327,550	337,999	337,999	305,290	337,545	163,548	163,548	337,999	327,096	344,364	191,131	215,675	327,096	4,054,838
5 Total Exports	337,999	327,550	337,999	337,999	305,290	337,545	163,548	163,548	337,999	327,096	344,364	191,131	215,675	327,096	4,054,838

Table 2.1.3
Bonneville Power Administration - Power Services Exports
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BPA-P to BCHP Trty CEA	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 BPA-P to BCHP NTSA Del	0	0	0	0	0	0	0	0	0	9,414	16,872	30,128	0	0	56,414
3 Total Exports to CAN	0	0	0	9,414	16,872	30,128	0	0	56,414						
Total Exports															
4 Federal Entities	0	0	0	0	0	0	0	0	0	9,414	16,872	30,128	0	0	56,414
5 Total Exports	0	0	0	9,414	16,872	30,128	0	0	56,414						

Table 2.1.3
Bonneville Power Administration - Power Services Exports
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BPA-P to BCHP Trty CEA															
0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 BPA-P to BCHP NTSA Del	0	0	0	0	0	0	0	0	0	0	5,018	16,173	39,494	0	60,686
3 Total Exports to CAN	0	0	0	5,018	16,173	39,494	0	60,686							
Total Exports															
4 Federal Entities															
0	0	0	0	0	0	0	0	0	0	5,018	16,173	39,494	0	60,686	
5 Total Exports	0	0	0	5,018	16,173	39,494	0	60,686							

Table 2.2.1

Bonneville Power Administration - Power Services: Imports
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Canada															
Contracts															
1 BCHP to BPA-P Trty LCALgcyRtn	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2 Total Imports From CAN	1.00														
Total Imports															
3 Federal Entities	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4 Total Imports	1.00														

Table 2.2.1

Bonneville Power Administration - Power Services: Imports
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Canada															
Contracts															
1 BCHP to BPA-P Trty LCALgcyRtn	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
2 Total Imports From CAN	1.00														
Total Imports															
3 Federal Entities	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
4 Total Imports	1.00														

Table 2.2.2

Bonneville Power Administration - Power Services: Imports
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BCHP to BPA-P Trty LCalGcyRtn															
2 Total Imports From CAN	416	400	400	416	400	416	208	208	416	400	416	208	224	384	4,912
Total Imports															
3 Federal Entities	416	400	400	416	400	416	208	208	416	400	416	208	224	384	4,912
4 Total Imports	416	400	400	416	400	416	208	208	416	400	416	208	224	384	4,912

Table 2.2.2

Bonneville Power Administration - Power Services: Imports
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BCHP to BPA-P Trty LCALgcyRtn															
432	400	400	416	384	416	208	208	416	400	416	208	208	400	400	4,912
2 Total Imports From CAN	432	400	400	416	384	416	208	208	416	400	416	208	208	400	4,912
Total Imports															
3 Federal Entities	432	400	400	416	384	416	208	208	416	400	416	208	208	400	4,912
4 Total Imports	432	400	400	416	384	416	208	208	416	400	416	208	208	400	4,912

Table 2.2.3

Bonneville Power Administration - Power Services: Imports

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BCHP to BPA-P Trty LCalgcyRtn															
328	321	344	328	296	327	152	152	328	320	328	152	160	336	3,872	
2 Total Imports From CAN	328	321	344	328	296	327	152	152	328	320	328	152	160	336	3,872
Total Imports															
3 Federal Entities	328	321	344	328	296	327	152	152	328	320	328	152	160	336	3,872
4 Total Imports	328	321	344	328	296	327	152	152	328	320	328	152	160	336	3,872

Table 2.2.3

Bonneville Power Administration - Power Services: Imports
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Canada															
Contracts															
1 BCHP to BPA-P Trty LCALgcyRtn															
2 Total Imports From CAN	312	321	344	328	288	327	152	152	328	320	328	152	176	320	3,848
Total Imports															
3 Federal Entities	312	321	344	328	288	327	152	152	328	320	328	152	176	320	3,848
4 Total Imports	312	321	344	328	288	327	152	152	328	320	328	152	176	320	3,848

Table 2.3.1

Bonneville Power Administration - Power Services: Intra-Regional Transfers

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Intra-Regional Transfers															
Contracts															
1 BPA-P to BPA-T Ops IntrlAgmt	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44
2 BPA-P to PSE Ops UBkr Repl	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3 Other Entities to BPA-P	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
4 Net Intra-Regional Transfers	54.5														
Intra-Regional Contracts Out															
5 Federal Entities	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44
6 Investor Owned Utilities	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7 Total Regional Contracts Out	9.44														
Intra-Regional Contracts In															
8 Federal Entities															
9 Marketer	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0	64.0
10 Total Regional Contracts In	64.0														

Table 2.3.1

Bonneville Power Administration - Power Services: Intra-Regional Transfers

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Intra-Regional Transfers															
Contracts															
1 BPA-P to BPA-T Ops IntrlAgmt	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44
2 BPA-P to PSE Ops UBkr Repl	0.00	3.89	3.77	3.92	4.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28
3 Other Entities to BPA-P	64.5	88.9	138.4	164.0	125.0	89.0	64.4	64.4	0.0	0.0	0.0	0.0	0.0	25.0	63.0
4 Net Intra-Regional Transfers	55.1	75.5	125.2	150.6	111.6	79.6	55.0	55.0	-9.4	-9.4	-9.4	-9.4	-9.4	15.6	52.2
Intra-Regional Contracts Out															
5 Federal Entities	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44	9.44
6 Investor Owned Utilities	0.00	3.89	3.77	3.92	4.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.28
7 Total Regional Contracts Out	9.44	13.33	13.21	13.36	13.45	9.44	10.72								
Intra-Regional Contracts In															
8 Federal Entities															
9 Marketer	64.5	88.9	138.4	164.0	125.0	89.0	64.4	64.4	0.0	0.0	0.0	0.0	0.0	25.0	63.0
10 Total Regional Contracts In	64.5	88.9	138.4	164.0	125.0	89.0	64.4	64.4	0.0	0.0	0.0	0.0	0.0	25.0	63.0

Table 2.3.2

Bonneville Power Administration - Power Services: Intra-Regional Transfers
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Intra-Regional Transfers															
Contracts															
1 BPA-P to BPA-T Ops IntrlAgmt															
3,926	3,775	3,775	3,926	3,775	3,926	1,963	1,963	3,926	3,775	3,926	1,963	2,114	3,624	46,355	
0	2,800	2,800	2,912	2,800	0	0	0	0	0	0	0	0	0	0	11,312
31,200	40,000	60,000	72,800	50,000	41,600	15,600	15,600	0	0	0	0	0	9,600	336,400	
4 Net Intra-Regional Transfers	27,274	33,425	53,425	65,962	43,425	37,674	13,637	13,637	-3,926	-3,775	-3,926	-1,963	-2,114	5,976	278,733
Intra-Regional Contracts Out															
5 Federal Entities															
3,926	3,775	3,775	3,926	3,775	3,926	1,963	1,963	3,926	3,775	3,926	1,963	2,114	3,624	46,355	
0	2,800	2,800	2,912	2,800	0	0	0	0	0	0	0	0	0	0	11,312
7 Total Regional Contracts Out	3,926	6,575	6,575	6,838	6,575	3,926	1,963	1,963	3,926	3,775	3,926	1,963	2,114	3,624	57,667
Intra-Regional Contracts In															
8 Federal Entities															
9 Marketer															
31,200	40,000	60,000	72,800	50,000	41,600	15,600	15,600	0	0	0	0	0	9,600	336,400	
10 Total Regional Contracts In	31,200	40,000	60,000	72,800	50,000	41,600	15,600	15,600	0	0	0	0	0	9,600	336,400

Table 2.3.2

Bonneville Power Administration - Power Services: Intra-Regional Transfers

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Intra-Regional Transfers															
Contracts															
1 BPA-P to BPA-T Ops IntrlAgmt															
4,077	3,775	3,775	3,926	3,624	3,926	1,963	1,963	3,926	3,775	3,926	1,963	1,963	3,775	46,355	
2 BPA-P to PSE Ops UBkr Repl	0	2,800	2,800	2,912	2,688	0	0	0	0	0	0	0	0	0	11,200
3 Other Entities to BPA-P	32,400	40,000	60,000	72,800	48,000	41,600	15,600	15,600	0	0	0	0	0	10,000	336,000
4 Net Intra-Regional Transfers	28,323	33,425	53,425	65,962	41,688	37,674	13,637	13,637	-3,926	-3,775	-3,926	-1,963	-1,963	6,225	278,445
Intra-Regional Contracts Out															
5 Federal Entities	4,077	3,775	3,775	3,926	3,624	3,926	1,963	1,963	3,926	3,775	3,926	1,963	1,963	3,775	46,355
6 Investor Owned Utilities	0	2,800	2,800	2,912	2,688	0	0	0	0	0	0	0	0	0	11,200
7 Total Regional Contracts Out	4,077	6,575	6,575	6,838	6,312	3,926	1,963	1,963	3,926	3,775	3,926	1,963	1,963	3,775	57,555
Intra-Regional Contracts In															
8 Federal Entities															
9 Marketer	32,400	40,000	60,000	72,800	48,000	41,600	15,600	15,600	0	0	0	0	0	10,000	336,000
10 Total Regional Contracts In	32,400	40,000	60,000	72,800	48,000	41,600	15,600	15,600	0	0	0	0	0	10,000	336,000

Table 2.3.3

Bonneville Power Administration - Power Services: Intra-Regional Transfers
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Intra-Regional Transfers															
Contracts															
1 BPA-P to BPA-T Ops IntrlAgmt															
3,095	3,029	3,246	3,095	2,793	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,510	3,171	36,540	
2 BPA-P to PSE Ops UBkr Repl	0	7	7	7	0	0	0	0	0	0	0	0	0	0	28
3 Other Entities to BPA-P	16,400	24,075	43,000	49,200	37,000	24,525	7,600	7,600	0	0	0	0	0	8,400	217,800
4 Net Intra-Regional Transfers	13,305	21,039	39,747	46,098	34,200	21,439	6,166	6,166	-3,095	-3,020	-3,095	-1,434	-1,510	5,229	181,232
Intra-Regional Contracts Out															
5 Federal Entities	3,095	3,029	3,246	3,095	2,793	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,510	3,171	36,540
6 Investor Owned Utilities	0	7	7	7	0	0	0	0	0	0	0	0	0	0	28
7 Total Regional Contracts Out	3,095	3,036	3,253	3,102	2,800	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,510	3,171	36,568
Intra-Regional Contracts In															
8 Federal Entities															
9 Marketer	16,400	24,075	43,000	49,200	37,000	24,525	7,600	7,600	0	0	0	0	0	8,400	217,800
10 Total Regional Contracts In	16,400	24,075	43,000	49,200	37,000	24,525	7,600	7,600	0	0	0	0	0	8,400	217,800

Table 2.3.3

Bonneville Power Administration - Power Services: Intra-Regional Transfers
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Intra-Regional Transfers															
Contracts															
1 BPA-P to BPA-T Ops IntrAgmt	2,944	3,029	3,246	3,095	2,718	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,661	3,020	36,314
2 BPA-P to PSE Ops UBkr Repl	0	7	7	7	7	0	0	0	0	0	0	0	0	0	28
3 Other Entities to BPA-P	15,600	24,075	43,000	49,200	36,000	24,525	7,600	7,600	0	0	0	0	0	8,000	215,600
4 Net Intra-Regional Transfers	12,656	21,039	39,747	46,098	33,275	21,439	6,166	6,166	-3,095	-3,020	-3,095	-1,434	-1,661	4,980	179,259
Intra-Regional Contracts Out															
5 Federal Entities	2,944	3,029	3,246	3,095	2,718	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,661	3,020	36,314
6 Investor Owned Utilities	0	7	7	7	7	0	0	0	0	0	0	0	0	0	28
7 Total Regional Contracts Out	2,944	3,036	3,253	3,102	2,725	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,661	3,020	36,341
Intra-Regional Contracts In															
8 Federal Entities															
9 Marketer	15,600	24,075	43,000	49,200	36,000	24,525	7,600	7,600	0	0	0	0	0	8,000	215,600
10 Total Regional Contracts In	15,600	24,075	43,000	49,200	36,000	24,525	7,600	7,600	0	0	0	0	0	8,000	215,600

Table 2.4.1**Non-Federal CER Deliveries to BPA**

Fiscal Year: 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Pacific Northwest															
1 CHPD to BPA CEAEA for Rock Island	16.8	17.5	16.6	17.2	17.2	16.8	17.3	17.3	17.2	16.7	17.2	17.3	17.5	16.5	17.0
2 CHPD to BPA CEAEA for Rocky Reach	36.3	37.4	36.3	37.7	37.4	36.4	37.6	37.6	37.7	36.1	37.7	37.6	37.9	36.1	37.0
3 DOPD to BPA CEAEA for Wells	22.4	23.1	22.4	23.2	23.0	22.4	23.1	23.1	23.2	22.2	23.2	23.1	23.3	22.3	22.8
4 GCPD to BPA CEAEA for Priest Rapids	28.5	29.6	28.3	29.4	29.3	28.6	29.5	29.5	29.4	28.3	29.4	29.5	29.8	28.1	29.0
5 GCPD to BPA CEAEA for Wanapum	27.4	28.1	27.3	28.3	28.2	27.4	28.3	28.3	28.3	27.2	28.3	28.3	28.6	27.1	27.9
6 Total Imports From PNW	131	136	131	136	135	132	136	136	136	131	136	136	137	130	134
Total Imports															
7 Federal Entities	131	136	131	136	135	132	136	136	136	131	136	136	137	130	134
8 Total Imports	131	136	131	136	135	132	136	136	136	131	136	136	137	130	134

Table 2.4.1**Non-Federal CER Deliveries to BPA**

Fiscal Year: 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Pacific Northwest															
1 CHPD to BPA CEAEA for Rock Island	17.4	17.5	16.6	17.2	17.1	16.8	17.3	17.3	17.2	16.7	17.2	17.3	16.3	17.6	17.1
2 CHPD to BPA CEAEA for Rocky Reach	37.7	37.4	36.3	37.7	37.1	36.4	37.6	37.6	37.7	36.1	37.7	37.6	35.2	37.4	37.1
3 DOPD to BPA CEAEA for Wells	23.2	23.1	22.4	23.2	22.9	22.4	23.1	23.1	23.2	22.2	23.2	23.1	21.7	24.2	23.0
4 GCPD to BPA CEAEA for Priest Rapids	29.6	29.6	28.3	29.4	29.1	28.6	29.5	29.5	29.4	28.3	29.4	29.5	27.6	29.7	29.1
5 GCPD to BPA CEAEA for Wanapum	28.5	28.1	27.3	28.3	28.0	27.4	28.3	28.3	28.3	27.2	28.3	28.3	26.5	28.1	27.9
6 Total Imports From PNW	136	136	131	136	134	132	136	136	136	131	136	136	127	137	134
Total Imports															
7 Federal Entities	136	136	131	136	134	132	136	136	136	131	136	136	127	137	134
8 Total Imports	136	136	131	136	134	132	136	136	136	131	136	136	127	137	134

Table 2.4.2**Non-Federal CER Deliveries to BPA****Fiscal Year: 2024****BP24 Final Proposal Report Date: 11/9/2022**

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Pacific Northwest															
1 CHPD to BPA CEAEA for Rock Island	12,480	12,000	12,000	12,480	12,000	12,480	6,240	6,240	12,480	12,000	12,480	6,240	6,720	11,520	147,360
2 CHPD to BPA CEAEA for Rocky Reach	27,040	26,000	26,000	27,040	26,000	27,040	13,520	13,520	27,040	26,000	27,040	13,520	14,560	24,960	319,280
3 DOPD to BPA CEAEA for Wells	16,640	16,000	16,000	16,640	16,000	16,640	8,320	8,320	16,640	16,000	16,640	8,320	8,960	15,360	196,480
4 GCPD to BPA CEAEA for Priest Rapids	21,216	20,400	20,400	21,216	20,400	21,216	10,608	10,608	21,216	20,400	21,216	10,608	11,424	19,584	250,512
5 GCPD to BPA CEAEA for Wanapum	20,384	19,600	19,600	20,384	19,600	20,384	10,192	10,192	20,384	19,600	20,384	10,192	10,976	18,816	240,688
6 Total Imports From PNW	97,760	94,000	94,000	97,760	94,000	97,760	48,880	48,880	97,760	94,000	97,760	48,880	52,640	90,240	1,154,320
Total Imports															
7 Federal Entities	97,760	94,000	94,000	97,760	94,000	97,760	48,880	48,880	97,760	94,000	97,760	48,880	52,640	90,240	1,154,320
8 Total Imports	97,760	94,000	94,000	97,760	94,000	97,760	48,880	48,880	97,760	94,000	97,760	48,880	52,640	90,240	1,154,320

Table 2.4.2**Non-Federal CER Deliveries to BPA****Fiscal Year: 2025****BP24 Final Proposal Report Date: 11/9/2022**

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Pacific Northwest															
1 CHPD to BPA CEAEA for Rock Island	12,960	12,000	12,000	12,480	11,520	12,480	6,240	6,240	12,480	12,000	12,480	6,240	6,240	12,000	147,360
2 CHPD to BPA CEAEA for Rocky Reach	28,080	26,000	26,000	27,040	24,960	27,040	13,520	13,520	27,040	26,000	27,040	13,520	13,520	26,000	319,280
3 DOPD to BPA CEAEA for Wells	17,280	16,000	16,000	16,640	15,360	16,640	8,320	8,320	16,640	16,000	16,640	8,320	8,320	16,800	197,280
4 GCPD to BPA CEAEA for Priest Rapids	22,032	20,400	20,400	21,216	19,584	21,216	10,608	10,608	21,216	20,400	21,216	10,608	10,608	20,400	250,512
5 GCPD to BPA CEAEA for Wanapum	21,168	19,600	19,600	20,384	18,816	20,384	10,192	10,192	20,384	19,600	20,384	10,192	10,192	19,600	240,688
6 Total Imports From PNW	101,520	94,000	94,000	97,760	90,240	97,760	48,880	48,880	97,760	94,000	97,760	48,880	48,880	94,800	1,155,120
Total Imports															
7 Federal Entities	101,520	94,000	94,000	97,760	90,240	97,760	48,880	48,880	97,760	94,000	97,760	48,880	48,880	94,800	1,155,120
8 Total Imports	101,520	94,000	94,000	97,760	90,240	97,760	48,880	48,880	97,760	94,000	97,760	48,880	48,880	94,800	1,155,120

Table 2.4.3

Non-Federal CER Deliveries to BPA

Fiscal Year: 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Pacific Northwest															
1 CHPD to BPA CEAEA for Rock Island	0	642	344	328	0	0	0	0	328	0	328	0	0	336	2,306
2 CHPD to BPA CEAEA for Rocky Reach	0	963	1,032	984	0	0	0	0	984	0	984	0	0	1,008	5,955
3 DOPD to BPA CEAEA for Wells	0	642	688	656	0	0	0	0	656	0	656	0	0	672	3,970
4 GCPD to BPA CEAEA for Priest Rapids	0	963	688	656	0	0	0	0	656	0	656	0	0	672	4,291
5 GCPD to BPA CEAEA for Wanapum	0	642	688	656	0	0	0	0	656	0	656	0	0	672	3,970
6 Total Imports From PNW	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,360	20,492
Total Imports															
7 Federal Entities	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,360	20,492
8 Total Imports	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,360	20,492

Table 2.4.3

Non-Federal CER Deliveries to BPA
Fiscal Year: 2025
BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Pacific Northwest															
1 CHPD to BPA CEAEA for Rock Island	0	642	344	328	0	0	0	0	328	0	328	0	0	640	2,610
2 CHPD to BPA CEAEA for Rocky Reach	0	963	1,032	984	0	0	0	0	984	0	984	0	0	960	5,907
3 DOPD to BPA CEAEA for Wells	0	642	688	656	0	0	0	0	656	0	656	0	0	640	3,938
4 GCPD to BPA CEAEA for Priest Rapids	0	963	688	656	0	0	0	0	656	0	656	0	0	960	4,579
5 GCPD to BPA CEAEA for Wanapum	0	642	688	656	0	0	0	0	656	0	656	0	0	640	3,938
6 Total Imports From PNW	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,840	20,972
Total Imports															
7 Federal Entities	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,840	20,972
8 Total Imports	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,840	20,972

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3. HYDRO RESOURCE FORECASTS FOR FY 2024 AND FY 2025

Table 3.1.1
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Regulated Hydro															
1 Albeni Falls	32	22	15	17	13	17	17	19	32	42	31	14	14	17	22
2 Bonneville	395	516	519	584	534	523	383	159	326	242	261	138	238	410	397
3 Chief Joseph	826	1,053	1,215	1,033	1,209	965	961	984	1,339	1,529	1,223	1,291	1,100	919	1,123
4 Dworshak	61	61	61	61	61	62	62	229	445	71	444	422	319	180	170
5 Grand Coulee	1,413	1,857	2,146	1,828	2,039	1,570	1,654	1,492	2,234	2,655	2,133	2,291	1,900	1,555	1,924
6 Hungry Horse	33	26	77	73	69	53	53	167	215	130	63	73	66	89	84
7 Ice Harbor	104	143	121	211	133	227	123	141	194	141	181	114	83	127	151
8 John Day	642	885	909	944	892	910	767	520	635	702	705	573	652	663	762
9 Libby	92	246	190	126	85	114	83	76	310	250	198	160	216	137	168
10 Little Goose	105	139	117	197	130	224	122	146	211	145	178	113	96	123	151
11 Lower Granite	104	139	118	197	131	223	84	140	138	98	129	82	100	126	134
12 Lower Monumental	106	143	121	213	135	231	106	127	212	113	143	85	98	129	147
13 McNary	417	540	574	588	582	572	477	300	357	335	297	288	482	444	456
14 The Dalles	513	708	739	782	733	713	637	527	759	596	499	406	436	527	631
Total Regulated Hydro															
15 Federal Entities	4,842	6,478	6,921	6,852	6,747	6,404	5,528	5,030	7,407	7,050	6,488	6,051	5,800	5,447	6,320
16 Total Regulated Hydro	4,842	6,478	6,921	6,852	6,747	6,404	5,528	5,030	7,407	7,050	6,488	6,051	5,800	5,447	6,320

Table 3.1.1
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Regulated Hydro															
1 Albeni Falls	32	17	15	17	13	17	21	19	29	43	29	14	14	17	22
2 Bonneville	394	524	519	584	534	523	381	164	220	307	164	138	238	410	386
3 Chief Joseph	826	1,099	1,215	1,033	1,209	965	994	1,036	1,374	1,588	1,296	1,291	1,100	919	1,144
4 Dworshak	61	61	61	61	61	62	68	229	70	255	388	422	319	180	149
5 Grand Coulee	1,413	1,878	2,146	1,828	2,039	1,570	1,700	1,578	2,275	2,806	2,269	2,291	1,900	1,555	1,958
6 Hungry Horse	33	23	77	73	69	53	54	149	233	182	91	73	66	89	91
7 Ice Harbor	105	127	122	213	134	229	124	143	148	194	153	115	84	128	149
8 John Day	642	860	909	944	892	910	790	526	592	773	669	573	652	663	760
9 Libby	92	296	190	126	85	114	83	76	462	504	137	160	216	137	201
10 Little Goose	105	120	117	197	130	224	127	146	149	198	148	113	96	123	146
11 Lower Granite	104	120	118	197	131	223	93	140	82	135	87	82	100	126	128
12 Lower Monumental	106	124	121	213	135	231	108	127	137	190	99	85	98	129	141
13 McNary	417	554	575	589	583	573	480	304	331	375	284	289	483	445	458
14 The Dalles	513	689	739	782	733	713	648	541	669	671	473	406	436	527	626
Total Regulated Hydro															
15 Federal Entities	4,843	6,493	6,923	6,855	6,750	6,407	5,671	5,180	6,769	8,220	6,287	6,052	5,802	5,449	6,359
16 Total Regulated Hydro	4,843	6,493	6,923	6,855	6,750	6,407	5,671	5,180	6,769	8,220	6,287	6,052	5,802	5,449	6,359

Table 3.1.2
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Regulated Hydro															
1 Albeni Falls	13,244	8,645	6,002	6,927	5,076	6,924	3,607	3,943	13,442	16,763	13,097	2,943	3,062	6,682	110,357
2 Bonneville	179,826	245,664	245,596	255,758	221,556	227,410	84,217	36,107	173,604	111,490	126,146	29,884	63,755	172,607	2,173,622
3 Chief Joseph	381,810	463,933	554,429	470,879	528,191	428,140	215,573	219,541	613,387	709,621	579,549	304,545	279,285	417,315	6,166,198
4 Dworshak	25,526	24,575	24,586	25,435	24,576	25,799	12,932	47,726	184,943	28,332	184,906	87,817	71,535	69,017	837,705
5 Grand Coulee	660,124	827,674	974,916	814,542	868,537	704,388	369,551	330,737	1,014,031	1,230,970	1,063,085	576,149	514,394	706,207	10,655,304
6 Hungry Horse	13,773	10,273	30,798	30,186	27,661	22,063	10,943	34,819	89,572	52,064	26,305	15,102	14,717	34,271	412,546
7 Ice Harbor	51,852	71,587	67,812	101,574	66,333	101,263	29,620	36,604	104,823	66,430	93,794	28,186	20,846	61,131	901,855
8 John Day	296,710	420,356	444,636	481,734	431,928	461,600	190,609	121,301	333,596	344,255	361,023	143,444	176,535	283,020	4,490,748
9 Libby	38,245	98,446	76,045	52,227	34,144	47,589	17,164	15,910	129,032	99,976	82,191	33,344	48,487	52,660	825,459
10 Little Goose	47,438	65,681	64,213	115,536	77,292	116,035	28,659	35,622	115,022	64,981	91,257	25,705	21,515	54,415	923,371
11 Lower Granite	47,016	65,729	64,934	118,803	78,247	117,773	19,343	33,807	75,895	41,336	60,836	17,075	23,980	55,100	819,875
12 Lower Monumental	48,255	68,148	66,735	129,027	80,667	121,972	23,975	30,859	115,887	51,037	69,504	17,764	22,841	57,813	904,485
13 McNary	200,185	248,460	273,522	292,267	281,268	282,026	104,121	66,492	167,980	148,267	130,639	63,295	117,575	198,959	2,575,056
14 The Dalles	239,225	345,918	365,149	400,345	358,533	365,573	161,615	125,714	362,042	281,434	244,215	96,324	112,429	226,896	3,685,412
Total Regulated Hydro															
15 Federal Entities	2,243,229	2,965,089	3,259,374	3,295,240	3,084,008	3,028,556	1,271,927	1,139,182	3,493,257	3,246,955	3,126,547	1,441,577	1,490,956	2,396,094	35,481,991
16 Total Regulated Hydro	2,243,229	2,965,089	3,259,374	3,295,240	3,084,008	3,028,556	1,271,927	1,139,182	3,493,257	3,246,955	3,126,547	1,441,577	1,490,956	2,396,094	35,481,991

Table 3.1.2
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Regulated Hydro															
1 Albeni Falls	13,754	6,652	6,002	6,927	4,873	6,924	3,145	3,943	12,119	17,012	12,177	2,943	2,843	6,960	106,275
2 Bonneville	187,092	251,115	243,959	254,893	213,117	226,879	51,579	38,225	104,645	154,678	69,703	29,981	59,262	181,502	2,066,630
3 Chief Joseph	393,469	484,102	553,516	470,334	506,028	427,610	134,996	232,974	630,173	735,782	612,953	305,721	264,190	425,676	6,177,524
4 Dworshak	26,508	24,548	24,586	25,435	23,593	25,799	10,331	47,726	28,913	101,974	161,393	87,817	66,425	71,893	726,941
5 Grand Coulee	679,459	837,402	973,440	813,755	831,598	703,399	232,532	352,918	1,033,861	1,298,641	1,127,903	578,562	487,453	718,840	10,669,764
6 Hungry Horse	14,302	9,343	30,798	30,186	26,555	22,063	8,210	30,950	96,720	72,628	37,876	15,102	13,665	35,699	444,097
7 Ice Harbor	54,169	62,875	68,531	102,494	64,542	102,238	14,548	37,013	75,202	94,634	78,538	28,338	19,391	63,809	866,322
8 John Day	309,086	412,016	444,344	481,242	415,219	461,409	92,943	123,933	300,586	399,197	341,195	143,591	161,495	293,774	4,380,031
9 Libby	39,716	118,323	76,045	52,227	32,778	47,589	12,630	15,910	191,991	201,438	57,072	33,344	45,024	54,854	978,941
10 Little Goose	49,145	54,505	64,307	115,602	74,903	116,184	15,721	35,821	71,129	95,555	73,321	25,625	19,974	56,396	868,189
11 Lower Granite	48,688	54,777	65,027	118,867	75,803	117,967	11,790	34,081	39,315	64,593	37,136	17,075	22,286	57,495	764,899
12 Lower Monumental	49,991	56,954	66,841	129,103	78,153	122,254	14,449	31,069	69,670	95,335	43,950	17,758	21,143	59,761	856,430
13 McNary	198,666	230,022	265,461	291,266	270,865	281,884	68,593	67,482	152,267	171,181	125,156	63,871	108,582	206,709	2,502,006
14 The Dalles	249,340	332,493	363,995	401,027	344,549	365,207	66,989	129,665	319,648	322,280	231,363	96,496	104,555	235,555	3,563,161
Total Regulated Hydro															
15 Federal Entities	2,313,385	2,935,128	3,246,851	3,293,357	2,962,576	3,027,407	738,456	1,181,712	3,126,240	3,824,928	3,009,737	1,446,225	1,396,288	2,468,923	34,971,212
16 Total Regulated Hydro	2,313,385	2,935,128	3,246,851	3,293,357	2,962,576	3,027,407	738,456	1,181,712	3,126,240	3,824,928	3,009,737	1,446,225	1,396,288	2,468,923	34,971,212

Table 3.1.3
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

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A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Regulated Hydro															
1 Albeni Falls	10,443	6,938	5,162	5,462	3,757	5,443	2,636	2,882	10,599	13,410	10,326	2,150	2,187	5,847	87,240
2 Bonneville	113,689	126,502	140,883	178,751	150,410	161,402	53,667	21,182	69,133	62,913	68,212	19,916	27,806	122,479	1,316,943
3 Chief Joseph	232,581	295,406	349,194	297,341	313,538	289,175	130,497	134,838	382,632	391,538	330,594	160,255	143,118	244,324	3,695,030
4 Dworshak	20,126	19,721	21,144	20,055	18,186	20,279	9,450	34,877	145,820	22,665	145,792	64,174	51,096	60,390	653,776
5 Grand Coulee	391,160	511,064	621,591	545,355	550,605	462,063	225,794	206,364	648,247	680,521	524,200	248,736	215,214	413,625	6,244,538
6 Hungry Horse	10,859	8,244	26,486	23,800	20,469	17,343	7,997	25,445	70,624	41,651	20,741	11,036	10,512	29,987	325,194
7 Ice Harbor	25,448	31,246	21,864	55,478	26,419	67,365	14,638	14,306	39,654	35,149	41,123	12,760	11,001	30,075	426,524
8 John Day	181,196	217,706	231,425	220,319	188,749	214,341	85,365	65,794	139,023	161,430	163,672	62,812	73,685	194,295	2,199,811
9 Libby	30,155	79,003	65,399	41,179	25,267	37,408	12,543	11,627	101,737	79,981	64,804	24,367	34,634	46,078	654,178
10 Little Goose	30,844	34,667	22,782	30,732	12,953	50,264	15,398	16,968	41,890	39,124	41,131	14,875	15,229	34,433	401,291
11 Lower Granite	30,015	34,284	22,909	28,005	13,087	47,883	10,782	16,699	26,445	29,283	35,144	12,279	14,553	35,423	356,790
12 Lower Monumental	30,453	35,133	23,423	29,733	13,501	49,723	14,329	15,023	41,622	30,488	36,959	12,845	14,840	35,100	383,173
13 McNary	109,779	140,964	153,324	145,265	123,510	142,771	67,550	41,472	97,620	93,214	90,271	40,521	67,513	120,618	1,434,391
14 The Dalles	142,200	164,573	184,498	181,443	151,754	164,527	67,669	64,131	202,349	147,689	127,398	49,987	54,982	152,820	1,856,020
Total Regulated Hydro															
15 Federal Entities	1,358,948	1,705,450	1,890,083	1,802,916	1,612,205	1,729,986	718,314	671,608	2,017,396	1,829,055	1,700,365	736,712	736,369	1,525,493	20,034,899
16 Total Regulated Hydro	1,358,948	1,705,450	1,890,083	1,802,916	1,612,205	1,729,986	718,314	671,608	2,017,396	1,829,055	1,700,365	736,712	736,369	1,525,493	20,034,899

Table 3.1.3
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

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A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Regulated Hydro															
1 Albeni Falls	9,933	5,338	5,162	5,462	3,655	5,443	3,145	2,882	9,555	13,610	9,601	2,150	2,405	5,568	83,910
2 Bonneville	106,339	126,482	142,520	179,616	146,022	161,598	51,579	20,861	59,289	66,043	52,258	19,819	32,299	113,987	1,278,710
3 Chief Joseph	220,922	308,102	350,108	297,887	306,676	289,704	134,996	140,018	391,905	407,574	351,115	159,078	158,213	235,963	3,752,260
4 Dworshak	19,144	19,700	21,144	20,055	17,695	20,279	10,331	34,877	22,797	81,580	127,252	64,174	56,206	57,515	572,747
5 Grand Coulee	371,825	516,618	623,067	546,142	538,607	463,052	232,532	215,238	658,446	721,777	560,023	246,322	242,155	400,992	6,336,797
6 Hungry Horse	10,330	7,498	26,486	23,800	19,916	17,343	8,210	22,618	76,260	58,102	29,864	11,036	11,563	28,559	351,584
7 Ice Harbor	23,822	29,030	21,941	55,866	25,801	67,781	14,548	14,300	35,202	45,181	35,349	12,946	12,727	28,203	422,696
8 John Day	168,821	208,045	231,717	220,811	184,055	214,532	92,943	65,566	140,063	157,144	156,369	62,665	88,725	183,540	2,174,996
9 Libby	28,684	94,954	65,399	41,179	24,584	37,408	12,630	11,627	151,377	161,150	44,999	24,367	38,097	43,883	780,338
10 Little Goose	29,137	32,360	22,688	30,667	12,230	50,115	15,721	16,769	39,470	46,996	36,783	14,955	16,771	32,452	397,115
11 Lower Granite	28,343	32,067	22,817	27,941	12,381	47,690	11,790	16,426	21,351	32,865	27,502	12,279	16,247	33,029	342,726
12 Lower Monumental	28,717	32,777	23,317	29,656	12,768	49,441	14,449	14,813	31,986	41,753	29,447	12,851	16,539	33,152	371,668
13 McNary	111,882	169,072	162,192	147,092	120,693	143,715	68,593	41,853	93,899	98,917	86,390	40,140	76,852	113,465	1,474,755
14 The Dalles	132,085	164,480	185,653	180,761	148,142	164,893	66,989	65,169	178,262	160,952	120,885	49,815	62,856	144,161	1,825,102
Total Regulated Hydro	1,289,982	1,746,523	1,904,210	1,806,934	1,573,226	1,732,993	738,456	683,015	1,909,863	2,093,642	1,667,838	732,597	831,654	1,454,470	20,165,404
15 Federal Entities															
16 Total Regulated Hydro	1,289,982	1,746,523	1,904,210	1,806,934	1,573,226	1,732,993	738,456	683,015	1,909,863	2,093,642	1,667,838	732,597	831,654	1,454,470	20,165,404

Table 3.1.4
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

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A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Regulated Hydro														
1 Albeni Falls	37	19	21	22	23	22	25	30	35	47	49	39	39.0	39.4
2 Bonneville	778	889	755	600	597	582	498	587	699	654	795	532	679	939
3 Chief Joseph	1,176	1,435	1,677	1,393	1,482	1,393	1,047	1,468	1,611	2,026	1,844	1,649	1511	1444
4 Dworshak	378	200	389	411	445	446	446	356	450	449	449	447	447	446
5 Grand Coulee	1,374	1,822	2,637	1,690	2,219	2,128	1,362	1,910	1,825	2,383	2,712	2,765	2,436	1,837
6 Hungry Horse	232	193	290	251	186	155	168	168	232	264	251	232	232	177
7 Ice Harbor	159	256	257	339	319	286	312	356	386	241	283	141	113	185
8 John Day	1,170	1,529	1,775	1,973	1,893	1,937	1,944	1,206	1,689	1,588	1,691	1,371	1,648	1,564
9 Libby	591	588	583	487	471	467	455	396	544	590	595	416	423	479
10 Little Goose	49	243	262	573	465	644	592	430	459	358	374	56	-43.8	114
11 Lower Granite	96	263	289	471	466	656	604	482	620	262	320	-26	-3.79	120
12 Lower Monumental	41	257	293	575	476	627	573	640	762	348	493	-16	20.0	116
13 McNary	361	509	665	704	703	695	496	340	483	126	220	166	286	178
14 The Dalles	646	1,011	1,119	1,050	905	1,365	1,201	875	1,087	1,017	911	679	764	907
Total Regulated Hydro														
15 Federal Entities	7,089	9,214	11,012	10,540	10,650	11,403	9,724	9,246	10,882	10,353	10,987	8,451	8550	8547
16 Total Regulated Hydro	7,089	9,214	11,012	10,540	10,650	11,403	9,724	9,246	10,882	10,353	10,987	8,451	8550	8547

Table 3.1.4
Bonneville Power Administration - Power Services: Regulated Hydro
Fiscal Year 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

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A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Regulated Hydro														
1 Albeni Falls	37	22	20	22	23	22	24	30	34	46	44	43	42.8	40.0
2 Bonneville	779	1,000	821	610	680	643	562	651	529	789	461	598	711	919
3 Chief Joseph	1,059	1,375	1,653	1,405	1,484	1,353	1,128	1,515	1,712	2,120	1,704	1,666	1485	1307
4 Dworshak	434	345	346	411	445	446	448	356	448	450	448	447	447	348
5 Grand Coulee	1,320	1,927	2,130	1,580	2,099	2,272	2,194	2,523	2,649	3,212	3,197	2,940	2,515	1,618
6 Hungry Horse	188	175	265	264	201	155	150	150	232	245	205	213	213	232
7 Ice Harbor	136	198	283	339	272	279	333	366	194	452	98	93	65.0	209
8 John Day	1,222	1,713	1,838	1,960	1,914	1,912	1,691	1,071	1,527	1,770	1,323	1,549	1,789	1,537
9 Libby	473	530	583	480	471	459	465	403	573	591	547	329	335	567
10 Little Goose	32	100	284	573	466	645	636	430	223	502	229	120	20.9	90.5
11 Lower Granite	88	106	311	461	477	657	629	483	252	432	117	33	63.7	123
12 Lower Monumental	51	157	285	575	476	628	585	653	452	628	93	-5	32.8	111
13 McNary	230	240	552	691	704	685	494	345	349	178	210	480	483	471
14 The Dalles	852	1,080	1,233	1,390	1,206	1,349	1,079	754	1,037	1,082	703	647	708	991
Total Regulated Hydro														
15 Federal Entities	6,901	8,968	10,603	10,762	10,916	11,506	10,415	9,729	10,213	12,496	9,380	9,154	8911	8565
16 Total Regulated Hydro	6,901	8,968	10,603	10,762	10,916	11,506	10,415	9,729	10,213	12,496	9,380	9,154	8911	8565

Table 3.2.1

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

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A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Independent Hydro															
1 Anderson Ranch	2.87	7.36	1.01	3.62	3.41	3.96	9.67	8.64	11.4	22.3	33.1	17.5	23.0	6.47	10.4
2 Big Cliff	13.0	20.4	14.2	18.5	6.64	8.49	9.94	9.94	7.95	7.40	2.91	6.96	9.76	11.0	
3 Black Canyon	0	5.06	2.56	5.97	4.83	8.18	8.51	8.51	8.51	8.51	2.44	2.76	2.73	5.49	
4 Boise River Diversion	0.11	0	0	0	0	0	1.08	1.12	2.16	3.26	3.26	1.62	1.73	0	0.97
5 Chandler	7.16	10.00	2.21	12.0	10.0	11.8	6.49	4.71	0.69	0	3.40	0	2.37	0.03	5.34
6 Cougar	18.5	23.8	16.2	20.5	7.25	8.72	9.07	17.2	17.6	15.6	16.9	19.7	17.3	9.82	15.6
7 Cowlitz Falls	19.8	27.5	18.7	25.6	27.9	29.2	22.7	44.4	26.8	34.4	24.9	20.3	22.7	0.82	24.2
8 Detroit	19.2	61.2	42.9	70.2	19.5	29.4	36.0	38.4	37.2	30.5	12.2	8.42	14.9	30.0	33.5
9 Dexter	10.5	16.3	16.3	15.9	5.03	5.55	5.55	8.51	7.92	7.70	9.13	3.75	9.73	5.82	9.53
10 Foster	8.15	16.1	15.8	16.7	8.00	10.2	10.7	10.6	9.11	5.75	4.24	1.64	6.83	12.8	10.15
11 Green Peter	17.4	63.1	46.7	45.4	5.93	12.9	18.1	28.3	16.7	12.6	16.4	0.50	14.7	28.0	24.7
12 Green Springs	4.96	6.06	6.88	7.69	7.69	8.15	7.83	7.83	8.12	7.98	5.95	4.63	4.63	4.92	6.73
13 Hills Creek	14.5	30.7	25.4	27.0	6.81	7.42	8.22	17.7	21.7	9.52	19.5	7.33	7.35	7.00	15.9
14 Lookout Point	35.0	66.9	46.2	49.0	12.6	16.1	17.1	35.2	30.0	23.3	38.1	9.38	35.7	16.8	32.0
15 Lost Creek	17.6	26.7	15.0	25.4	18.9	19.8	20.5	46.4	47.0	54.6	33.7	27.5	31.8	11.0	27.7
16 Minidoka	21.4	13.2	18.4	22.1	26.5	27.8	21.6	29.4	31.0	36.4	23.9	28.4	30.2	20.5	24.7
17 Palisades	56.3	27.3	11.3	39.7	41.1	41.6	61.1	57.8	83.8	170	139	137	157	58.2	73.1
18 Roza	6.27	10.8	7.46	10.1	1.16	3.12	8.91	8.67	10.7	4.86	11.9	9.45	8.62	9.87	7.9
Total Independent Hydro															
19 Federal Entities	273	433	307	416	213	252	283	383	380	455	412	303	398	234	339
20 Total Independent Hydro	273	433	307	416	213	252	283	383	380	455	412	303	398	234	339

Table 3.2.1

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2025 Water Year: P10

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A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Independent Hydro															
1 Anderson Ranch	2.87	2.08	1.01	3.62	3.41	3.96	8.13	8.64	19.9	21.8	9.56	17.5	23.0	6.47	8.6
2 Big Cliff	13.0	20.3	14.2	18.5	6.64	8.49	9.94	9.94	7.95	7.40	2.91	6.96	9.76	11.0	
3 Black Canyon	0	3.64	2.56	5.97	4.83	8.18	8.51	8.51	8.51	8.36	2.44	2.76	2.73	5.36	
4 Boise River Diversion	0.11	0	0	0	0	0.94	1.12	2.16	3.26	1.68	1.62	1.73	0	0.83	
5 Chandler	7.16	9.80	2.21	12.0	10.0	11.8	8.23	4.71	2.40	0	0	2.37	0.03	5.23	
6 Cougar	18.5	21.1	16.2	20.5	7.25	8.72	15.9	17.2	24.8	17.4	11.4	19.7	17.3	9.82	16.0
7 Cowlitz Falls	19.8	50.0	18.7	25.6	27.9	29.2	44.0	44.4	56.0	25.8	14.2	20.3	22.7	0.82	27.8
8 Detroit	19.2	70.7	42.9	70.2	19.4	29.4	35.2	38.4	38.0	31.1	25.9	8.42	14.9	30.0	35.5
9 Dexter	10.5	11.5	16.3	15.9	5.03	5.55	7.26	8.51	10.7	7.86	6.02	3.75	9.73	5.82	9.20
10 Foster	8.15	13.5	15.8	16.7	8.00	10.2	8.22	10.6	5.51	8.99	4.25	1.64	6.83	12.8	9.79
11 Green Peter	17.4	51.8	46.7	45.4	5.93	12.9	14.8	28.3	20.4	24.2	15.1	0.50	14.7	28.0	24.9
12 Green Springs	4.96	6.06	6.88	7.69	7.69	8.15	7.83	7.83	8.12	7.98	5.95	4.63	4.63	4.92	6.73
13 Hills Creek	14.5	18.9	25.4	27.0	6.81	7.42	22.8	17.7	16.7	16.1	7.35	7.33	7.35	7.00	14.6
14 Lookout Point	35.0	47.5	46.2	49.0	12.6	16.1	21.3	35.2	35.1	32.8	20.7	9.38	35.7	16.8	30.4
15 Lost Creek	17.6	21.5	15.0	25.4	18.9	19.8	19.7	46.4	48.3	56.4	22.7	27.5	31.8	11.0	26.6
16 Minidoka	21.4	21.6	18.4	22.1	26.5	27.8	23.5	29.4	36.6	33.9	27.9	28.4	30.2	20.5	26.0
17 Palisades	56.3	25.2	11.3	39.7	41.1	41.6	33.1	57.8	170	164	146	137	157	58.2	79.2
18 Roza	6.27	15.2	7.46	10.1	1.16	3.12	3.80	8.67	3.44	10.4	10.1	9.45	8.62	9.87	7.7
Total Independent Hydro															
19 Federal Entities	273	410	307	416	213	252	293	383	516	478	344	303	398	234	345
20 Total Independent Hydro	273	410	307	416	213	252	293	383	516	478	344	303	398	234	345

Table 3.2.2

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Independent Hydro															
1 Anderson Ranch	1,195	2,946	421	1,448	1,357	1,713	2,012	1,797	4,574	9,259	13,238	3,367	5,152	2,586	51,064
2 Big Cliff	5,420	8,155	5,902	7,419	2,654	3,669	2,067	2,067	3,975	3,307	2,962	558	1,558	3,903	53,616
3 Black Canyon	0	2,026	1,064	2,386	1,922	3,535	1,769	1,769	3,403	3,539	3,403	469	618	1,091	26,994
4 Boise River Diversion	47	0	0	0	0	0	225	234	866	1,355	1,304	311	387	0	4,728
5 Chandler	2,980	4,000	919	4,800	3,981	5,106	1,350	980	277	0	1,361	0	532	13	26,299
6 Cougar	7,700	9,502	6,754	8,209	2,900	3,765	1,887	3,581	7,022	6,475	6,756	3,789	3,881	3,928	76,150
7 Cowlitz Falls	8,251	11,012	7,785	10,242	11,171	12,610	4,715	9,242	10,715	14,291	9,963	3,901	5,095	328	119,322
8 Detroit	14,271	34,197	31,935	29,572	13,604	21,874	12,952	13,838	27,649	21,956	9,104	3,032	5,707	21,616	261,308
9 Dexter	4,360	6,536	6,781	6,345	2,014	2,398	1,155	1,771	3,168	3,201	3,652	720	2,180	2,327	46,607
10 Foster	3,389	6,441	6,561	6,689	3,198	4,411	2,225	2,199	3,645	2,391	1,697	314	1,530	5,102	49,792
11 Green Peter	7,247	30,284	34,767	20,674	2,372	5,572	6,526	10,204	12,455	5,229	6,566	97	3,286	11,219	156,497
12 Green Springs	2,063	2,425	2,861	3,077	3,075	3,520	1,628	1,628	3,247	3,319	2,381	889	1,037	1,969	33,120
13 Hills Creek	6,042	12,266	10,570	10,803	2,722	3,204	1,710	3,690	8,694	3,960	7,803	1,408	1,647	2,798	77,319
14 Lookout Point	26,032	48,233	34,375	29,535	5,033	6,947	6,139	12,687	11,996	9,677	28,312	3,377	13,720	12,089	248,150
15 Lost Creek	7,307	10,698	6,248	10,153	7,557	8,543	4,261	9,652	18,803	22,731	13,465	5,284	7,130	4,387	136,219
16 Minidoka	8,906	5,260	7,641	8,859	10,580	12,004	4,490	6,113	12,411	15,158	9,564	5,453	6,764	8,186	121,388
17 Palisades	23,404	10,938	4,719	15,874	16,337	17,984	12,709	12,013	33,532	70,731	55,754	26,292	35,192	23,285	358,765
18 Roza	2,609	4,329	3,104	4,026	465	1,346	1,854	1,803	4,297	2,021	4,741	1,814	1,930	3,948	38,289
Total Independent Hydro	131,222	209,249	172,407	180,112	90,943	118,200	69,676	95,266	170,728	198,601	182,025	61,075	97,346	108,775	1,885,626
20 Total Independent Hydro	131,222	209,249	172,407	180,112	90,943	118,200	69,676	95,266	170,728	198,601	182,025	61,075	97,346	108,775	1,885,626

Table 3.2.2

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2025 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Independent Hydro															
1 Anderson Ranch	1,195	834	421	1,448	1,311	1,713	1,692	1,797	7,946	9,071	3,824	3,367	5,152	2,586	42,354
2 Big Cliff	5,420	8,115	5,902	7,419	2,548	3,669	2,067	2,067	3,975	3,307	2,962	558	1,558	3,903	53,469
3 Black Canyon	0	1,456	1,064	2,386	1,856	3,535	1,769	1,769	3,403	3,539	3,345	469	618	1,091	26,301
4 Boise River Diversion	47	0	0	0	0	0	195	234	866	1,355	673	311	387	0	4,067
5 Chandler	2,980	3,918	919	4,800	3,844	5,106	1,712	980	960	0	0	0	532	13	25,763
6 Cougar	7,700	8,433	6,754	8,209	2,784	3,765	3,305	3,581	9,907	7,237	4,566	3,789	3,881	3,928	77,839
7 Cowlitz Falls	8,251	19,994	7,785	10,242	10,724	12,610	9,162	9,242	22,391	10,736	5,669	3,901	5,095	328	136,130
8 Detroit	14,271	46,000	31,935	29,572	13,060	21,874	12,674	13,838	28,235	22,414	19,248	3,032	5,707	21,616	283,478
9 Dexter	4,360	4,612	6,781	6,345	1,933	2,398	1,510	1,771	4,274	3,268	2,407	720	2,180	2,327	44,885
10 Foster	3,389	5,388	6,561	6,689	3,070	4,411	1,709	2,199	2,204	3,740	1,698	314	1,530	5,102	48,004
11 Green Peter	7,247	37,200	34,767	20,674	2,277	5,572	3,085	10,204	15,153	10,050	6,038	97	3,286	11,219	166,869
12 Green Springs	2,063	2,425	2,861	3,077	2,952	3,520	1,628	1,628	3,247	3,319	2,381	889	1,037	1,969	32,997
13 Hills Creek	6,042	7,553	10,570	10,803	2,613	3,204	4,740	3,690	6,671	6,703	2,940	1,408	1,647	2,798	71,381
14 Lookout Point	26,032	34,270	34,375	29,535	4,831	6,947	4,420	12,687	26,143	13,648	15,424	3,377	13,720	12,089	237,498
15 Lost Creek	7,307	8,597	6,248	10,153	7,254	8,543	4,098	9,652	19,318	23,462	9,064	5,284	7,130	4,387	130,499
16 Minidoka	8,906	8,633	7,641	8,859	10,163	12,004	4,893	6,113	14,637	14,087	11,140	5,453	6,764	8,186	127,477
17 Palisades	23,404	10,085	4,719	15,874	15,773	17,984	6,887	12,013	68,008	68,131	58,266	26,292	35,192	23,285	385,914
18 Roza	2,609	6,095	3,104	4,026	447	1,346	791	1,803	1,377	4,306	4,060	1,814	1,930	3,948	37,656
Total Independent Hydro															
19 Federal Entities	131,222	213,608	172,407	180,112	87,441	118,200	66,338	95,266	238,713	208,374	153,705	61,075	97,346	108,775	1,932,582
20 Total Independent Hydro	131,222	213,608	172,407	180,112	87,441	118,200	66,338	95,266	238,713	208,374	153,705	61,075	97,346	108,775	1,932,582

Table 3.2.3

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Independent Hydro															
1 Anderson Ranch	942	2,364	332	1,245	1,018	1,233	1,471	1,313	3,933	6,766	11,384	2,946	3,680	2,069	40,697
2 Big Cliff	4,274	6,545	4,653	6,381	1,964	2,642	1,510	1,510	3,418	2,417	2,547	489	1,113	3,122	42,584
3 Black Canyon	0	1,626	839	2,052	1,442	2,545	1,293	1,293	2,926	2,586	2,926	410	442	873	21,253
4 Boise River Diversion	37	0	0	0	0	0	164	171	745	990	1,121	272	276	0	3,776
5 Chandler	2,349	3,210	724	4,128	2,986	3,676	987	716	238	0	1,171	0	380	10	20,575
6 Cougar	6,071	7,626	5,325	7,059	2,146	2,711	1,379	2,617	6,039	4,732	5,810	3,316	2,772	3,142	60,746
7 Cowlitz Falls	6,506	8,837	6,138	8,808	8,267	9,078	3,446	6,753	9,214	10,444	8,569	3,414	3,640	262	93,375
8 Detroit	0	9,927	0	22,692	0	0	0	0	0	0	0	0	0	0	32,618
9 Dexter	3,438	5,245	5,346	5,456	1,490	1,726	844	1,294	2,725	2,339	3,141	630	1,557	1,862	37,093
10 Foster	2,672	5,169	5,173	5,753	2,367	3,176	1,626	1,607	3,135	1,747	1,459	275	1,093	4,082	39,332
11 Green Peter	5,714	15,193	0	13,133	1,755	4,011	0	0	0	3,821	5,647	85	2,347	8,975	60,682
12 Green Springs	1,627	1,946	2,256	2,646	2,276	2,534	1,190	1,190	2,793	2,425	2,048	778	741	1,575	26,024
13 Hills Creek	4,764	9,844	8,334	9,291	2,014	2,306	1,250	2,696	7,477	2,894	6,711	1,232	1,176	2,238	62,229
14 Lookout Point	0	0	0	6,918	3,724	5,001	0	0	10,316	7,072	0	0	0	0	33,031
15 Lost Creek	5,761	8,585	4,926	8,732	5,592	6,150	3,114	7,053	16,171	16,611	11,580	4,624	5,093	3,510	107,502
16 Minidoka	7,022	4,222	6,024	7,619	7,840	8,641	3,281	4,467	10,673	11,077	8,225	4,771	4,832	6,548	95,243
17 Palisades	18,453	8,778	3,721	13,652	12,253	12,947	9,288	8,778	28,838	51,688	47,949	23,005	25,137	18,628	283,114
18 Roza	2,057	3,474	2,448	3,463	344	969	1,355	1,318	3,696	1,477	4,077	1,587	1,379	3,158	30,801
Total Independent Hydro															
19 Federal Entities	71,687	102,590	56,241	129,027	57,477	69,346	32,197	42,777	112,337	129,087	124,364	47,833	55,656	60,056	1,090,675
20 Total Independent Hydro	71,687	102,590	56,241	129,027	57,477	69,346	32,197	42,777	112,337	129,087	124,364	47,833	55,656	60,056	1,090,675

Table 3.2.3

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2025 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Independent Hydro															
1 Anderson Ranch	942	669	332	1,245	983	1,233	1,236	1,313	6,833	6,629	3,289	2,946	3,680	2,069	33,399
2 Big Cliff	4,274	6,512	4,653	6,381	1,911	2,642	1,510	1,510	3,418	2,417	2,547	489	1,113	3,122	42,498
3 Black Canyon	0	1,169	839	2,052	1,392	2,545	1,293	1,293	2,926	2,586	2,877	410	442	873	20,696
4 Boise River Diversion	37	0	0	0	0	0	142	171	745	990	579	272	276	0	3,212
5 Chandler	2,349	3,145	724	4,128	2,883	3,676	1,251	716	825	0	0	0	380	10	20,088
6 Cougar	6,071	6,767	5,325	7,059	2,088	2,711	2,415	2,617	8,520	5,288	3,927	3,316	2,772	3,142	62,019
7 Cowlitz Falls	6,506	16,045	6,138	8,808	8,043	9,078	6,695	6,753	19,256	7,845	4,875	3,414	3,640	262	107,359
8 Detroit	0	4,969	0	22,692	0	0	0	0	0	0	0	0	0	0	27,661
9 Dexter	3,438	3,701	5,346	5,456	1,450	1,726	1,104	1,294	3,676	2,388	2,070	630	1,557	1,862	35,698
10 Foster	2,672	4,324	5,173	5,753	2,303	3,176	1,249	1,607	1,895	2,733	1,460	275	1,093	4,082	37,794
11 Green Peter	5,714	113	0	13,133	1,708	4,011	2,254	0	0	7,344	5,193	85	2,347	8,975	50,878
12 Green Springs	1,627	1,946	2,256	2,646	2,214	2,534	1,190	1,190	2,793	2,425	2,048	778	741	1,575	25,962
13 Hills Creek	4,764	6,061	8,334	9,291	1,960	2,306	3,464	2,696	5,737	4,898	2,528	1,232	1,176	2,238	56,687
14 Lookout Point	0	0	0	6,918	3,624	5,001	3,230	0	0	9,974	0	0	0	0	28,746
15 Lost Creek	5,761	6,899	4,926	8,732	5,441	6,150	2,995	7,053	16,614	17,146	7,795	4,624	5,093	3,510	102,739
16 Minidoka	7,022	6,928	6,024	7,619	7,622	8,641	3,575	4,467	12,588	10,294	9,581	4,771	4,832	6,548	100,513
17 Palisades	18,453	8,093	3,721	13,652	11,830	12,947	5,033	8,778	58,487	49,788	50,109	23,005	25,137	18,628	307,662
18 Roza	2,057	4,891	2,448	3,463	335	969	578	1,318	1,185	3,147	3,491	1,587	1,379	3,158	30,005
Total Independent Hydro															
19 Federal Entities	71,687	82,233	56,241	129,027	55,786	69,346	39,216	42,777	145,496	135,894	102,368	47,833	55,656	60,056	1,093,616
20 Total Independent Hydro	71,687	82,233	56,241	129,027	55,786	69,346	39,216	42,777	145,496	135,894	102,368	47,833	55,656	60,056	1,093,616

Table 3.2.4

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Independent Hydro														
1 Anderson Ranch	2.87	7.37	1.01	3.62	3.41	3.96	9.67	8.64	11.4	22.3	33.1	17.5	23.0	6.47
2 Big Cliff	13.0	20.4	14.2	18.5	6.64	8.49	9.94	9.94	9.94	7.95	7.40	2.91	6.96	9.76
3 Black Canyon	0	5.06	2.56	5.97	4.83	8.18	8.51	8.51	8.51	8.51	8.51	2.44	2.76	2.73
4 Boise River Diversion	0.11	0	0	0	0	0	1.08	1.12	2.16	3.26	3.26	1.62	1.73	0
5 Chandler	7.16	10.00	2.21	12.0	10.0	11.8	6.49	4.71	0.69	0	3.40	0	2.38	0.03
6 Cougar	18.5	23.8	16.2	20.5	7.25	8.72	9.07	17.2	17.6	15.6	16.9	19.7	17.3	9.82
7 Cowlitz Falls	19.8	27.5	18.7	25.6	27.9	29.2	22.7	44.4	26.8	34.4	24.9	20.3	22.7	0.82
8 Detroit	115	85.5	96.0	73.9	115	115	82.2	115	115	115	115	92.8	115	115
9 Dexter	10.5	16.3	16.3	15.9	5.04	5.55	5.55	8.51	7.92	7.70	9.13	3.75	9.73	5.82
10 Foster	8.15	16.1	15.8	16.7	8.00	10.2	10.7	10.6	9.11	5.75	4.24	1.64	6.83	12.8
11 Green Peter	17.4	75.7	93.0	51.7	5.93	12.9	37.0	93.0	93.0	12.6	16.4	0.51	14.7	28.0
12 Green Springs	3.28	4.57	6.87	7.43	7.47	7.40	5.77	7.03	8.12	7.98	5.95	4.61	4.62	4.92
13 Hills Creek	14.5	30.7	25.4	27.0	6.81	7.42	8.22	17.7	21.7	9.52	19.5	7.33	7.35	7.00
14 Lookout Point	138	129	138	73.8	12.6	16.1	49.7	138	30.0	23.3	138	77.2	138	138
15 Lost Creek	17.6	26.7	15.0	25.4	18.9	19.8	20.5	46.4	47.0	54.6	33.7	27.5	31.8	11.0
16 Minidoka	20.9	13.0	18.2	22.1	26.4	27.7	21.3	29.4	31.0	36.4	23.9	28.4	30.2	20.5
17 Palisades	56.3	27.3	11.3	39.7	41.1	41.6	61.1	57.8	83.8	170	139	137	157	58.2
18 Roza	6.27	10.8	7.46	10.1	1.16	3.12	8.91	8.67	10.7	4.86	11.9	9.45	8.62	9.87
Total Independent Hydro														
19 Federal Entities	469	530	498	450	308	337	378	627	535	540	614	455	601	441
20 Total Independent Hydro	469	530	498	450	308	337	378	627	535	540	614	455	601	441

Table 3.2.4

Bonneville Power Administration - Power Services: Independent Hydro

Fiscal Year 2025 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Independent Hydro														
1 Anderson Ranch	2.87	2.08	1.01	3.62	3.41	3.96	8.13	8.64	19.9	21.8	9.56	17.5	23.0	6.47
2 Big Cliff	13.0	20.3	14.2	18.5	6.64	8.49	9.94	9.94	9.94	7.95	7.40	2.91	6.96	9.76
3 Black Canyon	0	3.64	2.56	5.97	4.83	8.18	8.51	8.51	8.51	8.51	8.36	2.44	2.76	2.73
4 Boise River Diversion	0.11	0	0	0	0	0.94	0.94	1.12	2.16	3.26	1.68	1.62	1.73	0
5 Chandler	7.16	9.80	2.21	12.0	10.0	11.8	8.23	4.71	2.40	0	0	0	2.38	0.03
6 Cougar	18.5	21.1	16.2	20.5	7.25	8.72	15.9	17.2	24.8	17.4	11.4	19.7	17.3	9.82
7 Cowlitz Falls	19.8	50.0	18.7	25.6	27.9	29.2	44.0	44.4	56.0	25.8	14.2	20.3	22.7	0.82
8 Detroit	115	115	96.0	73.9	115	115	115	115	115	115	115	92.8	115	115
9 Dexter	10.5	11.5	16.3	15.9	5.04	5.55	7.26	8.51	10.7	7.86	6.02	3.75	9.73	5.82
10 Foster	8.15	13.5	15.8	16.7	8.00	10.2	8.22	10.6	5.51	8.99	4.25	1.64	6.83	12.8
11 Green Peter	17.4	93.0	93.0	51.7	5.93	12.9	14.8	93.0	93.0	24.2	15.1	0.51	14.7	28.0
12 Green Springs	3.28	4.57	6.87	7.43	7.47	7.40	5.77	7.03	8.12	7.98	5.95	4.61	4.62	4.92
13 Hills Creek	14.5	18.9	25.4	27.0	6.81	7.42	22.8	17.7	16.7	16.1	7.35	7.33	7.35	7.00
14 Lookout Point	138	138	138	73.8	12.6	16.1	21.3	138	138	32.8	138	77.2	138	138
15 Lost Creek	17.6	21.5	15.0	25.4	18.9	19.8	19.7	46.4	48.3	56.4	22.7	27.5	31.8	11.0
16 Minidoka	20.9	21.4	18.2	22.1	26.4	27.7	23.2	29.4	36.6	33.9	27.8	28.4	30.2	20.5
17 Palisades	56.3	25.2	11.3	39.7	41.1	41.6	33.1	57.8	170	164	146	137	157	58.2
18 Roza	6.27	15.2	7.46	10.1	1.16	3.12	3.80	8.67	3.44	10.4	10.1	9.45	8.62	9.87
Total Independent Hydro														
19 Federal Entities	469	585	498	450	308	337	371	627	769	562	551	455	601	441
20 Total Independent Hydro	469	585	498	450	308	337	371	627	769	562	551	455	601	441

Table 3.3.1

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Small Hydro															
1 Dworshak-Clearwater Hatchery	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63
2 Rocky Brook	0.04	0.21	0.56	0.58	0.41	0.47	0.46	0.46	0.20	0.09	0.00	0.00	0.00	0	0.25
Total Small Hydro															
3 Federal Entities	2.67	2.84	3.19	3.21	3.04	3.10	3.09	3.09	2.83	2.72	2.63	2.63	2.63	2.63	2.88
4 Total Small Hydro	2.67	2.84	3.19	3.21	3.04	3.10	3.09	3.09	2.83	2.72	2.63	2.63	2.63	2.63	2.88

Table 3.3.1

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2025 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Small Hydro															
1 Dworshak-Clearwater Hatchery	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63	2.63
2 Rocky Brook	0.04	0.21	0.56	0.58	0.42	0.47	0.46	0.46	0.20	0.09	0.00	0.00	0.00	0	0.25
Total Small Hydro															
3 Federal Entities	2.67	2.84	3.19	3.21	3.05	3.10	3.09	3.09	2.83	2.72	2.63	2.63	2.63	2.63	2.88
4 Total Small Hydro	2.67	2.84	3.19	3.21	3.05	3.10	3.09	3.09	2.83	2.72	2.63	2.63	2.63	2.63	2.88

Table 3.3.2

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Small Hydro															
1 Dworshak-Clearwater Hatchery	1,094	1,052	1,052	1,094	1,052	1,094	547	547	1,094	1,052	1,094	547	589	1,010	12,919
2 Rocky Brook	19	88	239	247	162	199	95	95	85	36	1	1	1	0	1,268
Total Small Hydro															
3 Federal Entities	1,113	1,140	1,291	1,341	1,214	1,293	642	642	1,179	1,088	1,095	548	590	1,010	14,187
4 Total Small Hydro	1,113	1,140	1,291	1,341	1,214	1,293	642	642	1,179	1,088	1,095	548	590	1,010	14,187

Table 3.3.2

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2025 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Small Hydro															
1 Dworshak-Clearwater Hatchery	1,136	1,052	1,052	1,094	1,010	1,094	547	547	1,094	1,052	1,094	547	547	1,052	12,919
2 Rocky Brook	19	88	239	247	162	199	95	95	85	36	1	1	1	0	1,268
Total Small Hydro															
3 Federal Entities	1,155	1,140	1,291	1,341	1,172	1,293	642	642	1,179	1,088	1,095	548	548	1,052	14,187
4 Total Small Hydro	1,155	1,140	1,291	1,341	1,172	1,293	642	642	1,179	1,088	1,095	548	548	1,052	14,187

Table 3.3.3

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Small Hydro															
1 Dworshak-Clearwater Hatchery	863	844	905	863	778	860	400	400	863	842	863	400	421	884	10,183
2 Rocky Brook	14	61	175	181	121	149	70	70	67	26	1	0	0	0	0
Total Small Hydro															
3 Federal Entities	877	905	1,080	1,044	899	1,009	470	470	930	868	864	400	421	884	11,118
4 Total Small Hydro	877	905	1,080	1,044	899	1,009	470	470	930	868	864	400	421	884	11,118

Table 3.3.3

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2025 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Small Hydro															
1 Dworshak-Clearwater Hatchery	821	844	905	863	757	860	400	400	863	842	863	400	463	842	10,120
2 Rocky Brook	14	61	175	181	121	149	70	70	67	26	1	0	0	0	935
Total Small Hydro															
3 Federal Entities	835	905	1,080	1,044	878	1,009	470	470	930	868	864	400	463	842	11,055
4 Total Small Hydro	835	905	1,080	1,044	878	1,009	470	470	930	868	864	400	463	842	11,055

Table 3.3.4

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2024 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Small Hydro														
1 Dworshak-Clearwater Hatchery	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
2 Rocky Brook	1.11	1.49	1.60	1.59	1.62	1.58	1.58	1.58	1.58	1.09	0.19	0.49	0.49	0
Total Small Hydro														
3 Federal Entities	4.11	4.49	4.60	4.59	4.62	4.58	4.58	4.58	4.58	4.09	3.19	3.49	3.49	3.00
4 Total Small Hydro	4.11	4.49	4.60	4.59	4.62	4.58	4.58	4.58	4.58	4.09	3.19	3.49	3.49	3.00

Table 3.3.4

Bonneville Power Administration - Power Services: Small Hydro

Fiscal Year 2025 Water Year: P10

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Small Hydro														
1 Dworshak-Clearwater Hatchery	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
2 Rocky Brook	1.11	1.49	1.60	1.59	1.62	1.58	1.58	1.58	1.58	1.09	0.19	0.49	0.49	0
Total Small Hydro														
3 Federal Entities	4.11	4.49	4.60	4.59	4.62	4.58	4.58	4.58	4.58	4.09	3.19	3.49	3.49	3.00
4 Total Small Hydro	4.11	4.49	4.60	4.59	4.62	4.58	4.58	4.58	4.58	4.09	3.19	3.49	3.49	3.00

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4. OTHER RESOURCE FORECASTS FOR FY 2024 AND FY 2025

Table 4.1.1

Bonneville Power Administration - Power Services: Large Thermal Resources

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Large Thermal Resources															
1 Columbia Generating Station	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116
Total Large Thermal Resources															
3 Federal Entities	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116
4 Total	1,116														

Table 4.1.1

Bonneville Power Administration - Power Services: Large Thermal Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Large Thermal Resources															
1 Columbia Generating Station	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	360	409	1,116	1,116	1,116	1,116	994
Total Large Thermal Resources															
3 Federal Entities	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	360	409	1,116	1,116	1,116	1,116	994
4 Total	1,116	360	409	1,116	1,116	1,116	1,116	994							

Table 4.1.2

Bonneville Power Administration - Power Services: Large Thermal Resources

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Large Thermal Resources															
1 Columbia Generating Station	464,256	446,400	446,400	464,256	446,400	464,256	232,128	232,128	464,256	446,400	464,256	232,128	249,984	428,544	5,481,792
Total Large Thermal Resources															
3 Federal Entities	464,256	446,400	446,400	464,256	446,400	464,256	232,128	232,128	464,256	446,400	464,256	232,128	249,984	428,544	5,481,792
4 Total	464,256	446,400	446,400	464,256	446,400	464,256	232,128	232,128	464,256	446,400	464,256	232,128	249,984	428,544	5,481,792

Table 4.1.2

Bonneville Power Administration - Power Services: Large Thermal Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Large Thermal Resources															
1 Columbia Generating Station	482,112	446,400	446,400	464,256	428,544	464,256	232,128	232,128	149,760	163,680	464,256	232,128	232,128	446,400	4,884,576
Total Large Thermal Resources															
3 Federal Entities	482,112	446,400	446,400	464,256	428,544	464,256	232,128	232,128	149,760	163,680	464,256	232,128	232,128	446,400	4,884,576
4 Total	482,112	446,400	446,400	464,256	428,544	464,256	232,128	232,128	149,760	163,680	464,256	232,128	232,128	446,400	4,884,576

Table 4.1.3

Bonneville Power Administration - Power Services: Large Thermal Resources

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Large Thermal Resources															
1 Columbia Generating Station	366,048	358,236	383,904	366,048	330,336	364,932	169,632	169,632	366,048	357,120	366,048	169,632	178,560	374,976	4,321,152
Total Large Thermal Resources															
3 Federal Entities	366,048	358,236	383,904	366,048	330,336	364,932	169,632	169,632	366,048	357,120	366,048	169,632	178,560	374,976	4,321,152
4 Total	366,048	358,236	383,904	366,048	330,336	364,932	169,632	169,632	366,048	357,120	366,048	169,632	178,560	374,976	4,321,152

Table 4.1.3

Bonneville Power Administration - Power Services: Large Thermal Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Large Thermal Resources															
1 Columbia Generating Station	348,192	358,236	383,904	366,048	321,408	364,932	169,632	169,632	118,080	130,944	366,048	169,632	196,416	357,120	3,820,224
Total Large Thermal Resources															
3 Federal Entities	348,192	358,236	383,904	366,048	321,408	364,932	169,632	169,632	118,080	130,944	366,048	169,632	196,416	357,120	3,820,224
4 Total	348,192	358,236	383,904	366,048	321,408	364,932	169,632	169,632	118,080	130,944	366,048	169,632	196,416	357,120	3,820,224

Table 4.1.4
Bonneville Power Administration - Power Services: Large Thermal Resources
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Large Thermal Resources														
1 Columbia Generating Station	1,181	1,179	1,180	1,178	1,175	1,177	1,166	1,166	1,151	1,154	1,168	1,163	1,163	1,179
Total Large Thermal Resources	1,181	1,179	1,180	1,178	1,175	1,177	1,166	1,166	1,151	1,154	1,168	1,163	1,163	1,179
3 Federal Entities	1,181	1,179	1,180	1,178	1,175	1,177	1,166	1,166	1,151	1,154	1,168	1,163	1,163	1,179
4 Total	1,181	1,179	1,180	1,178	1,175	1,177	1,166	1,166	1,151	1,154	1,168	1,163	1,163	1,179

Table 4.1.4

Bonneville Power Administration - Power Services: Large Thermal Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Large Thermal Resources														
1 Columbia Generating Station	1,181	1,179	1,180	1,178	1,175	1,177	1,166	1,166	1,151	1,154	1,168	1,163	1,163	1,179
Total Large Thermal Resources														
3 Federal Entities	1,181	1,179	1,180	1,178	1,175	1,177	1,166	1,166	1,151	1,154	1,168	1,163	1,163	1,179
4 Total	1,181	1,179	1,180	1,178	1,175	1,177	1,166	1,166	1,151	1,154	1,168	1,163	1,163	1,179

Table 4.2.1
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Renewable Resources															
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	9	13	10	5	9	10	18	15	16	16	16	8	12	11	11.8
10 Stateline Wind	16	23	18	9	16	18	32	27	29	29	28	15	22	20	21.2
Total Renewable Resources															
13 Federal Entities	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33.0
14 Total	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33.0

Table 4.2.1
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Renewable Resources															
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	9	13	10	5	9	10	18	15	16	16	16	8	12	11	11.8
10 Stateline Wind	16	23	18	9	16	18	32	27	29	29	28	15	22	20	21.2
Total Renewable Resources															
13 Federal Entities	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33.0
14 Total	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33.0

Table 4.2.2
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Renewable Resources															
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	3,614	4,143	3,721	2,049	3,772	4,421	3,890	3,278	6,718	6,589	6,435	1,544	2,638	4,830	57,643
10 Stateline Wind	6,501	7,451	6,693	3,685	6,785	7,953	6,996	5,896	12,084	11,852	11,575	2,777	4,744	8,688	103,681
Total Renewable Resources															
13 Federal Entities	10,116	11,594	10,414	5,734	10,558	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	161,324
14 Total	10,116	11,594	10,414	5,734	10,558	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	161,324

Table 4.2.2
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Renewable Resources															
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	3,614	4,143	3,721	2,049	3,642	4,421	3,890	3,278	6,718	6,589	6,435	1,544	2,638	4,830	57,513
10 Stateline Wind	6,501	7,451	6,693	3,685	6,551	7,953	6,996	5,896	12,084	11,852	11,575	2,777	4,744	8,688	103,447
Total Renewable Resources															
13 Federal Entities	10,116	11,594	10,414	5,734	10,194	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	160,960
14 Total	10,116	11,594	10,414	5,734	10,194	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	160,960

Table 4.2.3
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Renewable Resources															
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	3,104	5,188	3,618	1,876	2,302	3,035	2,571	2,158	5,300	4,910	5,181	1,358	2,006	3,261	45,868
10 Stateline Wind	5,583	9,331	6,508	3,374	4,141	5,458	4,625	3,882	9,533	8,832	9,318	2,443	3,608	5,865	82,503
Total Renewable Resources															
13 Federal Entities	8,687	14,519	10,126	5,251	6,443	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,371
14 Total	8,687	14,519	10,126	5,251	6,443	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,371

Table 4.2.3
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Renewable Resources															
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	3,104	5,188	3,618	1,876	2,223	3,035	2,571	2,158	5,300	4,910	5,181	1,358	2,006	3,261	45,789
10 Stateline Wind	5,583	9,331	6,508	3,374	3,998	5,458	4,625	3,882	9,533	8,832	9,318	2,443	3,608	5,865	82,360
Total Renewable Resources															
13 Federal Entities	8,687	14,519	10,126	5,251	6,221	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,149
14 Total	8,687	14,519	10,126	5,251	6,221	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,149

Table 4.2.4
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2024

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Renewable Resources														
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Stateline Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Renewable Resources														
13 Federal Entities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Total	0	0	0	0	0	0	0	0						

Table 4.2.4
Bonneville Power Administration - Power Services: Renewable Resources

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A 1Hr-MW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep
Renewable Resources														
1 Condon Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 Fourmile Hill Geothermal	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Klondike Wind 1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8 Klondike Wind 3	0	0	0	0	0	0	0	0	0	0	0	0	0	0
10 Stateline Wind	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total Renewable Resources														
13 Federal Entities	0	0	0	0	0	0	0	0	0	0	0	0	0	0
14 Total	0	0	0	0	0	0	0	0						

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5. PNW REGIONAL HYDRO FORECASTS BY WATER YEAR

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Table 5.1.1
Regional Net Hydro Surplus Deficit By Water Year
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
1 1989 Regional Net Hydro Surplus Deficit	9,468	13,208	13,857	14,088	10,919	13,876	15,528	18,895	17,558	16,214	13,317	11,565	11,216	10,300	13,455
2 1990 Regional Net Hydro Surplus Deficit	10,159	14,829	16,534	18,595	19,620	14,804	15,302	17,309	16,873	20,359	17,130	15,254	14,434	10,514	15,863
3 1991 Regional Net Hydro Surplus Deficit	10,221	18,243	17,121	19,961	20,971	17,087	16,130	15,134	17,499	19,634	20,064	16,247	14,830	10,388	16,849
4 1992 Regional Net Hydro Surplus Deficit	9,971	13,169	12,340	14,317	14,524	11,502	11,089	11,234	15,948	13,223	11,115	10,899	10,472	9,865	12,311
5 1993 Regional Net Hydro Surplus Deficit	9,186	12,641	12,264	12,069	10,258	12,711	12,692	10,352	18,830	17,280	14,556	12,890	11,917	11,132	12,915
6 1994 Regional Net Hydro Surplus Deficit	10,114	12,677	12,796	12,558	12,220	12,157	10,929	14,494	15,912	14,121	12,312	10,737	10,222	10,054	12,342
7 1995 Regional Net Hydro Surplus Deficit	9,654	12,553	13,834	14,819	15,952	17,481	12,800	11,903	17,036	20,431	16,501	13,287	12,265	11,256	14,549
8 1996 Regional Net Hydro Surplus Deficit	12,376	19,384	24,079	24,604	25,086	23,668	17,680	20,956	19,511	21,024	21,079	15,883	15,656	11,168	19,748
9 1997 Regional Net Hydro Surplus Deficit	10,970	14,366	17,571	25,060	24,318	22,334	19,032	22,336	22,894	24,161	22,046	17,165	17,143	13,625	19,587
10 1998 Regional Net Hydro Surplus Deficit	16,054	16,558	15,608	17,712	18,605	15,326	13,279	13,451	20,936	21,026	17,548	15,455	11,948	11,162	16,461
11 1999 Regional Net Hydro Surplus Deficit	10,284	12,866	16,437	22,519	20,775	22,523	16,829	18,588	18,634	21,912	22,056	18,017	17,897	11,086	17,901
12 2000 Regional Net Hydro Surplus Deficit	10,729	17,534	18,642	19,307	18,201	16,776	17,376	19,068	17,989	17,007	15,036	13,887	11,459	10,293	16,022
13 2001 Regional Net Hydro Surplus Deficit	10,238	12,253	11,930	12,202	12,661	10,952	10,589	8,810	12,487	12,680	11,709	11,181	10,331	9,680	11,433
14 2002 Regional Net Hydro Surplus Deficit	9,347	11,409	13,605	13,856	12,789	12,907	14,227	17,549	17,184	20,788	19,032	12,671	12,153	10,547	14,148
15 2003 Regional Net Hydro Surplus Deficit	9,847	12,820	12,319	13,583	13,720	15,523	13,522	14,286	15,793	19,116	12,294	10,220	10,333	9,842	13,243
16 2004 Regional Net Hydro Surplus Deficit	10,039	13,966	14,681	14,042	11,954	12,686	12,639	13,029	15,884	17,196	13,427	10,197	11,591	10,933	13,214
17 2005 Regional Net Hydro Surplus Deficit	11,441	14,154	16,603	16,493	17,191	13,156	10,578	11,066	14,953	16,071	14,472	11,727	10,851	10,237	13,900
18 2006 Regional Net Hydro Surplus Deficit	9,458	13,889	14,877	20,366	20,925	15,756	18,445	17,722	20,512	20,270	15,956	11,813	10,767	10,820	15,991
19 2007 Regional Net Hydro Surplus Deficit	9,528	14,150	15,311	18,645	15,725	20,015	16,433	15,431	17,171	17,447	14,790	11,395	10,425	10,260	14,990
20 2008 Regional Net Hydro Surplus Deficit	9,487	12,797	13,116	15,117	14,117	13,585	11,793	10,436	18,578	22,332	18,487	13,918	13,632	10,708	14,438
21 2009 Regional Net Hydro Surplus Deficit	9,933	13,584	12,695	17,457	13,869	11,440	16,769	16,247	17,570	17,994	13,460	11,034	9,908	10,381	13,769
22 2010 Regional Net Hydro Surplus Deficit	9,785	12,785	13,448	13,459	12,215	11,018	12,010	10,132	13,076	20,696	16,569	12,547	11,223	10,635	13,048
23 2011 Regional Net Hydro Surplus Deficit	9,848	12,772	16,166	20,807	21,478	18,617	21,003	17,067	19,938	24,236	24,605	18,669	15,570	11,353	17,987
24 2012 Regional Net Hydro Surplus Deficit	11,036	13,777	14,374	17,711	17,530	18,538	20,407	21,853	20,044	21,970	22,214	16,682	15,911	10,722	17,110
25 2013 Regional Net Hydro Surplus Deficit	10,258	15,849	18,293	16,152	14,856	12,622	19,026	15,717	18,427	19,372	16,473	12,763	11,533	11,070	15,234
26 2014 Regional Net Hydro Surplus Deficit	10,653	12,933	12,652	17,691	12,486	19,287	18,223	17,271	18,649	19,392	17,954	14,165	12,411	10,605	15,291
27 2015 Regional Net Hydro Surplus Deficit	10,119	15,725	18,161	19,734	21,034	19,989	15,519	12,142	13,058	13,223	10,895	10,268	9,902	10,174	14,649
28 2016 Regional Net Hydro Surplus Deficit	9,331	12,162	14,459	15,673	13,316	19,288	18,212	19,174	17,735	15,591	12,633	12,374	10,478	10,215	14,212
29 2017 Regional Net Hydro Surplus Deficit	10,685	17,178	15,322	18,756	18,699	24,542	22,397	21,600	22,162	22,411	15,600	15,206	14,081	10,262	17,677
30 2018 Regional Net Hydro Surplus Deficit	10,180	12,614	15,365	20,582	21,267	18,596	17,927	18,016	21,488	19,943	14,827	11,474	12,700	9,725	16,206

Table 5.1.1
Regional Net Hydro Surplus Deficit By Water Year
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
1 1989 Regional Net Hydro Surplus Deficit	9,470	12,735	13,859	14,091	10,920	14,338	15,441	18,807	17,525	16,621	13,131	11,566	11,218	10,303	13,471
2 1990 Regional Net Hydro Surplus Deficit	10,160	14,845	16,537	18,614	19,715	14,657	15,965	18,174	16,270	20,510	17,135	15,254	15,292	10,517	15,913
3 1991 Regional Net Hydro Surplus Deficit	10,220	18,063	17,099	19,942	21,075	17,038	16,882	15,161	16,943	19,901	19,789	16,248	14,976	10,390	16,813
4 1992 Regional Net Hydro Surplus Deficit	9,976	13,173	12,342	14,319	14,525	11,505	11,094	11,139	13,967	15,458	11,117	10,900	10,474	9,867	12,319
5 1993 Regional Net Hydro Surplus Deficit	9,184	12,639	12,266	12,193	10,253	12,701	12,675	10,345	18,097	16,668	16,118	12,871	11,899	11,134	12,949
6 1994 Regional Net Hydro Surplus Deficit	10,112	12,679	12,798	12,560	12,221	12,160	11,097	13,906	14,452	15,898	12,314	10,739	10,224	10,055	12,348
7 1995 Regional Net Hydro Surplus Deficit	9,657	12,554	13,836	14,822	15,953	17,440	12,530	11,747	17,134	20,677	16,561	13,241	12,225	11,259	14,555
8 1996 Regional Net Hydro Surplus Deficit	12,378	19,330	24,188	24,940	24,954	23,568	18,360	20,886	19,489	21,657	21,398	15,887	15,805	11,171	19,857
9 1997 Regional Net Hydro Surplus Deficit	10,966	14,360	17,564	24,917	25,126	22,099	20,616	22,063	23,776	24,796	22,208	17,161	17,284	13,634	19,804
10 1998 Regional Net Hydro Surplus Deficit	15,958	16,468	15,612	17,833	18,494	15,332	13,041	13,775	21,247	20,311	17,556	15,955	13,644	11,164	16,509
11 1999 Regional Net Hydro Surplus Deficit	10,287	12,867	16,441	22,626	20,828	22,396	17,612	19,064	17,971	22,097	22,063	18,009	18,035	11,088	17,914
12 2000 Regional Net Hydro Surplus Deficit	10,726	17,422	18,598	19,300	18,206	16,769	17,269	18,976	17,845	17,620	15,038	13,889	11,460	10,295	16,032
13 2001 Regional Net Hydro Surplus Deficit	10,241	12,257	11,932	12,205	12,662	10,955	10,596	8,820	12,025	13,226	11,711	11,182	10,333	9,682	11,438
14 2002 Regional Net Hydro Surplus Deficit	9,347	11,409	13,607	13,860	12,791	12,905	14,434	17,479	16,587	21,084	19,027	13,383	12,888	10,549	14,193
15 2003 Regional Net Hydro Surplus Deficit	9,847	12,824	12,321	13,707	13,582	15,515	12,915	14,382	15,554	19,533	12,296	10,221	10,334	9,844	13,235
16 2004 Regional Net Hydro Surplus Deficit	10,038	13,952	14,683	14,044	11,955	12,688	12,468	13,613	15,198	17,707	13,431	10,199	11,593	10,936	13,219
17 2005 Regional Net Hydro Surplus Deficit	11,444	14,144	16,605	16,496	17,188	13,208	10,560	11,620	14,783	15,963	14,474	11,728	10,852	10,239	13,894
18 2006 Regional Net Hydro Surplus Deficit	9,459	13,891	14,880	20,365	21,104	15,693	18,384	17,628	20,532	20,632	15,882	11,731	10,683	10,822	15,998
19 2007 Regional Net Hydro Surplus Deficit	9,530	14,161	15,314	18,639	15,728	20,041	18,773	14,896	16,793	17,442	14,219	11,397	10,426	10,262	14,985
20 2008 Regional Net Hydro Surplus Deficit	9,487	12,799	13,119	15,121	14,119	13,584	12,509	10,679	18,473	22,422	18,494	13,864	13,698	10,710	14,479
21 2009 Regional Net Hydro Surplus Deficit	9,932	13,580	12,697	17,446	13,870	11,436	16,438	15,879	17,176	18,522	13,461	11,036	9,910	10,383	13,749
22 2010 Regional Net Hydro Surplus Deficit	9,787	12,787	13,450	13,462	12,216	11,021	12,503	10,476	13,004	20,834	16,571	12,360	11,031	10,637	13,076
23 2011 Regional Net Hydro Surplus Deficit	9,848	12,773	16,168	20,802	21,701	18,585	20,943	16,996	19,786	24,350	25,369	18,879	16,169	11,356	18,082
24 2012 Regional Net Hydro Surplus Deficit	11,037	13,780	14,377	17,828	17,401	18,509	21,279	22,465	19,306	22,708	23,007	16,622	16,046	10,725	17,237
25 2013 Regional Net Hydro Surplus Deficit	10,259	15,789	18,249	16,156	14,858	12,676	19,061	15,638	17,811	20,115	16,476	12,765	11,535	11,072	15,239
26 2014 Regional Net Hydro Surplus Deficit	10,654	12,935	12,654	17,683	12,474	19,275	18,174	17,213	18,716	19,421	17,960	14,718	13,522	10,607	15,373
27 2015 Regional Net Hydro Surplus Deficit	10,120	15,644	18,116	19,805	21,113	19,951	15,544	11,903	12,299	14,236	10,897	10,270	9,904	10,176	14,640
28 2016 Regional Net Hydro Surplus Deficit	9,333	12,171	14,461	15,676	13,319	19,283	19,232	20,409	17,199	16,154	11,861	10,840	10,436	10,218	14,179
29 2017 Regional Net Hydro Surplus Deficit	10,683	17,000	15,324	18,552	18,956	24,212	22,750	22,174	21,880	22,883	15,597	14,921	12,965	10,264	17,627
30 2018 Regional Net Hydro Surplus Deficit	10,182	12,615	15,368	20,617	21,477	18,518	17,594	18,007	22,265	19,990	14,826	11,423	12,767	9,727	16,262

6. 4(H)(10)(C) CREDIT

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Table 6.1.1
4(h)(10)(C) Power Purchase Amounts By Water Year
Fiscal Year 2024

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	
Energy-aMW	Oct	Nov	Dec	Jan	Feb	Mar	Ap1	Ap2	May	Jun	Jul	Ag1	Ag2	Sep	Avg	
1	1989	1116	223	1279	1506	1876	0	0	0	-390	-118	69	0	61	459	
2	1990	1051	371	0	0	0	0	277	244	0	-378	0	0	867	191	
3	1991	1484	0	0	0	0	0	0	0	0	0	0	0	1088	215	
4	1992	1347	298	2090	838	101	1352	534	1346	0	1086	1101	556	-264	-203	
5	1993	1065	306	2032	2528	2535	423	804	2557	0	0	0	-269	0	-123	
6	1994	1080	518	1566	2834	827	960	95	2055	867	834	383	306	-31	926	
7	1995	1140	978	1072	1648	0	0	0	3191	447	0	0	0	0	369	
8	1996	87	0	0	0	0	0	0	0	0	0	0	0	621	58	
9	1997	1064	0	0	0	0	0	0	0	0	0	0	0	0	90	
10	1998	0	0	179	0	0	0	339	955	0	0	-48	0	-72	611	
11	1999	1342	1005	0	0	0	0	0	0	0	0	0	0	731	257	
12	2000	1293	0	0	0	0	0	0	0	-373	-74	0	-187	1122	156	
13	2001	1313	700	1724	1676	800	1578	1918	3336	2091	1812	890	-368	-352	1	
14	2002	1125	575	1039	1472	1401	1538	0	0	0	0	-296	-113	804	643	
15	2003	1292	193	1558	1672	566	0	0	0	408	0	641	801	0	117	
16	2004	1170	-16	384	1952	1158	789	0	2549	715	0	95	878	0	701	
17	2005	527	0	0	0	0	12	1159	1910	793	0	0	144	-158	914	
18	2006	1736	0	228	0	0	0	0	0	0	-140	232	-243	1060	241	
19	2007	1558	-143	213	0	0	0	0	0	0	-232	389	-257	1380	237	
20	2008	1551	2	1447	24	0	4	179	2126	0	0	0	-250	0	694	
21	2009	1377	196	1343	0	69	1302	0	0	0	231	713	-54	6	410	
22	2010	1087	838	1079	2730	828	1851	0	4118	2443	0	0	-427	-238	-95	
23	2011	1352	1298	0	0	0	0	0	1034	0	0	0	0	555	310	
24	2012	888	45	393	0	0	0	0	0	0	0	0	0	852	182	
25	2013	1310	0	0	0	0	722	0	0	0	0	0	0	562	219	
26	2014	1139	418	1421	0	1280	0	0	0	0	0	0	-285	0	754	
27	2015	1437	0	0	0	0	0	0	674	1675	1296	1399	953	-104	187	
28	2016	892	319	992	855	802	0	0	0	0	-514	140	0	-64	-157	
29	2017	874	0	514	0	0	0	0	0	0	0	0	-39	1107	207	
30	2018	1510	1414	56	0	0	0	0	0	0	-297	96	-51	250	246	
31	Average	1140	318	687	658	408	351	168	871	323	125	120	108	-74	494	431
32	Median	1155	195	389	0	-16	587	312								

Table 6.1.2
4(h)(10)(C) Power Purchase Amounts By Water Year
Fiscal Year 2025

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
	Energy-aMW	Oct	Nov	Dec	Jan	Feb	Mar	Ap1	Ap2	May	Jun	Jul	Ag1	Ag2	Sep	Avg
1	1989	1134	601	1245	1486	1874	0	0	0	0	-657	35	88	0	59	479
2	1990	1050	301	0	0	0	0	0	0	688	0	-372	0	0	866	212
3	1991	1485	0	0	0	0	0	0	0	0	0	0	0	0	1086	215
4	1992	1342	372	1994	836	98	1351	532	1408	1302	0	1169	570	-233	-267	786
5	1993	1101	389	1898	2440	2538	434	820	2564	0	0	0	-264	0	-121	844
6	1994	1082	646	1499	2751	825	870	0	2450	1821	-373	396	320	0	-85	908
7	1995	1183	1074	1050	1645	0	0	0	3264	384	0	0	0	0	365	614
8	1996	84	0	0	0	0	0	0	0	0	0	0	0	0	618	58
9	1997	1068	0	0	0	0	0	0	0	0	0	0	0	0	0	91
10	1998	0	0	176	0	0	0	497	738	0	0	-49	0	-71	608	108
11	1999	1340	1026	0	0	0	0	0	0	0	0	0	0	0	729	258
12	2000	1296	0	0	0	0	0	0	0	0	-328	-72	0	-201	1120	160
13	2001	1311	695	1722	1673	754	1567	1910	3326	2374	1438	901	-282	-343	0	1233
14	2002	1103	579	995	1480	1387	1714	0	0	106	0	0	-211	-145	849	667
15	2003	1292	189	1533	1584	663	0	0	0	545	0	627	819	0	51	578
16	2004	1186	111	374	1949	1155	787	0	2195	1229	0	91	896	0	698	760
17	2005	524	0	0	0	0	-18	1168	1545	903	0	0	163	-137	851	302
18	2006	1736	0	225	0	0	0	0	0	0	0	-139	306	-230	1008	240
19	2007	1556	-111	210	0	0	0	0	0	0	0	-231	387	-242	1319	235
20	2008	1551	0	1318	21	0	4	-296	1989	0	0	0	-249	0	694	361
21	2009	1379	200	1341	0	66	1260	0	0	0	0	231	713	-41	-10	406
22	2010	1095	919	994	2727	825	1839	0	3891	2481	0	0	-355	-223	-105	1042
23	2011	1352	1347	0	0	0	0	0	1105	0	0	0	0	0	552	316
24	2012	888	42	391	0	0	0	0	0	0	0	0	0	0	847	181
25	2013	1309	0	0	0	0	692	0	0	0	0	0	0	0	560	216
26	2014	1139	470	1418	0	1286	0	0	0	0	0	0	-284	0	752	405
27	2015	1436	0	0	0	0	0	0	768	2167	667	1398	946	-91	184	561
28	2016	922	294	899	908	798	0	0	0	0	-529	720	880	-62	-132	359
29	2017	879	0	512	0	0	0	0	0	0	0	0	0	-38	1108	208
30	2018	1509	1412	53	0	0	0	0	0	0	0	-391	113	-8	251	240
31	Average	1144	352	662	650	409	350	154	841	467	7	144	152	-69	482	435
32	Median	1185	195	383	0	0	0	0	0	0	0	0	0	0	584	337

7. FEDERAL TIER 1 SYSTEM FIRM CRITICAL OUTPUT

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Table 7.1.1
Federal Tier 1 System Firm Critical Output Projection - 2-Year Average
RHWM Process for BP-24 Rate Period
S232-RC-20220530-195059

		A	B	C
1.	T1SFCO Projections Energy in aMW	2024	2025	Average
2.	Total Federal System Hydro Generation (<i>TRM Table 3.1</i>)	6,633	6,686	6,660
3.	Total Designated Non-Federally Owned Resources (<i>TRM Table 3.2</i>)	1,140	1,018	1,079
4.	Total Designated BPA Contract Purchases (<i>TRM Table 3.3</i>)	135	135	135
5.	Total Designated System Obligations (<i>TRM Table 3.4</i>)	-881	-880	-881
6.	Federal Tier 1 System Firm Critical Output (sum of Lines 2-5)	7,027	6,958	6,993

Table 7.1.2
Federal System Hydro Generation for use in the T1SFCO Calculation
RHWM Process for BP-24 Rate Period
TRM Table 3.1
S232-RC-20220530-195059

		A	B	C
1.	Regulated Hydro	2024	2025	Average
2.	Albeni Falls	24.7	22.8	23.8
3.	Bonneville	400.7	391.3	396.0
4.	Chief Joseph	1,086.7	1,101.6	1,094.2
5.	Dworshak	169.3	192.8	181.1
6.	Grand Coulee	1,877.6	1,901.0	1,889.3
7.	Hungry Horse	79.1	68.7	73.9
8.	Ice Harbor	164.9	168.6	166.7
9.	John Day	775.1	781.0	778.1
10.	Libby	163.3	149.9	156.6
11.	Little Goose	162.6	160.0	161.3
12.	Lower Granite	148.7	150.1	149.4
13.	Lower Monumental	165.0	159.4	162.2
14.	McNary	461.3	469.5	465.4
15.	The Dalles	646.5	645.0	645.7
16.	Independent Hydro	2024	2025	Average
17.	Anderson Ranch	10.1	10.1	10.1
18.	Big Cliff	10.5	10.5	10.5
19.	Black Canyon	5.9	5.8	5.8
20.	Boise River Diversion	0.9	1.1	1.0
21.	Chandler	5.2	6.2	5.7
22.	Cougar	14.9	14.8	14.9
23.	Cowlitz Falls	22.4	24.7	23.6
24.	Detroit	31.2	34.2	32.7
25.	Dexter	9.1	9.6	9.4
26.	Foster	9.6	9.4	9.5
27.	Green Peter	22.1	23.7	22.9

Table 7.1.2
Federal System Hydro Generation for use in the T1SFCO Calculation
RHWM Process for BP-24 Rate Period

TRM Table 3.1

S232-RC-20220530-195059

		A	B	C
28.	Green Springs - USBR	6.7	6.7	6.7
29.	Hills Creek	16.1	14.4	15.3
30.	<i>Idaho Falls - City Plant (expired 9/30/2016)</i>			
31.	<i>Idaho Falls - Lower Plants #1 & #2 (expired 9/30/2016)</i>			
32.	<i>Idaho Falls - Upper Plant (expired 9/30/2016)</i>			
33.	Lookout Point	30.1	31.4	30.7
34.	Lost Creek	27.9	27.0	27.4
35.	Minidoka	10.4	11.2	10.8
36.	Palisades	66.9	74.9	70.9
37.	Roza	7.5	8.3	7.9
38.	Total Tier 1 Federal System Hydro Generation	6,633.4	6,685.6	6,659.5

^{1/} Reference Tiered Rate Methodology, November 2008. TRM-12-A-02, Table 3.1, page 121.

Table 7.1.3
Designated Non-Federally Owned Resources for use in the T1SFCO Calculation
RHWM Process for BP-24 Rate Period

TRM Table 3.2

S232-RC-20220530-195059

1.	Project	2024	2025	Average
2.	Ashland Solar Project (<i>expired 5/31/2020</i>)	0.0	0.0	0.0
3.	Columbia Generating Station	1,116.0	993.7	1,054.8
4.	Condon Wind Project (<i>expired 9/30/2022</i>)	0.0	0.0	0.0
5.	Dworshak/Clearwater Small Hydropower	2.6	2.6	2.6
6.	Foote Creek 1 (<i>early termination in 2019</i>)	0.0	0.0	0.0
7.	Foote Creek 2 (<i>expired 2014</i>)	0.0	0.0	0.0
8.	Foote Creek 4 (<i>Acquisition Expired 10/1/2020</i>)	0.0	0.0	0.0
9.	<i>Fourmile Hill Geothermal (Not included)</i>	0.0	0.0	0.0
10.	<i>Georgia-Pacific Paper (Wauna) (Acquisition Expired 4/5/2016)</i>	0.0	0.0	0.0
11.	Klondike I (<i>expired 4/2022</i>)	0.0	0.0	0.0
12.	Stateline Wind Project (<i>expires 12/2026</i>)	21.2	21.2	21.2
13.	White Bluffs Solar (<i>expired in 1996</i>)	0.0	0.0	0.0
14.	Total Designated Non-Federally Owned Resources	1,139.8	1,017.5	1,078.7

^{1/} Reference Tiered Rate Methodology, November 2008. TRM-12-A-02, Table 3.2, page 122.

Table 7.1.4
Designated BPA Contract Purchases for use in the T1SFCO Calculation
RHWM Process for BP-24 Rate Period
TRM Table 3.3
S232-RC-20220530-195059

1.	Contract Purchases	Contract #	2024	2025	Average
2.	Priest Rapids CER for Canada	97PB-10099	29.0	29.1	29.1
3.	Rock Island #1 CER for Canada	97PB-10102	17.0	17.1	17.1
4.	Rock Reach CER for Canada	97PB-10103	37.0	37.1	37.1
5.	Wanapum CER for Canada	97PB-10100	27.9	27.9	27.9
6.	Wells CER for Canada	97PB-10101	22.8	23.0	22.9
7.	BCHP to BPA PwrS	99PB-22685	1.0	1.0	1.0
8.	BCHP to BPA LCA <i>(settled financially)</i>	99PB-22685			
9.	PASA to BPA Pk Repl <i>(expired 4/30/2015)</i>	94BP-93658			
10.	PASA to BPA S/N/X <i>(expired 4/30/2015)</i>	94BP-93658			
11.	PASA to BPA Xchg Nrg <i>(expired 4/30/2015)</i>	94BP-93658			
12.	RVSD to BPA Pk Repl <i>(expired 4/30/2016)</i>	94BP-93958			
13.	RVSD to BPA Seas Xchg <i>(expired 4/30/2016)</i>	94BP-93958			
14.	RVSD to BPA Xchg Nrg <i>(expired 4/30/2016)</i>	94BP-93958			
15.	PPL to BPA SNX (Spring Return) <i>(expired 6/1/2014)</i>	94BP-94332			
16.	PPL to BPA SPX (Summer Return) <i>(expired 6/1/2014)</i>	94BP-94332			
17.	Total Designated BPA Contract Purchases	134.7	135.3	135.0	

^{1/} Reference Tiered Rate Methodology, November 2008. TRM-12-A-02, Table 3.3, page 123.

Table 7.1.5
Designated BPA System Obligations for use in the T1SFCO Calculation
RHWM Process for BP-24 Rate Period
TRM Table 3.4 (Negative numbers indicate obligations)

S232-RC-20220530-195059

A	B	C	D
1.	System Obligation	Contract #	2024
2.	BPA to BRCJ Chief Joseph	14-03-17506; 14-03-49151	-8.6
3.	BPA to BRCB Columbia Basin Project	Ibp-4512; 14-03-001-12160	-148.3
4.	BPA to BRCR Crooked River Project	14-03-73152	-0.7
5.	BPA to BROP Owyhee Project	EW-78-Y-83-00019	-1.3
6.	BPA to BRRP Rathdrum Prairie Project	14-03-49151	-0.8
7.	BPA to BRSID Southern Idaho Projects	EW-78-Y-83-00019	-20.1
8.	BPA to BRSIN Spokane Indian Develop.	14-03-49151	-0.3
9.	BPA to BRSV Spokane Valley	14-03-63656	-0.7
10.	BPA to BRTD The Dallas Reclamation Project	14-03-32210	-1.9
11.	BPA to BRTV Tualatin Project	14-03-49151	-0.8
12.	BPA to BRUB Umatilla Basin Project	10GS-75345	-2.5
13.	BPA to BRYK Yakima Project	DE-MS79-88BP92591	-1.7
14.	BPA to BCHP LCA (<i>settled financially</i>)	99PB-22685	0.0
15.	BPA to BCHA Can Ent	99EO-40003	-454.3
16.	BPA to BCHA NTSA	12PG-10002	-11.7
17.	BPA to BHEC 2012PSC (<i>expired 6/30/2017</i>)	97PB-10051	
18.	BPA to PASA C/N/X (<i>expired 4/30/2015</i>)	94BP-93658	
19.	BPA to PASA S/N/X (<i>expired 4/30/2015</i>)	94BP-93658	
20.	BPA to RVSD C/N/X (<i>expired 4/30/2016</i>)	94BP-93958	
21.	BPA to RVSD Seas Xchg (<i>expired 4/30/2016</i>)	94BP-93958	
22.	Federal Intertie Losses (<i>Calculated: 3.0% of Intertie Sales Table 2.12.5 lines 18-21</i>)	n/a	0.0
23.	BPA to AVWP WP3 S (<i>expires 6/30/2019</i>)	85BP-92186	
24.	BPA to PPL SNX (Spring Delivery) (<i>expired 6/1/2014</i>)	94BP-94332	
25.	BPA to PPL SPX (Summer Delivery) (<i>expired 6/1/2014</i>)	94BP-94332	
26.	BPA to PSE WP3 S (<i>expired 6/30/2017</i>)	85BP-92185	

Table 7.1.5
Designated BPA System Obligations for use in the T1SFCO Calculation
RHWM Process for BP-24 Rate Period
TRM Table 3.4 (Negative numbers indicate obligations)

S232-RC-20220530-195059

		A	B	C	D
1.	System Obligation	Contract #	2024	2025	Average
27.	BPA to PSE Upper Baker 2	09PB-12126	-1.3	-1.3	-1.3
28.	BPAP to BPAT (Dittmer/Substation Service)	09PB-12128	-9.4	-9.4	-9.4
29.	Federal Power Trans. Losses	n/a	-248.7	-246.7	-247.7
30.	Slice Transmission Loss Returns	n/a	32.2	31.9	32.0
31.	Total Designated System Obligations		-880.9	-880.3	-880.6

^{1/} Reference Tiered Rate Methodology, November 2008. TRM-12-A-02, Table 3.4, page 124-125.

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8. HYDRO REGULATION ASSUMPTIONS

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STUDY NUMBER: 22_RateCase24_IP & 22_RateCase25_IP

Requested By: BPA Rates Process

Due Date: August 31, 2022

Purpose of Study: This is a 90-year continuous study of the system operation for the Initial Proposal BP-24 (BP-24 IP) Rate Case for FY 2024 and FY 2025. As a result of the BP-24 Rate Proceeding Settlement, the Final Proposal BP-24 is equivalent to the BP-24 Initial Proposal.

Study Directories:

- DOP Step:** X:\RATES\22_RateCase24_IP\Emails\DOPTSR24forRATE or \\Bonfire\model\TREATY\DOP24_Ratecase_90Yr\TSR90_2020MF_Update
- AER Step:** X:\RATES\22_RateCase24_IP\AER90 & X:\RATES\22_RateCase25_IP\AER90
- OPER Step:** X:\RATES\22_RateCase24_IP\OPER_final90 & X:\RATES\22_RateCase25_IP\OPER_final

Name of Regulator: Jennie Tran & Erin Riley

The Rate Case HYDSIM studies are run in three steps. The first step determines the Canadian Treaty operations; these operations serve as the starting point for the second step that determines the U.S. non-federal operations and an approximation of the federal operations reflective of participation in the Pacific Northwest Coordination Agreement; finally, the third step fine-tunes the federal operations.

There are two separate 90-year studies—one for Fiscal Year (FY) 2024 (October 2023 through September 2024) and one for FY 2025 (October 2024 through September 2025). For simplicity the two 90-year studies are often referred to as a singular study, and the three steps are often referred to as a singular step. However, in reality there is a Detailed Operating Plan (DOP) Step for each one, an Actual Energy Regulation (AER) Step for each one, and an operational (OPER) Step for each one, which is a total of six studies, and these are collectively referred to as the HYDSIM study for the Rate Case. It was decided that the system output is based on the recent 30 years of the historical record (1989-2018) for the BP-24 rate case. Future rate case studies may only be 30 year continuous studies.

DOP STEP

- This Step is used to determine the Canadian Treaty project elevations following procedures from the Columbia River Treaty.
- Since the official DOP studies for Treaty storage operations are typically completed just 1-2 months prior to the operating year, they are not available in time for the rate case study. Therefore, surrogate DOP studies are used to reflect expected study results and determine the Canadian Treaty storage operations for the AER step.
- The surrogate DOP24 study starts with the official Assured Operating Plans (AOP22): AOP22 study would be used for AOP23, and AOP24. The surrogate DOP converts the AOP from perfect-knowledge to forecast-based and from operating-year to fiscal-year, and includes all the data updates that are expected to be included in the official DOP studies. These studies were run by BPA on July 6, 2022 for this BP-24 IP Rate Case.
- These updates include plant data from the Pacific Northwest Coordination Agreement (PNCA) 2021 data submittal for OY22 except Grand Coulee pumping schedule from the PNCA 2022 data submittal for OY23. The surrogate DOP used the 2020 Level Modified flow data, and water supply forecast developed by the Corps of Engineers (COE).

- This continuous 90-year surrogate DOP study begins on October 1, 1928, and ends on September 30, 2018.

AER STEP

- This AER Step is used to determine the project minimum storage elevations using load equal to the PNCA 2022 operating year (OY22) Firm Energy Load Carrying Capability (FELCC) and unlimited secondary market. Minimum elevations from the AER Step are input into the OPER Step.
- This is a **continuous** 90-year study based on the PNCA OY22 data submittal.
- The Coordinated System generation does not include the Tacoma projects, PacifiCorp projects, Brownlee, Oxbow, and Hells Canyon.
- **Streamflow Data** are from “2020 Level Modified Streamflow, 1928-2018”. They are historical streamflows that would have been observed if current irrigation depletions (as of year 2018) existed in the past, and if the effects of river regulation were removed (See “2020 Level Modified Streamflow: Seasonal Volumes and Statistics, 1928-2018” and “2020 Level Modified Streamflow, 1928-2018” both dated October 2020.) Adjustments to the streamflow data are made in this study according to the Bureau of Reclamation’s updated Grand Coulee pumping schedule for the Columbia Basin Project in the PNCA OY22 data submittal.
- **Plant Data** are from the PNCA OY22 data submittal.
- **Loads** are from the FELCC OY22 Critical Period study run by the Northwest Power Pool (NWPP) for the PNCA. The NWPP study has a one-year critical period (September 1, 1936 through April 30, 1937). Thus, only one year of FELCC values are used for all water conditions. This study reflects coordination between PNCA parties in meeting PNCA FELCC. Therefore, generation from projects owned by non-PNCA parties (Brownlee, Oxbow, Hells Canyon, and Canadian projects) is not used to meet PNCA FELCC in these studies. Also, in this study the generation from Tacoma and PacifiCorp projects is not included because they are not in the PNCA Coordinated System FELCC computation. The PNCA hydro FELCC includes Hydro-Independent generation from 1936-37, so BPA revises the FELCC to reflect the Hydro-Independent generation for each of the 90 years and uses this modified FELCC as the hydro-residual load required for this study. There is no limit assumed in the secondary market, which is consistent with PNCA studies.
- **Unit Outages** for all projects are from the PNCA OY22 data.
- **Initial Contents** for all projects came from the September 30, 1929, storage ending content from the final Rates study for 2007 except Mica, Arrow, and Duncan are initialized to the content from the surrogate DOP studies. The initial conditions do not significantly affect the study results since this is a continuous study.
- **Critical Rule Curves** (CRCs) are in accordance with PNCA OY22 adopted system critical rule curves.
- **Water supply forecast** for the 2020 Modified Streamflows developed by the Corps of Engineers.
- **Flood Control Rule Curves**, also known as Upper Rule Curves (URCs), are the highest contents allowed for each reservoir and supersede all other reservoir elevation and content operating objectives. The curves are based on the Corps of Engineers water supply forecast methodology (not actuals); shifting some of Dworshak’s requirement to Grand Coulee when possible; a ratio of 3.6/4.08 Arrow/Mica split; and variable flood control (VarQ) at Hungry Horse and Libby. The rule curves are based on the Columbia River System Operations “Preferred Alternative” that was presented in the 2020 joint-agency environmental impact study (available online at <https://www.nwd.usace.army.mil/CRSO/Final-EIS/>). These flood control curves include the variable flood control in December at Libby. The Mica, Arrow, and Duncan flood control requirements are from the surrogate DOP24study. The flood control curves for Grand Coulee are adjusted for the amount of storage capability available below the URC on April 30 each year for Mica, Arrow, and Duncan to more closely reflect the methodology used in real-time operations.
- **Variable Energy Content Curves** (VECCs) are calculated using Power Discharge Requirements (PDRs), distribution factors, forecast errors from the PNCA OY22 planning process, and the Corps of Engineers water supply forecast data. The Grand Coulee Energy Content Curve (ECC) lower limits are 1225 feet (441.5 ksfd) January through April, and 1240 feet (884.4 ksfd) in May. The unit ‘ksfd’ is a volume equal to 1000 cfs for 24 hours. The Canadian projects’ surrogate DOP24 VECCs are based on forecasts, the ratio of 3.6/4.08 Arrow/Mica split, non-shifted flood control, and VarQ flood control at Hungry Horse.

Project Specific Data:

- **Mica, Duncan, and Arrow** are fixed to the 90-year surrogate DOP24 study.
- **Libby** operates to meet Coordinated System FELCC in October and November with a minimum flow of 4,000 cfs. Libby has a maximum outflow of 4,000 cfs January through April and 25,000 cfs May through August. The 25,000 cfs May through August maximum outflow is powerhouse hydraulic capacity without spill, but a higher outflow including spill can be provided to maintain the required VarQ flood control space. Libby has a minimum outflow of 6,000 cfs May 15 through September, and target outflows of 6,000 cfs in September and 4,000 cfs in October. Libby can be drafted to meet FELCC in October and November as long as it does not draft below the December Variable URC. When the December forecast at Libby for April through August is less than 5500 thousand acre feet (KAF), the flood control at Libby in December is 2426.7 feet (1805.8 ksfd). When the forecast is greater than 5900 KAF, the flood control in December is 2411.0 feet (1501.9 ksfd). The flood control data is interpolated between 1805.8 ksfd and 1501.9 ksfd when the forecast is between 5500 and 5900 KAF. January-April, Libby operates to minimum flow (4,000 cfs) or at the flood control URC in attempt to reach the flood control URC on April 15 (as a surrogate for the Biological Opinion's (BiOp) April 10 objective). During May and June Libby operates for Sturgeon and during May 15 through September 30 it operates for Bull Trout. Sturgeon and Bull Trout flow requirements May through August are based on the May final April-August COE water supply forecast at Libby and are summarized as follows from the PNCA OY21 Corps of Engineers data submittal based on the U.S. Fish and Wildlife Service BiOp dated February 18, 2006, where MAF is one million acre-feet and KAF is one thousand acre-feet of water volume.

Libby May1 Apr-Aug Sturgeon Flow Volume
Forecast Volume (MAF) Provided from Libby (KAF)

<4800	0
4800-5400	800
5400-6350	800-1120
6350-7400	1120-1200
7400-8500	1200
8500-8900	1200-1600
>8900	1600

Libby May1 Apr-Aug Bull Trout Minimum Flow
Forecast Interval (MAF) May15-Aug31 (CFS)

<4800	6000
4800-6000	7000
6000-6700	8000
>6700	9000

In years when the May 1 forecast of April through August volume at The Dalles is less than 72.2 MAF (the lowest 20th percentile), the August 31 draft limit is 2439 feet (2061.3 ksfd) and in years when the forecast is greater than or equal to 72.2 MAF, the August 31 draft limit is 2449 feet (2280.3 ksfd). Libby can draft below the August draft limit to meet the Bull Trout flow objective. The project attempts to operate along a computed straight line between the June 30 content and August 31 draft limit to minimize occurrences of a second peak flow in the summer. Sliding scale summer draft at Libby adjusts summer ending elevations based on local forecasts for each project. This operation is intended to provide flexibility in balancing objectives for meeting both local resident fish and downstream flow augmentation.

Libby's May, April- August Water Supply Fcst.		September Elevation Target	
Percentile	kAF	Feet	ksfd
0%	0	2439	2061.3
<= 15%	4660		
25%	5010	2449	2280.3
75%	6780		
>= 85%	7333	2454	2394.9
100%	99999		

- **Kootenay Lake** is operated as necessary, up to free flow, to maintain the lake level below the International Joint Commission (IJC) rule curve and the calculated "allowable elevation at Queens Bay". After August 31, the lake level may rise to elevation 1745.32 at the Queens Bay gage. This maximum elevation at Queens Bay is in effect through January 7. After January 7 the lake will be lowered to elevation 1744 on February 1, elevation 1742.4 on March 1, and 1739.32 on May 1. From June 1 through August 31, after the lake exceeds elevation 1739.32 feet at the Queens Bay gage, the lake shall be operated using the "allowable elevation" calculation to determine the Queens Bay maximum allowable elevation until the elevation at the Nelson gage drafts back to 1743.32 feet.
- **Hungry Horse** operates to meet the following minimum flow requirements at the project and at Columbia Falls as shown in the PNCA OY22 data submittal. The minimum flows are determined each month based on the January, February, and March forecasts of April-August streamflow volumes. The March forecast also determines the minimum flows for April through December.

<u>Hungry Horse</u> <u>Apr-Aug Forecast (KAF)</u>	<u>Hungry Horse</u> <u>Minimum Flow (CFS)</u>	<u>Columbia Falls</u> <u>Minimum Flow (CFS)</u>
<1190	400	3200
1190-1790	400-900	3200-3500
>1790	900	3500

Hungry Horse will draft to 3555.7 feet (1453.5 ksfd) in October and November and 3549.2 feet (1376.8 ksfd) in December for winter flood control. However, due to the minimum flow requirement at Columbia Falls, Hungry Horse often operates below these elevations in October through December. From January through March, Hungry Horse operates between the variable draft limits (VDLs), which assures a 75 percent chance of filling to April flood control elevation and the VarQ flood control elevation, except in periods when minimum flow requirements draft the project deeper. The VDLs are calculated using assumed inflows that are exceeded 75 percent of the time, the minimum outflow, and the requirement to be at flood control elevation on April 10. Hungry Horse operates to the draft limit of 3545 feet (1330.2 ksfd) or VarQ flood control upper rule curve in April. In May and June, Hungry Horse operates on flood control when possible but drafts below flood control to meet minimum flows when necessary. January through April outflows are reshaped to reduce forced spill. In years when the May 1 April-August volume forecast for The Dalles is less than 72.2 MAF (20th percentile from the COE's PNCA OY21 data submittal), the project operates along a computed straight line between the June 30 content and a September 30 draft limit of 3540.0 feet (1275.1 ksfd) to minimize occurrences of a second peak flow in the summer. In years when the May 1 April-August volume forecast for The Dalles is greater than or equal to 72.2 MAF (20th percentile), the September 30 draft limit is 3550.0 feet (1386.7 ksfd). The summer draft is then shaped to provide flat flows July through September where possible. The maximum discharge at Hungry Horse is 9,000 cfs during September through April 15, and 11,956 cfs during April 16 through August 31, unless the URC causes more discharge. Sliding scale summer draft at Hungry Horse adjusts summer ending elevations based on local forecasts for each project. This operation is intended to provide flexibility in balancing objectives for meeting both local resident fish and downstream flow augmentation.

HGH May-Sep Inflow		HGH Summer Draft Elevation Limits (feet)		
Forecast (Kaf)		JUL	AU1	AU2
<1410		3554	3551	3547
Between 1410 and 1580		3554 - 3559	3551 -3557	3547-3555
>1580		3559	3557	3555
HGH May-Sep Inflow		HGH Summer Draft Storage Content Limits (ksfd)		
Forecast (Kaf)		JUL	AU1	SEP
<1410		1433.4	1398.4	1352.3
Between 1410 and 1580		1433.4 - 1491.8	1393.4 - 1468.4	1352.3 - 1445.1
>1580		1491.8	1468.4	1445.1
				1386.7

- **Albeni Falls** targets 2062 feet (559.1 ksfd) from June through August, 2060 feet (465.7 ksfd) in September, 2056 feet (279.0 ksfd) in October, 2051 feet (57.6 ksfd) November through March, 2056 feet (279.0 ksfd) in April, and 2060 feet (465.7 ksfd) in May.
- **Kerr** targets 2891 feet (488.6 ksfd) in October, 2889.6 feet (401.5 ksfd) in November, 2888 feet (302.8 ksfd) in December, 2886.6 feet (217.1 ksfd) in January, 2886.5 feet (162.3 ksfd) in February, 2885.7 feet (162.3 ksfd) in March, 2883.0 feet (0 ksfd) on April 15, 2884.1 feet (65.7 ksfd) on April 30, 2890 feet (426.3 ksfd) in May, full at 2893 feet (614.7 ksfd) June through September.
- **Grand Coulee** operates to meet FELCC September through December subject to the draft limits of 1283 feet (2413.9 ksfd) in September and October, 1275 feet (2102.4 ksfd) in November, and 1270 feet (1915.1 ksfd) in December. January through March, Grand Coulee can be drafted to the variable draft limits (VDLs) to support Chum flow and Vernita Bar minimum flow requirements. In all years, the calculated VDL has a lower limit of 1260 feet (1553.2 ksfd) in January, 1250 feet (1208.8 ksfd) in February, and 1240 feet (883.8 ksfd) in March. Only during years identified for drum gate maintenance, the upper limit is 1270 feet (1915.1 ksfd) in February, and 1250 feet (1208.8 ksfd) in March. The VDL reflects the expected April 10th URC and storage needed for the appropriate Vernita Bar minimum flow and potential drum gate maintenance requirements. These VDLs are calculated using the following data: the regulated inflows from the Hydsim model which are exceeded 85 percent of the time, perfect knowledge of the minimum outflow, and the requirement to be at flood control elevation on April 10. On April 15, Grand Coulee operates to flood control. To support the McNary and Priest Rapids April 30 through May flow targets, Grand Coulee may be drafted to the lower of flood control or 1280 feet (2295.3 ksfd). In June, Grand Coulee operates to 1288 feet (2615.3 ksfd) or flood control elevations. Drum gate maintenance occurs in years when the Grand Coulee April flood control elevation (based on the final February 1 water supply forecast) is less than 1255 feet (1380.2 ksfd). In those drum gate years, Coulee cannot exceed 1270 ft (1915.1 ksfd) in February and 1255 feet (1380.2 ksfd) from March-April. The drum gate maintenance is performed at least one time in a 3-year period, two times in a 5-year period, and three times in a 7-year period. When July 1 April-August final forecast volume runoff at The Dalles is less than 92 Maf, the BiOP draft limits are 1283 feet (2413.9 ksfd) in July, 1280 feet (2295.3 ksfd) in August 15, and 1278 feet (2217.5 ksfd) in August 31. Otherwise, the draft limits are 1285 feet (2493 ksfd) in July, 1282 feet (2374.4 ksfd) in August 15, and 1280 feet (2295.3 ksfd) in August 31. The Lake Roosevelt Incremental Storage Releases Program (LRISRP) requires Grand Coulee to draft an additional foot in non-drought years and 1.8 feet in drought years at the end of August. At-site minimum flow is equal to 30,000 cfs. Grand Coulee is subject to a draw down limit of 1.5 feet per day when Grand Coulee is above 1260 feet (1553.3 ksfd), 1.3 feet per day when Grand Coulee is between 1260 feet (1553.3 ksfd) and 1240 feet (884.4 ksfd), and 1.0 feet per day when Grand Coulee is below 1240 feet (884.4 ksfd). During the flow augmentation period, Grand Coulee will release no more water than necessary to meet the minimum flow requirements.
- **Vernita Bar** minimum flows for December through May vary by water condition, with minimum flows established as the lower of either 68 percent of the larger of the October or November flow at Wanapum,

or 70,000 cfs. Values less than 70,000 cfs are rounded to the nearest 5,000 cfs. The minimum protection level flow at Vernita Bar in any period will be no less than 36,000 cfs. These Vernita Bar flow requirements are modeled as requirements at Priest Rapids, and Grand Coulee will draft to meet them.

- **Priest Rapids** has a flow augmentation target of 135,000 cfs for Steelhead April 10 through June 30. From April 1-9 the minimum flow for Priest Rapids is the same as the Vernita Bar minimum flow.
- **Upper Snake** reservoirs and river reaches above Brownlee are not simulated in this study. Upper Snake operations are embedded in the Brownlee inflow data, as described in the 2020 Level Modified Streamflow documentation.
- **Brownlee** operates to the fixed target elevations provided to BPA from the NWPP on October 11, 2013. They are 2059 feet (373.5 ksfd) in August, 2045 feet (293.8 ksfd) in September, 2053 feet (337.4 ksfd) in October, 2069.8 feet (441.8 ksfd) in December, 2059.7 feet (377.7 ksfd) in January, 2075 feet (477.8 ksfd) in June, and 2062 feet (391.5 ksfd) in July and supports a minimum flow requirement of 6500 cfs at Hells Canyon. Brownlee drafts to support the flow objective at Hells Canyon of between 6500 to 13000 cfs in October, and between 8000 to 13000 cfs in November for Fall Chinook operation. In February through May, Brownlee operates to flood control unless drafted for Hells Canyon minimum flow requirement.
- **Dworshak** is on minimum flow of 1,600 cfs or at flood control elevations in all periods with the exception of July-September. Dworshak's outflow is limited to 14,000 cfs in July-August except when exceeded to meet the URC where the maximum flow is 25,000 cfs. During the July-August flow augmentation period, Dworshak will release no more water than necessary to meet the Lower Granite flow target, though the target is rarely met and instead Dworshak most often operates to target elevations based on a straight-line draft between end of June and end of August target elevations: usually 1600 feet (1016.0 ksfd) on June 30 and 1535 feet (497.0 ksfd) on August 31. The summer draft is then shaped to provide flat flows July through August where possible. Dworshak is drafted to 1520 feet (395.8 ksfd) on September 30 subject to a maximum outflow of 9,867 cfs.
- **Lower Snake projects operate at MOP** (minimum operating pool) in accordance with the PNCA data submittal. As identified in the Federal Columbia River Power System BiOp, the Corps operates Lower Granite, Little Goose, Lower Monumental, and Ice Harbor within one-and-a-half foot of minimum operating pool (MOP) during the period from approximately April 1 through August 15. MOPs for Lower Granite, Little Goose, Lower Monumental and Ice Harbor are elevations 733.8 (228.3 ksfd), 633.8 (264.4 ksfd), 537.8 (183.0 ksfd) and 437.8 feet (196.4 ksfd), respectively. During the rest of the year Lower Granite, Little Goose, Lower Monumental and Ice Harbor operate at elevations 735.5 (235.3 ksfd), 635.5 (272.7 ksfd), 538.5 (185.2 ksfd) and 438.5 feet (199.1 ksfd), respectively.
- **Spill for Fish Passage** is included at the eight lower Snake River and lower Columbia River projects (Lower Granite, Little Goose, Lower Monumental, Ice Harbor, McNary, John Day, The Dalles and Bonneville) based on the PNCA OY22 data, summarized below. The spill is limited at times by 125 percent Total Dissolved Gas (TDG) Caps except John Day and The Dalles by 120 percent TDG Caps and minimum turbine flow requirements.
- **Juvenile Passage Spill and Total Dissolved Gas Caps from OY22 PNCA Planning**

	Spill	Min Turb	Days	Hour Ending	Notes
LWG	gas cap vs 20 kcfs; 18 kcfs; 7 kcfs	11.6 kcfs	Apr 3 - Jun 20; Jun 21 - Aug 14; Aug 15-31	16 hrs/day vs 8 hrs/day; All hours; All hours	125% TDG Gas Cap: 79 kcfs Apr3-Jun20; 115%/120% Gas Cap: 44 kcfs Jun21-Aug31
LGS	gas cap vs 30% flow; 30% flow; 7 kcfs	11.5 kcfs	Apr 3 - Jun 20; Jun 21 - Aug 14; Aug 15-31	16 hrs/day vs 8 hrs/day; All hours; All hours	125% TDG Gas Cap: 81 kcfs Apr3-Jun20; 115%/120% Gas cap: 31 kcfs Jun21-Aug31
LMN	gas cap vs 30 kcfs; 17 kcfs; 7 kcfs	11.5 kcfs	Apr 3 - Jun 20; Jun 21 - Aug 14; Aug 15-31	16 hrs/day vs 8 hrs/day; All hours; All hours	125% TDG Gas Cap: 106 kcfs Apr3-Jun20; 115%/120% Gas cap: 17 kcfs Jun21-Aug31
IHR	gas cap vs 30% flow; 30% flow; 8.5 kcfs	9.5 kcfs	Apr 3 - Jun 20; Jun 21 - Aug 14; Aug 15-31	16 hrs/day vs 8 hrs/day; All hours; All hours	125% TDG Gas Cap: 114 kcfs Apr3-Jun20; 115%/120% Gas cap: 81 kcfs Jun21-Aug31
MCN	gas cap vs 48% flow; 57% flow; 20 kcfs	50 kcfs	Apr 10 - Jun 15; Jun 16 - Aug 14; Aug 15 - 31	16 hrs/day vs 8 hrs/day; All hours; All hours	125% TDG Gas Cap: 260 kcfs Apr10-Jun15; 115%/120% Gas cap: 184 kcfs Jun16-Aug31
JDA	gas cap vs 32% flow; 35% flow; 20 kcfs	50 kcfs	Apr 10 - Jun 15; Jun 16 - Aug 14; Aug 15 - 31	16 hrs/day vs 8 hrs/day; All hours; All hours	120% TDG Gas Cap: 168 kcfs Apr10-Jun15; 115%/120% Gas cap: 165 kcfs Jun16-Aug31
TDA	40% flow; 30% flow	50 kcfs	Apr 10 - Aug 14; Aug 15-31	All hours	125% TDG Gas Cap: 169 kcfs Apr10-Jun15; 115%/120% TDG Gas Gap: 118 kcfs Jun16- Aug31
BON	gas cap vs 100 kcfs; 95 kcfs ; 50 kcfs	30 kcfs	Apr 10 - Jun 15; Jun 16 - Aug 14; Aug 15 - 31	16 hrs/day vs 8 hrs/day; All hours; All hours	Limited Gas Cap: 150 kcfs Apr10-Jun15 (due to erosion concerns); 113 kcfs Jun16- Aug31

LWG = Lower Granite; LGS = Little Goose; LMN = Lower Monumental; IHR = Ice Harbor; MCN = McNary;
JDA = John Day; TDA = The Dalles; BON = Bonneville

- **Chum Flow Objectives at Bonneville** are from November 1 through April 10 and estimated at 125,000 cfs in the PNCA data submittal. Grand Coulee drafts for this Chum flow requirement with draft limits of 1275 feet (2102.4 ksfd) in November and 1270 feet (1915.1 ksfd) in December.
- **McNary Flow Targets** for April 10 through June 30 are 220,000 to 260,000 cfs based on The Dalles April 1, April-August volume runoff forecasts. When the forecast is 80 MAF or less the target is 220,000 cfs, and when the forecast is 92 MAF or greater the target is 260,000 cfs. Straight-line interpolation determines the flow targets for volume forecasts between 80 and 92 MAF. McNary summer flow targets

are 200,000 cfs in July and August. Grand Coulee drafts for this flow augmentation target, subject to draft limits.

- **Lower Granite Flow Targets** also vary depending on the forecast. When Lower Granite April 1, April-July runoff forecast is less than 16 MAF, then the April 3 through June 20 flow target is 85,000 cfs, and the June 21 through August 31 is 50,000 cfs. When the April 1 Lower Granite April-July forecast is greater than 20 MAF, the April 3 through June 20 target flow is 100,000 cfs. In June 21 through August 31, when the forecast is greater than 28 MAF, the flow target is 55,000 cfs. The spring flow targets are interpolated for forecasts between 16 and 20 MAF, and the summer flow targets are interpolated for forecasts between 16 and 28 MAF. However, these spring flow targets do not actually get modeled at Lower Granite because filling Dworshak by the end of June has a higher priority. Dworshak does draft to meet the summer flow objective, subject to draft limits.
- **John Day** is operated to the variable target elevations below except Ap2-May are forced to 265.0 ft for flood control operation.

John Day PNCA OY22 Targets (Elevation & Storage Contents)

	July-Aug 31	Sept-Oct	Nov	Dec-Feb	Mar	Apr1-15	Apr16-30	May	Jun
Feet	263.5	264.5	264.4	264.3	264.4	264.5	265.5	265.5	264.5
ksfd	152.5	177.9	175.3	172.7	175.3	177.9	204.1	204.1	177.9

- **Bonneville** second powerhouse corner collector is modeled as “other spill” in HYDSIM, data from PNCA OY22.
- **Spill at non-Federal projects** is summarized below from PNCA OY22 planning data. Wells dam spills the percentage shown below if Chief Joseph’s outflow is less than 140,000 cfs; otherwise Wells spills 10,200 cfs April 9 through August 19.

Non-Federal Spill for Fish (Percent of Total Outflow or cfs)

PROJECTS:	Apr1	Apr2	May	Jun	Jul	Aug1	Aug2
Rocky Reach (%)	0.0	0.0	0.3	9.0	9.0	9.0	2.8
Rock Island (%)	0.0	9.3	10.0	20.0	20.0	20.0	6.3
Wanapum (cfs)	1,700	21,700	21,700	21,700	21,700	21,700	12,700
Priest Rapids (cfs)	1,800	28,800	28,000	28,800	28,800	28,800	15,800

PROJECTS:	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Wanapum (cfs)	3,700	3,700	2,700	800	800	1,200	1,458
Priest Rapids (cfs)	2,800	2,800	2,300	200	200	1,100	1,461

OPER STEP

- **All AER Step criteria apply in the OPER Step unless specifically amended below.**
- **Grand Coulee pumping schedule** for the Columbia Basin Project in the PNCA OY23 data submittal.
- **Loads** in the OPER Step are the 2024 and 2025 Coordinated System firm residual hydro loads from BPA's LORA Study (S236-INV-20220727-092515) on July 27, 2022. These residual hydro loads are the total Coordinated System firm load less all the firm non-hydro resources. A variable secondary market limit based on an AURORA market analysis is also included in all periods of every year. The secondary market limit is calculated as necessary to force the HYDSIM ‘overgen’ spill to equal the spill due to lack of market estimated by AURORA, except in periods when Grand Coulee and/or Hungry Horse are able to store water and avoid spill. The Coordinated System independent hydro generation from BPA's LORA Study (S236-INV_20220722-092515) is also used in this study to develop the residual hydro load. In this OPER study, the generation from the Tacoma and PacifiCorp projects is included in the HYDSIM Coordinated System total generation because Tacoma and PacifiCorp are included in the Coordinated System firm residual hydro loads from BPA's LORA.
- **Availability Factors** are used in HYDSIM to simulate unit outages and units held for reserve requirements. Unit outages are based on the latest information for all plants provided by BPA's Federal Hydro Projects Ops group. The availability factors are calculated using a combination of planned outages

plus forced outages that are based on historical data and forecast equipment condition. The following tables show availability factors based on these outage assumptions for FY 2024 and FY 2025.

For FY24

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
LIB	99%	99%	99%	83%	80%	80%	79%	92%	99%	99%	70%	80%
HGH	75%	75%	93%	81%	60%	50%	54%	75%	85%	81%	75%	57%
ALF	97%	78%	89%	97%	97%	97%	97%	97%	97%	94%	75%	76%
DWR	84%	43%	86%	91%	99%	99%	99%	99%	99%	99%	99%	99%
GCL	82%	82%	84%	85%	85%	84%	84%	80%	77%	82%	86%	84%
CHJ	98%	95%	97%	98%	96%	97%	92%	94%	97%	97%	96%	94%
LWG	87%	87%	89%	87%	95%	96%	97%	97%	97%	88%	77%	83%
LGS	82%	84%	86%	97%	96%	94%	97%	96%	96%	87%	80%	83%
LMN	80%	84%	88%	97%	97%	95%	96%	96%	96%	86%	82%	81%
IHR	84%	87%	84%	99%	99%	84%	91%	92%	92%	77%	89%	89%
MCN	67%	74%	81%	83%	82%	81%	80%	81%	64%	68%	62%	59%
JDA	75%	78%	83%	87%	86%	87%	86%	87%	87%	87%	82%	79%
TDA	72%	74%	80%	72%	69%	84%	83%	83%	83%	79%	85%	79%
BON	93%	90%	87%	90%	87%	91%	84%	90%	93%	92%	89%	94%

FY 2025:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
LIB	79%	89%	99%	82%	80%	79%	80%	97%	99%	92%	55%	95%
HGH	60%	75%	85%	85%	65%	50%	48%	75%	79%	66%	68%	75%
ALF	97%	83%	84%	97%	97%	97%	97%	97%	97%	86%	83%	77%
DWR	96%	76%	76%	91%	99%	99%	99%	99%	99%	99%	99%	77%
GCL	83%	80%	76%	83%	83%	87%	95%	92%	87%	94%	89%	81%
CHJ	95%	94%	95%	97%	95%	95%	92%	96%	96%	96%	96%	90%
LWG	86%	83%	90%	86%	97%	97%	97%	97%	97%	88%	84%	83%
LGS	80%	82%	88%	97%	96%	95%	97%	96%	97%	87%	87%	80%
LMN	81%	86%	86%	97%	97%	95%	96%	96%	96%	77%	84%	81%
IHR	80%	85%	87%	99%	99%	83%	92%	92%	92%	75%	82%	92%
MCN	60%	61%	76%	83%	82%	81%	80%	81%	65%	74%	79%	72%
JDA	80%	82%	84%	87%	86%	85%	80%	84%	84%	80%	85%	81%
TDA	84%	85%	87%	87%	85%	85%	79%	83%	81%	83%	84%	86%
BON	97%	96%	91%	90%	93%	96%	90%	89%	92%	92%	90%	93%

- The availability factors are also used to reflect reserve requirements because HYDSIM has no other mechanism to account for incremental reserves, which require the system to have units available to increase generation. After calculating availability factors based on unit outage information, the availability factors are further decreased to reflect units needed for meeting reserve requirements. The availability factors assume the federal hydro system will provide 82.9 percent of the estimated operating contingency reserves required. The availability factors reflect operating contingency reserve requirements at 3 percent of the total control area generation and 3 percent of the total loads. Balancing reserves were modeled to assume full participation in the Energy Imbalance Market. A balancing reserve requirement of 732 – 734 MW for FY2024 and of 737 – 806 MW for FY2025 are also included in the availability factors. The installed wind forecast of 3080 MW for all periods is also included in the availability factors except 3472 MW for Sep of FY2025. The availability factors also reflect the 1 percent of peak efficiency turbine operating requirements at the four lower Snake River projects and the four

lower Columbia River projects in April-November. The following tables show availability factors after considering these reserve and turbine operating requirements in addition to the outage assumptions.

FY 2024:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
LIB	98%	98%	98%	83%	80%	80%	79%	79%	93%	98%	98%	69%
HGH	75%	75%	93%	81%	60%	50%	54%	54%	75%	85%	81%	75%
ALF	92%	71%	92%	92%	92%	92%	92%	92%	92%	92%	92%	71%
DWR	84%	43%	86%	91%	99%	99%	99%	99%	99%	99%	99%	99%
GCL	75%	73%	76%	76%	75%	75%	71%	71%	68%	69%	71%	74%
CHJ	95%	93%	95%	96%	95%	95%	89%	89%	86%	88%	91%	94%
LWG	80%	79%	81%	79%	88%	89%	78%	78%	78%	76%	70%	61%
LGS	75%	77%	78%	89%	88%	87%	78%	78%	78%	76%	72%	64%
LMN	73%	76%	81%	89%	89%	88%	85%	85%	86%	83%	75%	71%
IHR	74%	77%	74%	89%	89%	74%	85%	85%	87%	87%	72%	82%
MCN	61%	68%	74%	76%	78%	77%	61%	61%	63%	50%	53%	49%
JDA	69%	72%	76%	80%	79%	80%	81%	81%	84%	83%	81%	77%
TDA	66%	67%	73%	65%	62%	77%	64%	64%	66%	67%	64%	68%
BON	85%	82%	79%	81%	79%	83%	72%	72%	74%	78%	75%	72%

FY 2025:

	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep
LIB	79%	88%	98%	82%	80%	79%	80%	80%	98%	98%	92%	55%
HGH	61%	75%	85%	85%	64%	50%	48%	48%	75%	79%	65%	69%
ALF	92%	82%	82%	92%	92%	92%	92%	92%	92%	92%	82%	82%
DWR	96%	76%	76%	91%	99%	99%	99%	99%	99%	99%	99%	99%
GCL	75%	72%	69%	74%	73%	78%	80%	80%	78%	75%	80%	76%
CHJ	95%	90%	87%	94%	93%	95%	92%	92%	96%	94%	96%	96%
LWG	79%	75%	83%	78%	89%	89%	76%	76%	78%	76%	70%	67%
LGS	73%	75%	80%	89%	88%	87%	77%	77%	78%	77%	70%	70%
LMN	74%	79%	78%	89%	89%	88%	82%	82%	86%	83%	68%	72%
IHR	71%	76%	76%	89%	89%	73%	87%	87%	87%	87%	70%	75%
MCN	57%	56%	70%	75%	78%	77%	63%	63%	63%	51%	58%	62%
JDA	74%	75%	77%	80%	79%	78%	77%	77%	81%	78%	76%	80%
TDA	77%	78%	80%	80%	78%	77%	65%	65%	67%	68%	68%	67%
BON	89%	88%	82%	82%	85%	87%	69%	69%	72%	77%	72%	73%

- **Initial Contents** for the major federal projects are based on the 70-year average of September 30 storage ending content from the 08_RateCase10_final study.
- **Flood Control Rule Curves** for Grand Coulee are adjusted for the amount of storage capability available below the URC on April 30 each year for Mica, Arrow, and Duncan and are also adjusted to shift some Dworshak flood control space to Grand Coulee when possible while still meeting Dworshak's local flood control requirements and following Corps procedures.
- **Non-federal projects** are run to the resulting contents from the AER Step. This allows the federal projects to operate differently without causing the non-federal projects to adjust operations to meet the system load.
- **Bonneville Chum Flow Objectives** are determined each period based on 11.5 or 11.3 feet tailwater elevation requirements below Bonneville November through March and 16.5 feet tailwater in April and the historical Willamette streamflow data. The January-March minimum Chum flows are re-calculated based on the regulated outflow at Bonneville in December. Grand Coulee operates to meet the chum flow objectives November through March subject to the draft limits described under Grand Coulee.
- **April 10 URC** objectives are included in the study. The BiOp objective is for the federal reservoirs to be at their April 10 URC elevations each year, as full as possible in preparation for providing flows to meet

the spring flow objectives, although minimum flow requirements and forecast errors can cause projects to miss this refill objective. The objective is for Grand Coulee to operate with an 85 percent chance of reaching the April 10 elevation and for Libby and Hungry Horse to operate with a 75 percent chance. The April 10 objectives are modeled as April 15 objectives in HYDSIM.

- **Lower Granite flow targets** in summer have been removed from the OPER Step as well because Dworshak now runs to target elevations by the end of August to better reflect actual operations.
- **Deeper draft of storage projects** is allowed for hydropower generation at Dworshak in January-March periods and Grand Coulee in September-October periods.

Project Specific Data:

- **Mica, Duncan, and Arrow** are fixed to the 90-year DOP24 study for 2024 and 2025 rate case studies with the following additions: 1) One MAF of flow augmentation is stored at Mica in January and is released in February and March in years when the final February and March forecasts of April through August volume at The Dalles is less than 75 MAF, otherwise it is released all in July unless the regulated outflow at McNary is below 250,000 cfs in May-June then releases start in May with the limit of 8,000 cfs in May-Jun periods. The 1 MAF storage in January is limited by a minimum flow of 30,000 cfs for whitefish if the January 1 forecast of April through August volume at The Dalles is less than 75 MAF; otherwise the minimum flow is 20,000 cfs. Storage in February or March is not allowed if the outflows decrease more than 19,000 cfs from the January outflow. 2) FY 2024 only: The trout spawning operation is included at Arrow where April flows are at least 15,000 cfs and May and June flows are equal to or greater than the preceding month whenever possible. No more than a 5,000 cfs decrease is allowed in June from May outflow and 3) Mica, Arrow and Duncan projects are on DOP22 contents by July 31. The outflow at Arrow in July cannot exceed 80,000 cfs.
- **Non-Treaty Storage Agreement (NTSA):** A total of 3 MAF NTSA storage and release is included in the study. Modeling the NTSA operations required plant data updates at Mica and Arrow to increase their maximum storage contents and their upper rule curves. The study includes the NTSA dry-year operations and spring-summer operations. The NTSA also includes operations driven by price, but this operation is not included in this study due to the complexities of incorporating price-based operating decisions.
 - **For Dry Year NTSA operation**
 - Store $\frac{1}{2}$ MAF into Mica (or Arrow) in November-June if the April Final April-August volume forecast at The Dalles is 91.4 MAF or higher.
 - Release $\frac{1}{2}$ MAF from Mica (or Arrow) in May-June if the April Final April-August volume forecast at The Dalles is less than 72.5 MAF (forecast trigger for Dry Years).
 - Water that is stored in November-June should not violate the minimum flow requirements at Priest Rapids, Bonneville, and McNary and the Arrow trout/whitefish operations. Water that is released in May or June should not violate the Arrow trout spawning operation.
 - **For Spring-Summer NTSA operation**
 - Store up to $2\frac{1}{2}$ MAF at Mica (or Arrow) in April 16 – June 30 if meeting Arrow trout operation and exceeding 300,000 cfs outflow at McNary and minimum flow requirement at Priest. Do not store in May-June for years that Arrow's outflow from the DOP study exceeds 80,000 cfs in August. Canada would not likely agree to the spring-summer provision when flows are forecasted to be that high.
 - Release in July-August the amount that was stored in April 16 – June 30 at Mica (or Arrow). If the release in July would result in McNary exceeding its flow target, then the release occurs in August without violating the 80,000 cfs maximum flow.
- **Priest Rapids** flow augmentation targets for Steelhead are modeled as 120,000 cfs in April 10-15, 90,000 cfs in April 16-30 and 135,000 cfs in May. In dry years, the May flow targets will be reduced to 100,000 cfs if Grand Coulee inflow is below 90,000 cfs and will be reduced to 115,000 cfs if Grand Coulee inflow is between 90,000 cfs and 120,000 cfs.
- **Brownlee** drafts to 2062.0 feet (391.5 ksfd) in July, 2059.0 feet (373.5 ksfd) on August 15, 2055.0 feet (349.4 ksfd) on August 31, 2048.0 feet (309.7 ksfd) in September, and 2050.0 feet (320.4 ksfd) in October. In November, Brownlee operates to meet the flow target of 9,000 cfs at Hells Canyon for Idaho Power Company Fall Chinook operation, and Hells Canyon only exceeds the 9,000 cfs flow when

Brownlee drafts more due to the flood control URC. In December, Brownlee targets 2065.0 feet (409.5 ksfd) but will draft deeper in order to meet the minimum flow of 9,000 cfs at Hells Canyon. In January, Brownlee targets 2065.0 feet (409.5 ksfd) but can fill higher to avoid exceeding the maximum flow limit. In February-May, Brownlee remains full at 2077.0 ft (491.7 ksfd) except when the URC or minimum flow at Hells Canyon of 9,000 cfs requires deeper drafts. In June, Brownlee targets full except when draft is needed to maintain a minimum flow of 7,000 cfs at Hells Canyon. Brownlee has a maximum flow limit of 35,000 cfs in all periods except 30,000 cfs in January.

- **Dworshak** operates to the variable draft limits (VDL) during January – March to potentially increase generation and reduce spill while protecting the ability to refill. Dworshak has a maximum discharge of 17,000 cfs April-December and 14,000 cfs January-March to reflect typical actual operations and avoid exceeding 110 percent TDG. January through June outflows are reshaped to reduce forced spill. July and August outflows are smoothed to reflect typical actual operations by using 11,000 cfs minimum in July and August 1-15, and a maximum 25 percent reduction from the first half of August to the second half of August. Dworshak has a maximum elevation of 1590 feet (922.8 ksfd) in July, and a target elevation of 1519 feet (389.4 ksfd) in September.
- **Ice Harbor** has an updated H/K table to reflect the upgrading fish friendly turbine for unit 2 and unit 3 (Note: last H/K updated in 2016 to reflect fish friendly turbine upgraded for unit1).
- **Libby** has a September minimum flow of 6,000 cfs. In the fall, Libby minimizes October draft and maximizes December draft by targeting outflow of 4,000 cfs in October-November, and limiting outflow to 20,000 cfs maximum October-December. Libby can release above 4,000 cfs in October-November if the outflow in December exceeds 20,000 cfs. Libby cannot fill above 2435 ft (1977.1 ksfd) in November and 2454 ft (2394.9 ksfd) in June. Libby's outflow in May is based on a VarQ allowable refill calculation as used in actual operations; therefore, Libby might fill above flood control some years in May to achieve calculated VarQ flow. Libby's May through September operation includes the sturgeon pulse, bull trout minimum required flows, and summer flow augmentation. June and July outflows are reshaped to reduce forced spill in July. Libby has a sliding scale draft target elevations of 5 feet to 20 feet from full by the end of September based on Libby Apr-August forecast in May. Libby is allowed to fill above flood control to avoid spilling in January through March and the outflows during January through April are reshaped to reduce forced spill to reflect the actual operation.
- **Hungry Horse** has a maximum elevation of 3545 feet (1330.2 ksfd) in April and 3558 feet (1480.1 ksfd) in June. Outflows from the second half of April and May are reshaped to prevent June outflow from exceeding 9000 cfs. Columbia Falls minimum flow requirements in July-September include the additional irrigation flow of 493 cfs in dry years. Hungry Horse minimum is set to 50% of the Columbia Falls minimum flow during March-June if Hungry Horse April1 May-September volume forecast is less than 1450 KAF. Hungry Horse has a sliding scale draft target elevation of 10 feet to 20 feet by end of September based on Hungry Horse Apr-August forecast in May.
- **Séliš Ksanka Qlispé (formerly Kerr)** targets 2891 feet (488.6 ksfd) in October, 2890.0 feet (426.3 ksfd) in November, 2888 feet (302.8 ksfd) in December, 2886.3 feet (198.8 ksfd) in January, 2885.7 feet (162.3 ksfd) in February, 2884.8 feet (107.9 ksfd) in March, 2885.7 feet (159.3 ksfd) on April 15, 2885.8 feet (168.4 ksfd) on April 30, 2888.7 feet (345.9 ksfd) in May, 2892.8.0 feet (601.4 ksfd) June-August, and 2892 feet (551.4 ksfd) in September.
- **Grand Coulee** operates to variable storage content in September (between 1277 ft = 2178.6 ksfd and 1288 feet = 2614.8 ksfd) and October (between 1283 feet = 2418.3 ksfd and 1288 feet = 2614.8 ksfd) for a power operation depending available water and market condition. The draft limits for Chum flow in November and December are 1275 feet (2102.4 ksfd) and 1270 feet (1915.1 ksfd), respectively. Grand Coulee cannot fill above 1288 feet (2615.5 ksfd) in any period except July-August in some years that it can fill to 1290 feet (2697.1 ksfd) in order to reduce forced spill. Grand Coulee drafts to support the Chum flow target January through March subject to the draft limits of about 10 feet below the computed variable draft limit in non-drum gate maintenance years. The Bureau performs maintenance during the spring on the spillway drum gates at least one of every three years, at least two of every five years, and at least three of every seven years. This drum gate maintenance requires a maximum Lake Roosevelt elevation of 1267.0 feet (1805.3 ksfd) at the end of February and 1255 feet (1380.2 ksfd) from March through April 30. Years when the April flood control elevation at Grand Coulee based on February water supply forecast is less than 1255 feet (1380.2 ksfd) are automatic drum gate maintenance years. Grand

Coulee can draft further if needed to support the Vernita Bar flow requirement at Priest Rapids. The deepest draft limits at Grand Coulee for Vernita Bar minimum flow requirement without violating the draft limits of 1270 feet (1915.1 ksf) in December, 1260 feet (1553.3 ksf) in January, 1250 feet (1209.0 ksf) in February, and 1240 feet (884.4 ksf) March-May. Grand Coulee can only draft 10 feet below the flood control to support the Steelhead minimum flows in April-May. In all periods, Grand Coulee cannot draft below 1228 feet (525.6 ksf) unless it is on flood control operation. In June, Grand Coulee operates between 1285 feet (2493.0 ksf) and 1288 feet (2615.5 ksf) unless it is on flood control. Grand Coulee's April-December operation includes additional draft as allowed by the Lake Roosevelt Incremental Storage Releases Program (LRISRP). After meeting all modeling requirements, Grand Coulee's January through March operation is re-evaluated to put more generation in January and February or evenly distribute the secondary energy when possible without violating the one foot per day draft rate limit and other constraints in the study.

- **Columbia Basin Irrigation Project Pumping (Banks Lake)** is captured through the PNCA data submittal estimates of pumping, which are based on the average of the past five years' actual pumping.
- **Juvenile Fish Bypass Spill** for the federal projects is summarized in the AER study section. In addition, the spill of 10 kcfs is modeled at MCN, IHR, LMN, LWG, and 5 kcfs LGS projects to provide safe and effective downstream passage for adult steelhead that overshoot their target tributary and then migrate back downstream during the months when there is no scheduled spill for juvenile fish bypass. The overshoot spill will be provided at least 3 days each week and 4 hours each day from October 1 to November 15 and March 1 to March 31.
- **Over-generation Spill Priorities and TDG Caps** are summarized in the following table. Spill up to the TDG levels is modeled in the order listed below to avoid generation levels that exceed the secondary market limit. This is called 'overgen' spill' in HYDSIM. A variable secondary market limit is calculated in HYDSIM as needed to force the 'overgen' spill in each period to equal the estimated energy spilled due to lack of market conditions forecast from the AURORA model. The following values approximate the typical amounts of spill that cause TDG to reach the specified percentage levels. (In actual operations, the spill at a certain gas level can vary significantly and operations are adjusted in real time to manage to the appropriate gas level.)

Spring/Summer: TDG spill production estimates in kcfs for over generation spill.

Project	TDG	MAR	APR	MAY	JUN	JUL	Project	TDG	MAR	APR	MAY	JUN	JUL
LWG	110%	20	15	15	15	5	TDA	110%	45	30	20	20	20
LWG	115%	30	35	35	35	25	TDA	115%	60	85	80	80	105
LWG	Waiver	30	73	84	45	45	TDA	Waiver	60	85	80	80	105
LWG	120%	45	53	51	53	53	TDA	120%	120	120	120	116	120
LWG	122%	60	63	63	63	63	TDA	122%	175	175	175	175	175
LWG	125%	72	72	84	81	84	TDA	125%	200	215	258	199	200
LWG	127%	75	80	80	85	85	TDA	127%	275	295	290	290	295
LWG	130%	100	100	100	100	100	TDA	130%	360	250	360	360	360
LWG	135%	140	140	140	140	140	TDA	135%	400	300	300	400	400
LGS	110%	20	15	10	10	10	BON	110%	70	70	70	70	70
LGS	115%	23	40	35	35	30	BON	115%	100	100	100	100	100
LGS	Waiver	20	79	83	79	32	BON	Waiver	70	150	150	150	113
LGS	120%	52	56	54	53	53	BON	120%	113	113	113	110	113
LGS	122%	55	64	64	62	62	BON	122%	150	150	150	150	150
LGS	125%	76	79	83	81	83	BON	125%	150	150	150	150	150
LGS	127%	85	95	95	95	95	BON	127%	150	150	150	150	150
LGS	130%	125	125	125	125	125	BON	130%	150	150	150	150	150
LGS	135%	180	180	180	180	180	BON	135%	150	150	150	150	150
LMN	110%	15	15	10	10	10	CHJ	110%	25	25	25	25	25
LMN	110% Bulk	15	10	10	10	10	CHJ	115%	45	45	45	45	45
LMN	110% Unif	15	10	10	10	10	CHJ	Waiver	25	25	25	25	25
LMN	115%	25	35	30	30	30	CHJ	120%	120	120	120	120	120
LMN	115% Bulk	25	25	25	19	18	CHJ	122%	160	160	160	160	160
LMN	115% Unif	25	30	25	35	35	CHJ	125%	190	190	190	190	190
LMN	Waiver	15	110	30	30	21	CHJ	127%	280	280	280	280	280
LMN	120% Bulk	15	42	40	48	21	CHJ	130%	290	290	290	290	290
LMN	120% Unif	30	42	40	48	52	CHJ	135%	300	300	300	300	300
LMN	120%	30	42	40	48	52	GCL_RO	110%	4	5	5	0	0
LMN	122%	35	48	48	50	56	GCL_RO	111%	5	5	1	0	0
LMN	125%	98	110	112	112	112	GCL_RO	112%	6	5	1	0	0
LMN	127%	139	145	146	146	146	GCL_RO	113%	7	5	2	0	0
LMN	130%	180	180	180	180	180	GCL_RO	114%	9	5	2	0	0
LMN	135%	250	250	250	250	250	GCL_RO	115%	11	5	3	0	0
IHR	110%	25	10	10	10	10	GCL_RO	Waiver	15	13	6	0	0
IHR	115%	35	45	40	40	90	GCL_RO	120%	21	35	35	0	0
IHR	Waiver	25	91	91	90	90	GCL_RO	122%	25	40	40	0	0
IHR	120%	75	91	91	90	91	GCL_RO	125%	32	45	45	0	0
IHR	122%	100	100	100	98	98	GCL_RO	127%	36	42	33	0	0
IHR	125%	117	119	112	112	112	GCL_RO	130%	43	50	50	50	50
IHR	127%	129	132	129	129	129	GCL_RO	135%	56	40	40	40	40
IHR	130%	140	145	145	145	145	GCL_DG	110%	19	10	10	10	10
IHR	135%	240	240	240	240	240	GCL_DG	111%	19	10	19	19	10
MCN	110%	48	48	48	48	48	GCL_DG	112%	19	10	19	19	10
MCN	115%	80	80	80	80	80	GCL_DG	113%	19	10	19	19	10
MCN	Waiver	140	193	197	179	180	GCL_DG	114%	19	10	19	19	10
MCN	120%	140	193	197	179	185	GCL_DG	115%	29	10	18	18	10
MCN	122%	185	200	200	200	200	GCL_DG	Waiver	49	50	51	51	10
MCN	125%	270	265	262	259	270	GCL_DG	120%	65	40	40	40	40
MCN	127%	295	293	291	255	260	GCL_DG	122%	74	50	50	50	50
MCN	130%	320	320	320	250	250	GCL_DG	125%	85	80	80	80	80
MCN	135%	380	380	380	300	300	GCL_DG	127%	95	96	100	100	100
JDA	110%	20	15	15	5	10	GCL_DG	130%	105	120	120	120	120
JDA	115%	80	40	60	60	135	GCL_DG	135%	120	130	130	130	130
JDA	Waiver	20	157	176	174	170							
JDA	120%	170	157	176	174	170							
JDA	122%	180	180	180	196	180							
JDA	125%	215	190	191	217	215							
JDA	127%	238	220	221	234	233							
JDA	130%	260	250	250	250	250							
JDA	135%	300	300	300	300	300							

GCL_RO: Spill through outlet tubes is assumed to occur March through May when the reservoir is more likely below the spillway crest.

GCL_DG: Spill through drumgates is assumed to occur June through February.

DWR: only spills to 110% and is typically managed as a percentage of outflow.

9. FEDERAL LOADS AND RESOURCES FOR FY 2024 AND FY 2025

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Table 9.1.1

Loads and Resources - Federal System Rate Case
Fiscal Year: 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Firm Obligations															
1 Load Following	3,221	3,539	4,285	4,316	3,921	3,601	3,503	3,503	3,495	3,762	4,032	3,838	3,841	3,393	3,743
2 Preference Customers	2,983	3,397	4,110	4,141	3,755	3,404	3,149	3,149	3,044	3,261	3,490	3,390	3,394	2,998	3,428
3 Federal Agencies	116	133	163	166	148	135	120	120	106	106	115	118	118	109	128
4 USBR	123	10	11	8	18	61	234	234	345	395	427	330	329	286	188
5 Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Tier 1 Block	488	808	808	891	810	793	386	386	139	21	316	355	355	585	533
7 Tier 1 Block	488	808	808	891	810	793	386	386	139	21	316	355	355	585	533
8 Slice	2,256	2,794	3,050	3,093	2,806	2,781	2,435	2,348	2,730	2,619	2,403	2,392	2,370	2,293	2,633
9 Slice Block	1,136	1,322	1,510	1,494	1,331	1,276	1,178	1,178	1,133	1,084	1,120	1,113	1,113	1,094	1,233
10 Slice Output from T1 System	1,120	1,473	1,540	1,599	1,475	1,506	1,257	1,170	1,597	1,535	1,283	1,279	1,257	1,199	1,401
11 Direct Service Industries	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12 Direct Service Industry	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
13 Contract Deliveries	464	468	468	468	468	464	464	464	464	464	492	572	654	464	480
14 Exports	454	454	454	454	454	454	454	454	454	454	483	563	645	454	470
15 Intra-Regional Transfers (Out)	9	13	13	13	13	9	9	9	9	9	9	9	9	9	11
16 Tier 2 Load Service	200	200	201	200	201	198	197	197	199	198	200	199	199	201	199
17 Preference Customers	197	197	197	197	197	197	197	197	197	197	197	197	197	197	197
18 Federal Agencies	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
19 Resource Remarketing	-10	-10	-9	-10	-9	-12	-13	-13	-11	-12	-10	-11	-11	-9	-11
20 Uncommitted Sales	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184
21 Tier 1 System Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 Firm Surplus	184	184	184	184	184	184	184	184	184	184	184	184	184	184	184
23 Total Firm Obligations	6,824	8,005	9,007	9,163	8,400	8,033	7,180	7,092	7,222	7,259	7,639	7,552	7,614	7,131	7,784
Net Resources															
24 Hydro	5,117	6,913	7,232	7,271	6,964	6,660	5,815	5,417	7,790	7,508	6,902	6,356	6,201	5,684	6,662
25 Regulated Hydro - Net	4,842	6,478	6,921	6,852	6,747	6,404	5,528	5,030	7,407	7,050	6,488	6,051	5,800	5,447	6,320
26 Independent Hydro - Net	273	433	307	416	213	252	283	383	380	455	412	303	398	234	339
27 Small Hydro - Net	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
28 Non-Hydro Renewable	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33
29 Wind - Net	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33
30 Solar - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Other - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9.1.1

Loads and Resources - Federal System Rate Case
Fiscal Year: 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Energy-aMW	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Aug1	Aug16	Sep	Avg
32 Thermal	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116
33 Nuclear - Net	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116
34 Coal - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 Natural Gas - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 Petroleum - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Biofuel - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Cogeneration - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Contract Purchases	218	254	300	332	290	251	226	224	168	167	166	166	167	179	226
40 Imports	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41 Intra-Regional Transfers (In)	64	89	138	164	125	89	64	64	0	0	0	0	0	25	63
42 Non-Federal CER	131	136	131	136	135	132	136	136	136	131	136	136	137	130	134
43 Slice Transmission Loss Return	22	29	30	31	29	29	24	23	31	35	29	29	29	23	28
44 Uncommitted Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Tier 1 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Tier 2 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47 Reserves & Losses	-203	-260	-271	-273	-262	-252	-225	-214	-286	-282	-262	-244	-239	-219	-253
48 Operating Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Balancing Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 Transmission Losses	-203	-260	-271	-273	-262	-252	-225	-214	-286	-282	-262	-244	-239	-219	-253
51 Total Net Resources	6,274	8,059	8,405	8,460	8,132	7,803	6,981	6,585	8,833	8,553	7,966	7,417	7,279	6,792	7,785
52 Total Surplus/Deficit	-550	55	-602	-703	-268	-229	-199	-508	1,611	1,295	327	-135	-335	-340	0

Table 9.1.1

Loads and Resources - Federal System Rate Case
Fiscal Year: 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A Energy-aMW	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
Firm Obligations															
1 Load Following	3,209	3,530	4,275	4,315	3,976	3,600	3,504	3,504	3,491	3,763	4,038	3,855	3,823	3,391	3,744
2 Preference Customers	2,964	3,381	4,094	4,134	3,803	3,398	3,144	3,144	3,035	3,258	3,491	3,407	3,369	2,992	3,423
3 Federal Agencies	122	139	170	172	155	141	126	126	111	110	119	122	121	113	133
4 USBR	123	10	11	8	18	61	234	234	345	395	427	326	333	286	188
5 Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Tier 1 Block	484	803	803	885	833	788	383	383	138	21	314	354	352	581	531
7 Tier 1 Block	484	803	803	885	833	788	383	383	138	21	314	354	352	581	531
8 Slice	2,281	2,823	3,082	3,127	2,879	2,808	2,460	2,424	2,505	2,681	2,474	2,407	2,385	2,320	2,651
9 Slice Block	1,163	1,350	1,541	1,525	1,408	1,303	1,204	1,204	1,159	1,108	1,146	1,139	1,139	1,119	1,263
10 Slice Output from T1 System	1,118	1,473	1,540	1,602	1,471	1,505	1,256	1,220	1,347	1,573	1,328	1,268	1,246	1,201	1,387
11 Direct Service Industries	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
12 Direct Service Industry	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
13 Contract Deliveries	464	468	468	468	468	464	464	464	464	464	479	585	674	464	481
14 Exports	454	454	454	454	454	454	454	454	454	454	470	576	665	454	470
15 Intra-Regional Transfers (Out)	9	13	13	13	13	9	9	9	9	9	9	9	9	9	11
16 Tier 2 Load Service	386	385	387	385	386	384	383	383	385	384	385	385	385	387	385
17 Preference Customers	380	380	380	380	380	380	380	380	380	380	380	380	380	380	380
18 Federal Agencies	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
19 Resource Remarketing	-9	-9	-8	-10	-9	-11	-12	-12	-10	-11	-10	-10	-10	-8	-10
20 Uncommitted Sales	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Tier 1 System Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 Firm Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23 Total Firm Obligations	6,835	8,020	9,024	9,191	8,553	8,055	7,206	7,169	6,994	7,324	7,701	7,597	7,629	7,154	7,802
Net Resources															
24 Hydro	5,119	6,906	7,234	7,274	6,966	6,663	5,967	5,566	7,288	8,701	6,634	6,357	6,203	5,686	6,707
25 Regulated Hydro - Net	4,843	6,493	6,923	6,855	6,750	6,407	5,671	5,180	6,769	8,220	6,287	6,052	5,802	5,449	6,359
26 Independent Hydro - Net	273	410	307	416	213	252	293	383	516	478	344	303	398	234	345
27 Small Hydro - Net	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
28 Non-Hydro Renewable	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33
29 Wind - Net	25	36	28	15	24	28	50	42	45	45	44	23	34	31	33
30 Solar - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Other - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9.1.1

Loads and Resources - Federal System Rate Case
Fiscal Year: 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
Energy-aMW	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Aug1	Aug16	Sep	Avg
32 Thermal	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	360	409	1,116	1,116	1,116	1,116	994
33 Nuclear - Net	1,116	1,116	1,116	1,116	1,116	1,116	1,116	1,116	360	409	1,116	1,116	1,116	1,116	994
34 Coal - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 Natural Gas - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 Petroleum - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Biofuel - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Cogeneration - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Contract Purchases	224	254	300	332	289	251	226	225	163	168	167	166	157	186	226
40 Imports	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
41 Intra-Regional Transfers (In)	65	89	138	164	125	89	64	64	0	0	0	0	0	25	63
42 Non-Federal CER	136	136	131	136	134	132	136	136	136	131	136	136	127	137	134
43 Slice Transmission Loss Return	22	29	30	31	29	29	24	24	26	36	31	29	29	23	28
44 Uncommitted Purchases	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
45 Tier 1 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Tier 2 Augmentation	95	95	95	95	95	95	95	95	95	95	95	95	95	95	95
47 Reserves & Losses	-206	-263	-274	-276	-265	-255	-233	-222	-250	-301	-256	-247	-242	-222	-253
48 Operating Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Balancing Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 Transmission Losses	-206	-263	-274	-276	-265	-255	-233	-222	-250	-301	-256	-247	-242	-222	-253
51 Total Net Resources	6,373	8,145	8,499	8,556	8,225	7,898	7,221	6,823	7,702	9,117	7,800	7,511	7,363	6,893	7,802
52 Total Surplus/Deficit	-461	125	-525	-635	-328	-157	16	-346	708	1,793	99	-86	-266	-261	0

Table 9.1.2

Loads and Resources - Federal System Rate Case
Fiscal Year: 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Firm Obligations															
1 Load Following	1,461,307	1,516,356	1,854,284	1,906,954	1,652,022	1,608,799	760,663	760,663	1,542,492	1,645,400	1,761,826	847,982	913,211	1,428,332	19,660,292
2 Preference Customers	1,374,045	1,458,370	1,781,066	1,832,571	1,587,238	1,533,069	693,184	693,184	1,371,110	1,466,581	1,567,258	774,697	834,289	1,298,913	18,265,575
3 Federal Agencies	51,092	54,845	68,525	70,873	59,814	58,193	25,383	25,383	45,534	46,169	51,229	25,914	27,907	45,165	656,027
4 USBR	36,170	3,142	4,693	3,510	4,970	17,537	42,097	42,097	125,849	132,650	143,339	47,371	51,014	84,254	738,691
5 Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Tier 1 Block	217,353	348,160	358,723	395,977	337,185	352,250	83,366	83,366	61,913	9,195	140,818	76,271	82,138	251,640	2,798,354
7 Tier 1 Block	217,353	348,160	358,723	395,977	337,185	352,250	83,366	83,366	61,913	9,195	140,818	76,271	82,138	251,640	2,798,354
8 Slice	968,174	1,173,937	1,299,980	1,360,073	1,186,223	1,210,131	522,495	497,249	1,198,849	1,121,077	1,061,277	527,270	563,108	926,623	13,616,466
9 Slice Block	472,703	528,765	604,138	621,508	532,409	530,663	244,932	244,932	471,452	433,450	465,955	231,500	249,308	419,943	6,051,658
10 Slice Output from T1 System	495,470	645,173	695,842	738,565	653,814	679,468	277,563	252,317	727,398	687,627	595,322	295,769	313,799	506,680	7,564,808
11 Direct Service Industries	4,660	4,351	4,408	4,424	4,303	4,658	2,239	2,239	4,478	4,525	4,422	2,264	2,438	4,189	53,599
12 Direct Service Industry	4,660	4,351	4,408	4,424	4,303	4,658	2,239	2,239	4,478	4,525	4,422	2,264	2,438	4,189	53,599
13 Contract Deliveries	341,925	334,125	344,574	344,837	322,768	341,471	165,511	165,511	341,925	330,871	353,864	187,791	219,552	330,720	4,125,443
14 Exports	337,999	327,550	337,999	337,999	316,193	337,545	163,548	163,548	337,999	327,096	349,938	185,828	217,438	327,096	4,067,777
15 Intra-Regional Transfers (Out)	3,926	6,575	6,575	6,838	6,575	3,926	1,963	1,963	3,926	3,775	3,926	1,963	2,114	3,624	57,667
16 Tier 2 Load Service	83,252	79,853	80,435	83,051	80,292	82,442	40,958	40,958	82,712	79,100	83,048	41,368	44,550	77,166	979,185
17 Preference Customers	81,747	78,603	78,603	81,747	78,603	81,747	40,874	40,874	81,747	78,603	81,747	40,874	44,018	75,459	965,247
18 Federal Agencies	5,564	5,350	5,350	5,564	5,350	5,564	2,782	2,782	5,564	5,350	5,564	2,782	2,996	5,136	65,703
19 Resource Remarketing	-4,060	-4,101	-3,519	-4,261	-3,662	-4,869	-2,698	-2,698	-4,599	-4,853	-4,264	-2,288	-2,464	-3,430	-51,765
20 Uncommitted Sales	76,669	73,720	73,720	76,668	73,720	76,668	38,334	38,334	76,668	73,720	76,668	38,334	41,283	70,771	905,277
21 Tier 1 System Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 Firm Surplus	76,669	73,720	73,720	76,668	73,720	76,668	38,334	38,334	76,668	73,720	76,668	38,334	41,283	70,771	905,277
23 Total Firm Obligations	3,153,340	3,530,501	4,016,124	4,171,985	3,656,512	3,676,419	1,613,566	1,588,320	3,309,038	3,263,887	3,481,923	1,721,280	1,866,280	3,089,441	42,138,616
Net Resources															
24 Hydro	2,375,564	3,175,478	3,433,072	3,476,693	3,176,165	3,148,049	1,342,245	1,235,089	3,665,164	3,446,644	3,309,667	1,503,200	1,588,893	2,505,878	37,381,803
25 Regulated Hydro - Net	2,243,229	2,965,089	3,259,374	3,295,240	3,084,008	3,028,556	1,271,927	1,139,182	3,493,257	3,246,955	3,126,547	1,441,577	1,490,956	2,396,094	35,481,991
26 Independent Hydro - Net	131,222	209,249	172,407	180,112	90,943	118,200	69,676	95,266	170,728	198,601	182,025	61,075	97,346	108,775	1,885,626
27 Small Hydro - Net	1,113	1,140	1,291	1,341	1,214	1,293	642	642	1,179	1,088	1,095	548	590	1,010	14,187
28 Non-Hydro Renewable	10,116	11,594	10,414	5,734	10,558	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	161,324
29 Wind - Net	10,116	11,594	10,414	5,734	10,558	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	161,324
30 Solar - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Other - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9.1.2

Loads and Resources - Federal System Rate Case
Fiscal Year: 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
32 Thermal	464,256	446,400	446,400	464,256	446,400	464,256	232,128	232,128	464,256	446,400	464,256	232,128	249,984	428,544	5,481,792
33 Nuclear - Net	464,256	446,400	446,400	464,256	446,400	464,256	232,128	232,128	464,256	446,400	464,256	232,128	249,984	428,544	5,481,792
34 Coal - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 Natural Gas - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 Petroleum - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Biofuel - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Cogeneration - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Contract Purchases	138,996	146,926	167,910	185,316	157,094	152,968	70,077	69,587	112,299	110,203	111,857	55,885	60,076	110,061	1,649,254
40 Imports	416	400	400	416	400	416	208	208	416	400	416	208	224	384	4,912
41 Intra-Regional Transfers (In)	31,200	40,000	60,000	72,800	50,000	41,600	15,600	15,600	0	0	0	0	9,600	336,400	
42 Non-Federal CER	97,760	94,000	94,000	97,760	94,000	97,760	48,880	48,880	97,760	94,000	97,760	48,880	52,640	90,240	1,154,320
43 Slice Transmission Loss Return	9,620	12,526	13,510	14,340	12,694	13,192	5,389	4,899	14,123	15,803	13,681	6,797	7,212	9,837	153,622
44 Uncommitted Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Tier 1 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Tier 2 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47 Reserves & Losses	-93,414	-118,223	-126,642	-129,181	-118,361	-118,042	-51,731	-48,627	-133,537	-128,316	-124,178	-57,036	-60,629	-95,388	-1,403,305
48 Operating Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Balancing Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 Transmission Losses	-93,414	-118,223	-126,642	-129,181	-118,361	-118,042	-51,731	-48,627	-133,537	-128,316	-124,178	-57,036	-60,629	-95,388	-1,403,305
51 Total Net Resources	2,895,518	3,662,176	3,931,154	4,002,817	3,671,857	3,659,605	1,603,605	1,497,352	4,126,985	3,893,372	3,779,611	1,738,498	1,845,705	2,962,614	43,270,869
52 Total Surplus/Deficit	-257,822	131,674	-84,969	-169,168	15,345	-16,814	-9,960	-90,968	817,946	629,485	297,688	17,218	-20,574	-126,827	1,132,253

Table 9.1.2

Loads and Resources - Federal System Rate Case
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A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Firm Obligations															
1 Load Following	1,470,721	1,513,554	1,850,327	1,907,475	1,615,627	1,609,686	761,220	761,220	1,542,724	1,649,080	1,765,089	878,845	878,845	1,433,677	19,638,090
2 Preference Customers	1,380,309	1,452,936	1,774,522	1,830,653	1,550,370	1,531,653	692,408	692,408	1,368,961	1,468,498	1,568,785	802,202	802,202	1,302,008	18,217,915
3 Federal Agencies	54,160	57,476	71,112	73,313	60,460	60,496	26,715	26,715	47,914	47,933	52,966	27,614	27,614	47,215	681,704
4 USBR	36,251	3,142	4,693	3,510	4,797	17,537	42,097	42,097	125,849	132,650	143,339	49,029	49,029	84,454	738,472
5 Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Tier 1 Block	216,056	345,830	356,342	393,376	334,848	349,920	82,807	82,807	61,527	9,170	139,912	78,584	78,584	250,334	2,780,097
7 Tier 1 Block	216,056	345,830	356,342	393,376	334,848	349,920	82,807	82,807	61,527	9,170	139,912	78,584	78,584	250,334	2,780,097
8 Slice	1,014,195	1,183,516	1,310,280	1,370,364	1,167,090	1,224,366	527,842	517,791	1,085,506	1,160,940	1,091,946	529,045	526,477	973,170	13,682,528
9 Slice Block	502,268	540,147	616,509	634,363	540,646	542,094	250,503	250,503	482,000	443,389	476,738	236,906	236,906	447,753	6,200,723
10 Slice Output from T1 System	511,927	643,369	693,771	736,001	626,444	682,272	277,340	267,289	603,506	717,551	615,208	292,139	289,571	525,417	7,481,805
11 Direct Service Industries	4,660	4,351	4,408	4,424	4,155	4,658	2,239	2,239	4,478	4,525	4,422	2,351	2,351	4,189	53,450
12 Direct Service Industry	4,660	4,351	4,408	4,424	4,155	4,658	2,239	2,239	4,478	4,525	4,422	2,351	2,351	4,189	53,450
13 Contract Deliveries	342,076	334,125	344,574	344,837	311,602	341,471	165,511	165,511	341,925	330,871	348,290	193,094	217,638	330,871	4,112,393
14 Exports	337,999	327,550	337,999	337,999	305,290	337,545	163,548	163,548	337,999	327,096	344,364	191,131	215,675	327,096	4,054,838
15 Intra-Regional Transfers (Out)	4,077	6,575	6,575	6,838	6,312	3,926	1,963	1,963	3,926	3,775	3,926	1,963	1,963	3,775	57,555
16 Tier 2 Load Service	166,726	154,199	154,744	160,353	148,356	159,789	79,636	79,636	160,024	153,468	160,335	80,023	80,023	154,674	1,891,985
17 Preference Customers	164,088	151,933	151,933	158,011	145,856	158,011	79,005	79,005	158,011	151,933	158,011	79,005	79,005	151,933	1,865,740
18 Federal Agencies	6,538	6,054	6,054	6,296	5,811	6,296	3,148	3,148	6,296	6,054	6,296	3,148	3,148	6,054	74,338
19 Resource Remarketing	-3,900	-3,788	-3,243	-3,953	-3,312	-4,517	-2,517	-2,517	-4,283	-4,519	-3,971	-2,130	-2,130	-3,312	-48,093
20 Uncommitted Sales	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Tier 1 System Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 Firm Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23 Total Firm Obligations	3,214,434	3,535,574	4,020,675	4,180,829	3,581,677	3,689,889	1,619,254	1,609,204	3,196,184	3,308,054	3,509,994	1,761,942	1,783,918	3,146,915	42,158,543
Net Resources															
24 Hydro	2,445,763	3,149,876	3,420,548	3,474,810	3,051,189	3,146,900	1,370,091	1,277,619	3,366,132	4,034,390	3,164,537	1,507,848	1,494,182	2,578,750	37,482,636
25 Regulated Hydro - Net	2,313,385	2,935,128	3,246,851	3,293,357	2,962,576	3,027,407	1,303,111	1,181,712	3,126,240	3,824,928	3,009,737	1,446,225	1,396,288	2,468,923	35,535,867
26 Independent Hydro - Net	131,222	213,608	172,407	180,112	87,441	118,200	66,338	95,266	238,713	208,374	153,705	61,075	97,346	108,775	1,932,582
27 Small Hydro - Net	1,155	1,140	1,291	1,341	1,172	1,293	642	642	1,179	1,088	1,095	548	548	1,052	14,187
28 Non-Hydro Renewable	10,116	11,594	10,414	5,734	10,194	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	160,960
29 Wind - Net	10,116	11,594	10,414	5,734	10,194	12,374	10,886	9,175	18,803	18,441	18,010	4,321	7,382	13,519	160,960
30 Solar - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Other - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9.1.2

Loads and Resources - Federal System Rate Case
Fiscal Year: 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A HLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
32 Thermal	482,112	446,400	446,400	464,256	428,544	464,256	232,128	232,128	149,760	163,680	464,256	232,128	232,128	446,400	4,884,576
33 Nuclear - Net	482,112	446,400	446,400	464,256	428,544	464,256	232,128	232,128	149,760	163,680	464,256	232,128	232,128	446,400	4,884,576
34 Coal - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 Natural Gas - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 Petroleum - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Biofuel - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Cogeneration - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Contract Purchases	144,291	146,891	167,870	185,266	150,787	153,023	70,073	69,878	109,893	110,890	112,314	55,802	55,743	115,401	1,648,121
40 Imports	432	400	400	416	384	416	208	208	416	400	416	208	208	400	4,912
41 Intra-Regional Transfers (In)	32,400	40,000	60,000	72,800	48,000	41,600	15,600	15,600	0	0	0	0	0	10,000	336,000
42 Non-Federal CER	101,520	94,000	94,000	97,760	90,240	97,760	48,880	48,880	97,760	94,000	97,760	48,880	48,880	94,800	1,155,120
43 Slice Transmission Loss Return	9,939	12,491	13,470	14,290	12,163	13,247	5,385	5,190	11,717	16,490	14,138	6,714	6,655	10,201	152,089
44 Uncommitted Purchases	41,220	38,167	38,167	39,693	36,640	39,693	19,847	19,847	39,693	38,167	39,693	19,847	19,847	38,167	468,688
45 Tier 1 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Tier 2 Augmentation	41,220	38,167	38,167	39,693	36,640	39,693	19,847	19,847	39,693	38,167	39,693	19,847	19,847	38,167	468,688
47 Reserves & Losses	-97,599	-118,584	-127,438	-130,357	-114,832	-119,241	-53,265	-50,581	-115,768	-139,210	-120,579	-57,810	-57,575	-99,563	-1,402,403
48 Operating Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Balancing Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 Transmission Losses	-97,599	-118,584	-127,438	-130,357	-114,832	-119,241	-53,265	-50,581	-115,768	-139,210	-120,579	-57,810	-57,575	-99,563	-1,402,403
51 Total Net Resources	3,025,903	3,674,344	3,955,961	4,039,402	3,562,522	3,697,005	1,649,759	1,558,065	3,568,513	4,226,358	3,678,232	1,762,135	1,751,707	3,092,673	43,242,578
52 Total Surplus/Deficit	-188,531	138,770	-64,715	-141,427	-19,155	7,116	30,505	-51,139	372,329	918,304	168,238	193	-32,211	-54,242	1,084,035

Table 9.1.3

Loads and Resources - Federal System Rate Case
Fiscal Year: 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Firm Obligations															
1 Load Following	935,296	1,035,532	1,333,453	1,304,276	1,076,661	1,066,518	500,299	500,299	1,057,631	1,063,242	1,238,291	533,593	561,677	1,014,883	13,221,649
2 Preference Customers	845,248	990,889	1,277,007	1,248,646	1,026,137	996,360	440,368	440,368	893,650	881,586	1,029,211	445,634	469,089	859,896	11,844,090
3 Federal Agencies	34,852	40,811	53,095	52,899	42,948	42,407	17,749	17,749	33,103	30,142	34,559	16,412	17,275	33,334	467,336
4 USBR	55,196	3,832	3,351	2,731	7,575	27,751	42,181	42,181	130,878	151,514	174,521	71,547	75,312	121,653	910,223
5 Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Tier 1 Block	145,426	234,648	242,325	266,914	226,393	237,239	55,619	55,619	41,275	6,130	94,465	51,588	54,303	169,722	1,881,665
7 Tier 1 Block	145,426	234,648	242,325	266,914	226,393	237,239	55,619	55,619	41,275	6,130	94,465	51,588	54,303	169,722	1,881,665
8 Slice	710,176	840,845	969,512	941,445	766,541	856,306	354,064	347,961	832,616	764,344	726,739	333,876	346,901	724,156	9,515,482
9 Slice Block	372,708	424,326	519,569	490,034	393,987	417,135	178,987	178,987	371,721	346,754	367,387	169,170	178,074	367,455	4,776,294
10 Slice Output from T1 System	337,468	416,519	449,943	451,411	372,553	439,171	175,076	168,974	460,895	417,591	359,352	164,706	168,827	356,701	4,739,188
11 Direct Service Industries	3,524	3,580	3,776	3,760	3,353	3,516	1,721	1,721	3,706	3,395	3,762	1,696	1,785	3,731	43,025
12 Direct Service Industry	3,524	3,580	3,776	3,760	3,353	3,516	1,721	1,721	3,706	3,395	3,762	1,696	1,785	3,731	43,025
13 Contract Deliveries	3,095	3,036	3,253	3,102	2,800	3,086	1,434	1,434	3,095	3,020	12,509	18,306	31,638	3,171	92,982
14 Exports	0	0	0	0	0	0	0	0	0	0	9,414	16,872	30,128	0	56,414
15 Intra-Regional Transfers (Out)	3,095	3,036	3,253	3,102	2,800	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,510	3,171	36,568
16 Tier 2 Load Service	65,641	64,082	69,174	65,482	59,416	64,805	29,931	29,931	65,216	63,280	65,480	30,230	31,821	67,520	772,009
17 Preference Customers	64,455	63,079	67,599	64,455	58,166	64,258	29,869	29,869	64,455	62,883	64,455	29,869	31,441	66,027	760,879
18 Federal Agencies	4,387	4,294	4,601	4,387	3,959	4,374	2,033	2,033	4,387	4,280	4,387	2,033	2,140	4,494	51,792
19 Resource Remarketing	-3,201	-3,291	-3,026	-3,360	-2,710	-3,828	-1,971	-1,971	-3,626	-3,883	-3,362	-1,672	-1,760	-3,001	-40,662
20 Uncommitted Sales	60,450	59,160	63,399	60,450	54,553	60,266	28,013	28,013	60,450	58,976	60,450	28,013	29,488	61,924	713,606
21 Tier 1 System Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 Firm Surplus	60,450	59,160	63,399	60,450	54,553	60,266	28,013	28,013	60,450	58,976	60,450	28,013	29,488	61,924	713,606
23 Total Firm Obligations	1,923,608	2,240,883	2,684,892	2,645,429	2,189,716	2,291,735	971,082	964,979	2,063,989	1,962,387	2,201,697	997,302	1,057,613	2,045,106	26,240,418
Net Resources															
24 Hydro	1,431,511	1,808,945	1,947,404	1,932,987	1,670,581	1,800,341	750,981	714,855	2,130,662	1,959,009	1,825,593	784,945	792,447	1,586,432	21,136,692
25 Regulated Hydro - Net	1,358,948	1,705,450	1,890,083	1,802,916	1,612,205	1,729,986	718,314	671,608	2,017,396	1,829,055	1,700,365	736,712	736,369	1,525,493	20,034,899
26 Independent Hydro - Net	71,687	102,590	56,241	129,027	57,477	69,346	32,197	42,777	112,337	129,087	124,364	47,833	55,656	60,056	1,090,675
27 Small Hydro - Net	877	905	1,080	1,044	899	1,009	470	470	930	868	864	400	421	884	11,118
28 Non-Hydro Renewable	8,687	14,519	10,126	5,251	6,443	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,371
29 Wind - Net	8,687	14,519	10,126	5,251	6,443	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,371
30 Solar - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Other - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9.1.3

Loads and Resources - Federal System Rate Case
Fiscal Year: 2024 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
32 Thermal	366,048	358,236	383,904	366,048	330,336	364,932	169,632	169,632	366,048	357,120	366,048	169,632	178,560	374,976	4,321,152
33 Nuclear - Net	366,048	358,236	383,904	366,048	330,336	364,932	169,632	169,632	366,048	357,120	366,048	169,632	178,560	374,976	4,321,152
34 Coal - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 Natural Gas - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 Petroleum - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Biofuel - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Cogeneration - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Contract Purchases	23,280	36,335	55,520	61,572	44,529	33,379	11,151	11,033	12,556	9,917	11,866	3,937	4,040	19,021	338,137
40 Imports	328	321	344	328	296	327	152	152	328	320	328	152	160	336	3,872
41 Intra-Regional Transfers (In)	16,400	24,075	43,000	49,200	37,000	24,525	7,600	7,600	0	0	0	0	0	8,400	217,800
42 Non-Federal CER	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,360	20,492
43 Slice Transmission Loss Return	6,552	8,087	8,736	8,764	7,233	8,527	3,399	3,281	8,948	9,597	8,258	3,785	3,880	6,925	95,973
44 Uncommitted Purchases	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
45 Tier 1 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Tier 2 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
47 Reserves & Losses	-57,260	-69,502	-74,896	-74,159	-64,192	-69,048	-29,389	-28,435	-79,389	-74,837	-70,770	-30,670	-31,267	-62,103	-815,914
48 Operating Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Balancing Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 Transmission Losses	-57,260	-69,502	-74,896	-74,159	-64,192	-69,048	-29,389	-28,435	-79,389	-74,837	-70,770	-30,670	-31,267	-62,103	-815,914
51 Total Net Resources	1,772,266	2,148,532	2,322,058	2,291,699	1,987,698	2,138,096	909,572	873,125	2,444,711	2,264,951	2,147,236	931,646	949,394	1,927,452	25,108,438
52 Total Surplus/Deficit	-151,342	-92,351	-362,834	-353,731	-202,017	-153,639	-61,510	-91,854	380,722	302,564	-54,460	-65,657	-108,219	-117,654	-1,131,980

Table 9.1.3

Loads and Resources - Federal System Rate Case
Fiscal Year: 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
Firm Obligations															
1 Load Following	916,541	1,031,253	1,329,978	1,302,817	1,055,927	1,064,977	500,264	500,264	1,054,635	1,060,419	1,239,015	508,907	589,261	1,007,850	13,162,109
2 Preference Customers	825,108	984,528	1,271,369	1,245,302	1,004,921	992,979	439,319	439,319	888,844	877,611	1,028,759	424,387	491,396	852,185	11,766,027
3 Federal Agencies	36,317	42,893	55,258	54,784	43,692	44,247	18,764	18,764	34,914	31,294	35,735	16,312	18,887	34,213	486,073
4 USBR	55,116	3,832	3,351	2,731	7,315	27,751	42,181	42,181	130,878	151,514	174,521	68,209	78,978	121,452	910,010
5 Federal Diversity	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
6 Tier 1 Block	144,285	233,088	240,730	265,172	225,037	235,679	55,246	55,246	41,018	6,113	93,859	48,834	56,544	168,194	1,869,046
7 Tier 1 Block	144,285	233,088	240,730	265,172	225,037	235,679	55,246	55,246	41,018	6,113	93,859	48,834	56,544	168,194	1,869,046
8 Slice	682,917	852,059	982,527	955,831	767,698	861,759	357,914	354,915	778,415	769,595	748,510	337,413	389,219	697,433	9,536,206
9 Slice Block	362,742	433,459	530,207	500,170	405,483	426,121	183,058	183,058	380,039	354,704	375,889	173,123	200,459	358,197	4,866,708
10 Slice Output from T1 System	320,175	418,600	452,321	455,660	362,215	435,639	174,856	171,857	398,377	414,891	372,621	164,290	188,760	339,237	4,669,498
11 Direct Service Industries	3,524	3,580	3,776	3,760	3,237	3,516	1,721	1,721	3,706	3,395	3,762	1,613	1,868	3,731	42,910
12 Direct Service Industry	3,524	3,580	3,776	3,760	3,237	3,516	1,721	1,721	3,706	3,395	3,762	1,613	1,868	3,731	42,910
13 Contract Deliveries	2,944	3,036	3,253	3,102	2,725	3,086	1,434	1,434	3,095	3,020	8,114	17,607	41,155	3,020	97,027
14 Exports	0	0	0	0	0	0	0	0	0	0	5,018	16,173	39,494	0	60,686
15 Intra-Regional Transfers (Out)	2,944	3,036	3,253	3,102	2,725	3,086	1,434	1,434	3,095	3,020	3,095	1,434	1,661	3,020	36,341
16 Tier 2 Load Service	120,413	123,745	133,079	126,432	111,267	125,603	58,196	58,196	126,172	122,774	126,418	58,478	67,712	123,740	1,482,225
17 Preference Customers	118,508	121,926	130,663	124,585	109,392	124,205	57,735	57,735	124,585	121,547	124,585	57,735	66,851	121,547	1,461,597
18 Federal Agencies	4,722	4,858	5,206	4,964	4,359	4,949	2,300	2,300	4,964	4,843	4,964	2,300	2,664	4,843	58,236
19 Resource Remarketing	-2,817	-3,040	-2,789	-3,117	-2,484	-3,551	-1,839	-1,839	-3,377	-3,615	-3,131	-1,557	-1,802	-2,650	-37,608
20 Uncommitted Sales	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
21 Tier 1 System Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
22 Firm Surplus	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
23 Total Firm Obligations	1,870,624	2,279,349	2,693,343	2,704,125	2,145,086	2,255,106	974,776	972,545	2,068,490	1,976,589	2,221,525	977,329	1,151,913	2,003,967	26,294,766
Net Resources															
24 Hydro	1,362,504	1,829,662	1,961,531	1,937,005	1,629,890	1,803,348	778,141	726,262	2,056,289	2,230,404	1,771,070	780,830	887,773	1,515,367	21,270,075
25 Regulated Hydro - Net	1,289,982	1,746,523	1,904,210	1,806,934	1,573,226	1,732,993	738,456	683,015	1,909,863	2,093,642	1,667,838	732,597	831,654	1,454,470	20,165,404
26 Independent Hydro - Net	71,687	82,233	56,241	129,027	55,786	69,346	39,216	42,777	145,496	135,894	102,368	47,833	55,656	60,056	1,093,616
27 Small Hydro - Net	835	905	1,080	1,044	878	1,009	470	470	930	868	864	400	463	842	11,055
28 Non-Hydro Renewable	8,687	14,519	10,126	5,251	6,221	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,149
29 Wind - Net	8,687	14,519	10,126	5,251	6,221	8,493	7,197	6,040	14,833	13,742	14,499	3,801	5,615	9,126	128,149
30 Solar - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
31 Other - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Table 9.1.3

Loads and Resources - Federal System Rate Case
Fiscal Year: 2025 Water Year: P10
BP24 Final Proposal Report Date: 11/9/2022

A LLH-MWh	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Sum
32 Thermal	348,192	358,236	383,904	366,048	321,408	364,932	169,632	169,632	118,080	130,944	366,048	169,632	196,416	357,120	3,820,224
33 Nuclear - Net	348,192	358,236	383,904	366,048	321,408	364,932	169,632	169,632	118,080	130,944	366,048	169,632	196,416	357,120	3,820,224
34 Coal - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
35 Natural Gas - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
36 Petroleum - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
37 Biofuel - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Cogeneration - Net	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Contract Purchases	22,128	36,375	55,566	61,655	43,321	33,310	11,147	11,089	11,343	9,855	12,171	3,928	4,514	18,746	335,147
40 Imports	312	321	344	328	288	327	152	152	328	320	328	152	176	320	3,848
41 Intra-Regional Transfers (In)	15,600	24,075	43,000	49,200	36,000	24,525	7,600	7,600	0	0	0	0	0	8,000	215,600
42 Non-Federal CER	0	3,852	3,440	3,280	0	0	0	0	3,280	0	3,280	0	0	3,840	20,972
43 Slice Transmission Loss Return	6,216	8,127	8,782	8,847	7,033	8,458	3,395	3,337	7,735	9,535	8,563	3,776	4,338	6,586	94,727
44 Uncommitted Purchases	29,770	30,629	32,823	31,297	27,480	31,201	14,503	14,503	31,297	30,533	31,297	14,503	16,793	30,533	367,165
45 Tier 1 Augmentation	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
46 Tier 2 Augmentation	29,770	30,629	32,823	31,297	27,480	31,201	14,503	14,503	31,297	30,533	31,297	14,503	16,793	30,533	367,165
47 Reserves & Losses	-55,448	-71,073	-76,357	-75,258	-63,449	-70,112	-30,717	-29,247	-70,407	-77,247	-69,828	-30,998	-35,393	-60,278	-815,813
48 Operating Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
49 Balancing Reserves	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
50 Transmission Losses	-55,448	-71,073	-76,357	-75,258	-63,449	-70,112	-30,717	-29,247	-70,407	-77,247	-69,828	-30,998	-35,393	-60,278	-815,813
51 Total Net Resources	1,715,833	2,198,348	2,367,593	2,325,997	1,964,871	2,171,172	949,903	898,279	2,161,434	2,338,231	2,125,256	941,696	1,075,718	1,870,614	25,104,947
52 Total Surplus/Deficit	-154,791	-81,001	-325,750	-378,128	-180,215	-83,934	-24,872	-74,265	92,944	361,642	-96,268	-35,633	-76,195	-133,353	-1,189,819

10. FEDERAL LOADS AND RESOURCES SURPLUS/DEFICIT BY WATER YEAR

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Table 10.1.1
Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
1 1989 Federal Report - Rate Case Surplus Deficit	-550	255	-56.0	-34.9	-1031	964	1843	2966	2798	2024	332	149	36.9	-133	592
2 1990 Federal Report - Rate Case Surplus Deficit	-177	961	818	1713	3690	1117	1653	2512	2468	4416	2310	2099	1611	11.9	1760
3 1991 Federal Report - Rate Case Surplus Deficit	-334	2415	1468	3047	4004	2603	2044	1492	2874	4009	3780	2524	1880	-147	2301
4 1992 Federal Report - Rate Case Surplus Deficit	-226	424	-985	1.26	830	-436	-55.7	-174	2387	1202	-225	6.07	-139	-54.3	223
5 1993 Federal Report - Rate Case Surplus Deficit	-570	249	-602	-928	-1536	296	327	-973	3504	2843	1114	566	427	357	415
6 1994 Federal Report - Rate Case Surplus Deficit	-175	335	-560	-706	-133	-80.0	-403	823	1806	1295	206	-37.9	-345	-54.3	161
7 1995 Federal Report - Rate Case Surplus Deficit	-385	157	-279	144	1297	2675	590	195	2319	4033	2190	670	686	438	1136
8 1996 Federal Report - Rate Case Surplus Deficit	814	2912	5090	5445	5853	5776	2670	4162	3662	4787	4735	2253	2316	235	3749
9 1997 Federal Report - Rate Case Surplus Deficit	69.3	836	1611	5625	5554	4945	3229	5506	5801	6467	5044	2673	2990	1305	3700
10 1998 Federal Report - Rate Case Surplus Deficit	2318	1844	500	1437	2846	1408	530	595	5088	4415	2608	2027	93.0	272	2026
11 1999 Federal Report - Rate Case Surplus Deficit	-160	-36.0	862	4246	3955	5379	2253	3142	3209	4857	4693	2963	3340	193	2756
12 2000 Federal Report - Rate Case Surplus Deficit	-101	2021	2026	2582	2644	2578	2555	3177	3011	2219	1279	1371	-136	-161	1792
13 2001 Federal Report - Rate Case Surplus Deficit	-170	87.6	-836	-676	62.0	-341	-899	-1522	664	614	23.7	264	-264	-340	-179
14 2002 Federal Report - Rate Case Surplus Deficit	-634	-230	-224	-401	-153	441	1206	2827	2598	4570	3334	747	567	-88.8	990
15 2003 Federal Report - Rate Case Surplus Deficit	-226	435	-717	-530	382	1746	1131	1234	1922	3822	156	-359	-251	-234	630
16 2004 Federal Report - Rate Case Surplus Deficit	-391	952	390	-206	-772	350	627	593	2017	2799	751	-370	357	106	552
17 2005 Federal Report - Rate Case Surplus Deficit	456	873	1224	1089	2585	616	-458	-392	1611	2292	1452	306	-51.9	-57.2	981
18 2006 Federal Report - Rate Case Surplus Deficit	-580	873	409	2853	4334	1869	3221	2587	4684	3525	2191	200	-143	-199	1895
19 2007 Federal Report - Rate Case Surplus Deficit	-390	572	517	2433	1265	4003	2202	1567	2612	2646	1372	-8.55	-335	-447	1360
20 2008 Federal Report - Rate Case Surplus Deficit	-409	649	-533	690	783	943	270	-482	3445	5518	2941	1143	1419	157	1280
21 2009 Federal Report - Rate Case Surplus Deficit	-221	532	-691	1939	716	-269	2665	2175	2797	2710	733	-218	-731	-175	829
22 2010 Federal Report - Rate Case Surplus Deficit	-303	271	-110	-849	-508	-557	61.3	-616	737	4319	2080	476	79.2	154	434
23 2011 Federal Report - Rate Case Surplus Deficit	-353	5.95	988	3092	4288	3025	4869	2055	4122	6755	6392	3389	2036	323	2894
24 2012 Federal Report - Rate Case Surplus Deficit	199	687	247	1603	2522	3421	4719	5227	4203	5466	5088	2791	2555	-28.8	2586

Table 10.1.1

Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A Energy-aMW - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
25 2013 Federal Report - Rate Case Surplus Deficit	-124	1601	2151	1123	1055	355	3791	2049	3510	3573	2376	879	221	239	1608
26 2014 Federal Report - Rate Case Surplus Deficit	-47.4	312	-565	1961	-169	3579	3562	2590	3655	3704	2618	1412	594	125	1610
27 2015 Federal Report - Rate Case Surplus Deficit	-310	1536	1989	2754	3855	4291	1854	127	935	946	-359	-158	-414	-410	1319
28 2016 Federal Report - Rate Case Surplus Deficit	-352	94.8	36.8	527	-104	3786	3102	3463	2978	1947	540	997	-217	27.6	1098
29 2017 Federal Report - Rate Case Surplus Deficit	-375	2059	604	2570	2750	6357	5202	4825	5904	5406	1787	1868	1715	-148	2807
30 2018 Federal Report - Rate Case Surplus Deficit	-275	-293	614	3311	4289	3455	3006	2347	5391	3826	1217	182	948	-373	2028
Ranked Averages															
31 Bottom 10 pct	-4408	-5197	-6097	-6177	-5567	-5204	-4597	-4605	-4367	-4472	-5101	-5037	-5110	-4669	-5079
32 Middle 80 pct	-3204	-3501	-4271	-4160	-3678	-3298	-2856	-2918	-2365	-2320	-3232	-3427	-3578	-3318	-3313

Table 10.1.1**Federal Report - Rate Case Surplus Deficit By Water Year****Fiscal Year 2025****BP24 Final Proposal Report Date: 11/9/2022****S239-RC-20221121-114438**

A Energy-aMW - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
1 1989 Federal Report - Rate Case Surplus Deficit	-461	6.71	21.2	33.5	-1094	1340	1814	2935	2262	1754	346	189	99.4	-54.1	564
2 1990 Federal Report - Rate Case Surplus Deficit	-91.3	1054	896	1783	3671	1121	2147	3264	1611	3932	2246	2137	2272	90.8	1751
3 1991 Federal Report - Rate Case Surplus Deficit	-249	2338	1526	3099	4009	2623	2487	1389	1917	3715	3719	2563	2072	-68.3	2228
4 1992 Federal Report - Rate Case Surplus Deficit	-139	506	-908	70.1	767	-364	15.6	-180	789	1986	-150	45.2	-76.5	24.2	198
5 1993 Federal Report - Rate Case Surplus Deficit	-485	323	-525	-776	-1605	356	384	-875	2569	1997	2163	596	473	436	409
6 1994 Federal Report - Rate Case Surplus Deficit	-96.3	415	-483	-637	-197	-8.61	-249	538	472	1823	281	1.28	-283	24.2	130
7 1995 Federal Report - Rate Case Surplus Deficit	-297	235	-202	214	1232	2710	513	217	1847	3747	2229	647	721	518	1104
8 1996 Federal Report - Rate Case Surplus Deficit	901	2961	5234	5798	5672	5731	3008	4171	3026	4561	5070	2294	2689	315	3774
9 1997 Federal Report - Rate Case Surplus Deficit	150	908	1680	5538	6186	4844	4559	5344	6064	6540	5256	2712	3157	1386	3856
10 1998 Federal Report - Rate Case Surplus Deficit	2347	1855	578	1578	2703	1482	475	834	4752	3319	2690	2407	1321	351	2013
11 1999 Federal Report - Rate Case Surplus Deficit	-75.1	42.6	940	4400	3928	5308	2769	3532	2185	4426	4740	2983	3488	272	2711
12 2000 Federal Report - Rate Case Surplus Deficit	-19.6	2015	2068	2640	2584	2641	2553	3169	2380	2226	1274	1381	-73.3	-82.4	1761
13 2001 Federal Report - Rate Case Surplus Deficit	-80.0	169	-759	-607	-1.52	-269	-828	-1447	-52.2	392	99.2	303	-202	-261	-207
14 2002 Federal Report - Rate Case Surplus Deficit	-549	-152	-147	-331	-216	506	1374	2788	1615	4206	3389	1263	1129	-10.1	969
15 2003 Federal Report - Rate Case Surplus Deficit	-138	517	-640	-389	234	1809	831	1318	1307	3572	231	-319	-189	-156	593
16 2004 Federal Report - Rate Case Surplus Deficit	-308	1018	468	-137	-836	420	609	1066	1061	2723	756	-436	369	186	518
17 2005 Federal Report - Rate Case Surplus Deficit	544	945	1301	1158	2516	709	-435	-29.4	998	1754	1528	345	10.4	21.0	942
18 2006 Federal Report - Rate Case Surplus Deficit	-497	954	487	2921	4388	1913	3320	2572	4178	3260	2235	220	-119	-120	1873
19 2007 Federal Report - Rate Case Surplus Deficit	-302	662	594	2495	1203	4092	3741	1334	1952	2283	1039	-53.2	-327	-369	1334
20 2008 Federal Report - Rate Case Surplus Deficit	-325	729	-455	760	720	1012	743	-367	2852	4948	3011	1099	1505	236	1250
21 2009 Federal Report - Rate Case Surplus Deficit	-140	606	-613	1995	653	-205	2456	1939	1970	2629	683	-178	-669	-97.0	765
22 2010 Federal Report - Rate Case Surplus Deficit	-219	351	-33.3	-780	-572	-485	328	-310	257	3816	2140	260	-127	233	398
23 2011 Federal Report - Rate Case Surplus Deficit	-266	84.6	1065	3152	4398	3052	4914	2050	3414	6411	7110	3607	2481	402	2936
24 2012 Federal Report - Rate Case Surplus Deficit	287	767	325	1750	2367	3452	5268	5712	2953	5550	5810	2782	2717	49.9	2627

Table 10.1.1**Federal Report - Rate Case Surplus Deficit By Water Year****Fiscal Year 2025****BP24 Final Proposal Report Date: 11/9/2022****S239-RC-20221121-114438**

A Energy-aMW - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
25 2013 Federal Report - Rate Case Surplus Deficit	-40.9	1636	2191	1192	992	455	3869	2117	2545	3634	2453	919	283	317	1579
26 2014 Federal Report - Rate Case Surplus Deficit	36.6	391	-488	2019	-258	3599	3603	2605	3231	3261	2694	1820	1371	204	1629
27 2015 Federal Report - Rate Case Surplus Deficit	-225	1553	2030	2864	3874	4329	1923	105	19.6	990	-284	-119	-352	-332	1283
28 2016 Federal Report - Rate Case Surplus Deficit	-265	181	114	597	-162	3873	4112	4665	2234	1891	33.2	3.00	-170	107	1079
29 2017 Federal Report - Rate Case Surplus Deficit	-293	1987	681	2468	2863	6235	5481	5334	5189	5184	1857	1831	1178	-69.5	2745
30 2018 Federal Report - Rate Case Surplus Deficit	-188	-214	692	3393	4373	3451	2876	2381	5494	3399	1291	144	1034	-294	2040
Ranked Averages															
31 Bottom 10 pct	-4322	-5120	-6021	-6110	-5632	-5134	-4532	-4540	-5029	-5092	-5026	-5001	-5054	-4591	-5136
32 Middle 80 pct	-3119	-3430	-4197	-4090	-3741	-3226	-2754	-2835	-3061	-2818	-3165	-3402	-3501	-3239	-3361

Table 10.1.2

Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
1 1989 Federal Report - Rate Case Surplus Deficit	-257,822	221,737	156,432	158,984	-308,113	540,012	484,255	750,234	1,410,854	1,076,073	306,839	91,767	90,139	-14,823	4,706,569
2 1990 Federal Report - Rate Case Surplus Deficit	-58,321	525,875	482,382	965,689	1,705,178	586,260	421,263	621,709	1,194,457	1,943,893	1,304,872	598,173	494,511	32,828	10,818,768
3 1991 Federal Report - Rate Case Surplus Deficit	-130,928	1,063,433	721,042	1,500,240	1,725,207	1,285,046	508,180	358,601	1,418,831	1,829,274	1,978,044	696,641	559,507	-39,646	13,473,473
4 1992 Federal Report - Rate Case Surplus Deficit	-85,871	310,517	-274,929	164,710	539,235	-114,419	15,599	-34,029	1,148,265	591,284	-6,702	54,673	35,253	-6,808	2,336,778
5 1993 Federal Report - Rate Case Surplus Deficit	-274,118	209,830	-84,969	-254,596	-552,193	242,039	147,813	-195,133	1,714,987	1,462,370	698,576	207,045	197,800	209,158	3,728,608
6 1994 Federal Report - Rate Case Surplus Deficit	-52,110	244,839	-97,743	-147,792	86,993	52,110	-64,699	215,019	877,470	629,485	219,362	46,450	-20,799	-2,021	1,986,565
7 1995 Federal Report - Rate Case Surplus Deficit	-182,690	169,819	48,711	250,825	770,158	1,345,545	193,973	62,980	1,205,914	1,912,214	1,263,669	247,000	269,642	251,251	7,809,009
8 1996 Federal Report - Rate Case Surplus Deficit	435,033	1,320,859	2,151,078	2,282,537	2,361,047	2,438,124	635,011	987,921	1,820,142	2,124,268	2,234,985	646,489	676,445	152,017	20,265,955
9 1997 Federal Report - Rate Case Surplus Deficit	81,395	484,103	810,642	2,321,565	2,295,362	2,104,638	739,575	1,176,176	2,299,721	2,421,893	2,341,840	749,400	841,574	646,444	19,314,327
10 1998 Federal Report - Rate Case Surplus Deficit	1,198,327	898,791	389,334	838,305	1,379,680	727,846	168,586	166,527	2,324,801	2,055,285	1,471,072	592,549	110,635	189,376	12,511,113
11 1999 Federal Report - Rate Case Surplus Deficit	-33,866	98,327	519,524	1,863,679	1,734,148	2,340,576	547,855	805,422	1,589,287	2,171,620	2,250,823	814,860	908,363	117,988	15,728,606
12 2000 Federal Report - Rate Case Surplus Deficit	-14,890	917,124	973,761	1,357,196	1,308,072	1,278,383	626,091	767,969	1,486,130	1,141,902	795,332	414,367	39,007	-19,566	11,070,877
13 2001 Federal Report - Rate Case Surplus Deficit	-35,827	145,306	-225,397	-153,754	174,424	-80,924	-174,035	-341,469	331,590	306,765	140,676	130,770	9,415	-126,827	100,712
14 2002 Federal Report - Rate Case Surplus Deficit	-309,910	5,142	67,533	-14,698	94,377	277,921	328,961	692,427	1,268,859	2,014,577	1,734,662	258,390	229,719	-588	6,647,372
15 2003 Federal Report - Rate Case Surplus Deficit	-91,949	285,639	-168,553	-60,388	342,541	905,362	319,259	318,379	968,010	1,850,088	212,333	-29,662	14,558	-67,305	4,798,312
16 2004 Federal Report - Rate Case Surplus Deficit	-185,103	494,296	340,324	94,791	-165,213	237,318	188,575	162,695	1,028,355	1,393,710	525,087	-38,992	171,381	96,416	4,343,638
17 2005 Federal Report - Rate Case Surplus Deficit	266,172	493,932	659,275	663,435	1,270,803	365,966	-77,232	-83,480	817,946	1,108,867	863,462	134,577	52,138	3,905	6,539,765
18 2006 Federal Report - Rate Case Surplus Deficit	-263,928	479,552	327,291	1,379,161	1,908,544	919,043	765,655	666,966	2,165,558	1,713,392	1,253,238	117,506	32,274	-50,270	11,413,980
19 2007 Federal Report - Rate Case Surplus Deficit	-165,245	359,743	377,657	1,309,827	743,125	1,839,253	525,700	381,462	1,296,798	1,304,986	831,246	57,584	-20,574	-169,164	8,672,396
20 2008 Federal Report - Rate Case Surplus Deficit	-178,803	396,941	-72,458	482,589	512,733	520,095	91,467	-88,900	1,588,063	2,420,841	1,617,816	363,634	452,082	109,606	8,215,706
21 2009 Federal Report - Rate Case Surplus Deficit	-74,614	346,750	-163,741	1,032,368	483,708	-45,019	657,093	566,572	1,479,229	1,424,261	529,775	13,112	-118,919	-25,088	6,105,489
22 2010 Federal Report - Rate Case Surplus Deficit	-116,272	218,263	103,954	-228,135	-58,277	-177,226	48,635	-112,850	368,817	2,017,619	1,211,695	185,330	94,209	118,548	3,674,310
23 2011 Federal Report - Rate Case Surplus Deficit	-132,957	110,391	534,040	1,445,094	1,830,453	1,446,243	1,129,204	519,092	1,953,690	2,606,493	2,631,871	898,432	611,126	192,603	15,775,774

Table 10.1.2

Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
24 2012 Federal Report - Rate Case Surplus Deficit	158,474	406,017	256,863	905,650	1,262,268	1,629,077	1,091,037	1,191,193	1,829,247	2,101,658	2,263,560	746,187	721,265	9,543	14,572,038
25 2013 Federal Report - Rate Case Surplus Deficit	-35,122	754,824	1,019,948	672,315	652,869	229,861	865,989	499,042	1,693,632	1,650,858	1,325,471	284,747	127,640	157,181	9,899,256
26 2014 Federal Report - Rate Case Surplus Deficit	25,536	230,640	-104,938	1,082,226	96,521	1,684,243	825,733	627,248	1,773,673	1,729,069	1,458,585	425,561	237,345	85,728	10,177,170
27 2015 Federal Report - Rate Case Surplus Deficit	-126,457	733,969	944,935	1,365,271	1,635,173	1,953,700	465,135	42,864	442,212	484,756	-62,145	12,893	-44,674	-158,726	7,688,907
28 2016 Federal Report - Rate Case Surplus Deficit	-159,816	145,033	143,715	395,745	129,638	1,724,242	718,544	863,559	1,511,073	991,893	420,721	317,333	13,578	61,596	7,276,854
29 2017 Federal Report - Rate Case Surplus Deficit	-149,746	934,249	393,080	1,348,908	1,280,408	2,551,618	1,123,400	1,085,407	2,584,471	2,392,034	1,067,108	548,783	522,245	-26,528	15,655,435
30 2018 Federal Report - Rate Case Surplus Deficit	-86,493	1,124	403,780	1,561,773	1,819,983	1,653,852	708,983	594,922	2,282,844	1,778,556	766,013	107,354	328,291	-139,751	11,781,230
Ranked Averages															
31 Bottom 10 pct	-2,072,899	-2,311,358	-2,728,077	-2,812,387	-2,420,042	-2,399,716	-1,037,871	-1,039,529	-2,018,482	-2,034,691	-2,324,502	-1,148,996	-1,252,053	-2,057,340	-27,657,943
32 Middle 80 pct	-1,501,319	-1,530,410	-1,870,538	-1,846,055	-1,556,276	-1,501,413	-632,745	-647,676	-1,071,815	-1,036,116	-1,415,348	-759,813	-854,153	-1,450,546	-17,674,223

Table 10.1.2

Federal Report - Rate Case Surplus Deficit By Water Year

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

S239-RC-20221121-114438

A HLH-MWh - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
1 1989 Federal Report - Rate Case Surplus Deficit	-188531	85209	181553	187038	-329957	718915	442964	744854	1193222	972795	304773	71294	69975	60840	4514944
2 1990 Federal Report - Rate Case Surplus Deficit	13,113	556,320	518,106	979,474	1,658,020	586,355	495,739	800,622	824,772	1,818,780	1,266,487	578,541	602,671	116,824	10,815,823
3 1991 Federal Report - Rate Case Surplus Deficit	-58,663	1,066,453	759,130	1,561,105	1,710,253	1,290,610	559,842	338,059	1,019,083	1,697,411	1,968,043	686,539	552,155	42,846	13,192,865
4 1992 Federal Report - Rate Case Surplus Deficit	-17,422	330,490	-249,672	198,493	477,520	-89,003	30,505	-31,628	400,240	1,011,286	19,736	33,909	11,068	67,459	2,192,981
5 1993 Federal Report - Rate Case Surplus Deficit	-207,988	230,405	-64,715	-189,153	-566,464	272,723	130,637	-168,439	1,333,010	1,097,006	1,229,276	185,782	165,399	293,772	3,741,250
6 1994 Federal Report - Rate Case Surplus Deficit	15,094	262,285	-71,996	-123,700	48,014	78,303	-27,210	148,858	256,773	951,651	244,771	25,294	-41,309	70,043	1,836,870
7 1995 Federal Report - Rate Case Surplus Deficit	-113,623	187,960	74,099	284,819	703,229	1,350,737	148,369	70,457	1,010,108	1,797,124	1,265,970	209,038	233,173	339,124	7,560,585
8 1996 Federal Report - Rate Case Surplus Deficit	527,857	1,366,493	2,194,518	2,442,787	2,189,144	2,404,926	706,579	989,318	1,563,357	2,023,261	2,401,104	629,231	705,090	241,165	20,384,831
9 1997 Federal Report - Rate Case Surplus Deficit	149,870	502,067	862,906	2,308,513	2,386,049	2,071,205	1,031,907	1,136,731	2,448,996	2,484,120	2,477,756	734,740	805,160	752,272	20,152,291
10 1998 Federal Report - Rate Case Surplus Deficit	1,247,109	921,276	422,893	883,623	1,292,534	756,473	135,322	226,325	2,193,956	1,648,636	1,499,220	656,007	378,705	264,172	12,526,252
11 1999 Federal Report - Rate Case Surplus Deficit	34,426	107,716	563,683	1,998,628	1,727,168	2,299,921	632,181	886,646	1,178,243	1,982,861	2,337,936	802,748	879,280	210,188	15,641,625
12 2000 Federal Report - Rate Case Surplus Deficit	51,387	945,656	1,008,077	1,391,972	1,255,260	1,305,230	592,556	781,678	1,237,992	1,176,944	784,291	385,616	12,455	52,614	10,981,729
13 2001 Federal Report - Rate Case Surplus Deficit	38,706	160,149	-199,342	-125,804	134,000	-59,319	-159,934	-323,616	19,544	249,936	170,067	110,139	-10,095	-54,242	-49,812
14 2002 Federal Report - Rate Case Surplus Deficit	-243,849	21,622	95,299	12,042	55,836	308,143	342,481	692,146	843,547	1,893,805	1,786,151	357,730	334,386	79,114	6,578,453
15 2003 Federal Report - Rate Case Surplus Deficit	-20,944	307,873	-142,835	1,424	259,492	934,138	225,196	335,398	709,486	1,730,145	236,722	-50,595	-5,126	3,386	4,523,759
16 2004 Federal Report - Rate Case Surplus Deficit	-117,616	514,424	363,415	123,300	-190,299	269,160	167,870	274,467	597,534	1,395,159	512,127	-87,538	135,696	177,715	4,135,412
17 2005 Federal Report - Rate Case Surplus Deficit	346,801	515,349	700,495	674,128	1,200,520	401,571	-72,972	200	555,589	900,719	891,607	113,040	33,244	78,766	6,339,057
18 2006 Federal Report - Rate Case Surplus Deficit	-194,394	502,498	367,515	1,442,527	1,897,982	939,672	778,943	666,986	1,971,877	1,615,211	1,266,616	89,847	4,852	26,197	11,376,330
19 2007 Federal Report - Rate Case Surplus Deficit	-96,053	387,749	415,841	1,351,629	671,545	1,866,573	831,411	331,310	1,016,796	1,167,131	648,448	14,044	-49,572	-98,482	8,458,370
20 2008 Federal Report - Rate Case Surplus Deficit	-107,617	421,030	-39,791	508,003	450,040	543,807	194,177	-57,903	1,372,977	2,220,724	1,637,959	318,400	427,473	198,996	8,088,275
21 2009 Federal Report - Rate Case Surplus Deficit	-7,044	368,869	-127,789	1,060,032	419,105	-11,457	576,132	508,102	1,107,366	1,379,519	489,431	-10,199	-136,304	47,573	5,663,338
22 2010 Federal Report - Rate Case Surplus Deficit	-46,893	239,251	134,095	-202,874	-87,744	-152,961	106,908	-41,231	176,791	1,807,956	1,221,868	96,600	182	197,613	3,449,562
23 2011 Federal Report - Rate Case Surplus Deficit	-63,913	121,669	579,437	1,531,763	1,848,981	1,468,850	1,126,941	523,807	1,679,720	2,510,364	2,962,519	927,492	654,907	277,101	16,149,637
24 2012 Federal Report - Rate Case Surplus Deficit	236,821	428,195	292,825	962,412	1,158,869	1,635,199	1,196,207	1,242,727	1,489,522	2,158,919	2,556,491	721,861	702,833	94,417	14,877,299

Table 10.1.2

Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2025
BP24 Final Proposal Report Date: 11/9/2022
S239-RC-20221121-114438

A HLH-MWh - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
25 2013 Federal Report - Rate Case Surplus Deficit	36,286	783,256	1,051,604	682,271	576,956	283,157	862,771	520,439	1,302,702	1,665,917	1,345,696	260,345	103,110	238,744	9,713,253
26 2014 Federal Report - Rate Case Surplus Deficit	95,535	248,641	-71,347	1,099,661	49,698	1,697,572	821,542	638,556	1,646,306	1,622,352	1,491,030	496,579	389,714	166,180	10,392,017
27 2015 Federal Report - Rate Case Surplus Deficit	-57,832	750,885	978,739	1,447,467	1,646,210	1,971,803	437,852	38,407	28,980	564,558	-34,477	-7,308	-59,132	-87,190	7,618,962
28 2016 Federal Report - Rate Case Surplus Deficit	-90,746	168,584	174,029	421,909	93,908	1,768,616	930,674	1,074,878	1,180,548	1,007,878	144,758	27,626	-12,526	139,181	7,029,318
29 2017 Federal Report - Rate Case Surplus Deficit	-81,190	934,793	423,920	1,309,555	1,321,097	2,507,731	1,155,289	1,167,662	2,365,175	2,309,636	1,089,061	509,622	342,669	59,469	15,414,486
30 2018 Federal Report - Rate Case Surplus Deficit	-18,163	8,741	443,351	1,645,125	1,826,348	1,644,370	666,191	604,810	2,335,075	1,670,112	792,311	67,237	310,807	-56,355	11,939,959
Ranked Averages															
31 Bottom 10 pct	-2,055,476	-2,281,255	-2,697,719	-2,785,337	-2,360,327	-2,371,923	-1,024,553	-1,026,211	-2,295,776	-2,285,759	-2,294,247	-1,174,070	-1,195,649	-2,036,975	-27,885,275
32 Middle 80 pct	-1,468,651	-1,504,937	-1,840,115	-1,817,049	-1,527,136	-1,472,004	-616,606	-629,614	-1,365,256	-1,229,543	-1,390,046	-786,936	-816,233	-1,413,493	-17,877,619

Table 10.1.3

Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
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A LLH-MWh - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
1 1989 Federal Report - Rate Case Surplus Deficit	-151,342	-37,613	-198,081	-184,924	-409,529	176,491	179,362	317,471	671,216	381,237	-59,502	-37,954	-75,977	-80,774	490,082
2 1990 Federal Report - Rate Case Surplus Deficit	-73,291	167,024	126,400	308,811	862,801	243,725	173,949	282,451	642,009	1,235,675	413,829	157,485	123,961	-24,251	4,640,579
3 1991 Federal Report - Rate Case Surplus Deficit	-117,538	677,971	371,031	766,674	1,061,504	648,816	227,768	178,438	719,605	1,057,286	834,353	212,113	162,266	-66,108	6,734,180
4 1992 Federal Report - Rate Case Surplus Deficit	-82,400	-4,635	-458,023	-163,769	38,463	-209,605	-35,639	-28,763	627,605	274,095	-160,723	-52,489	-88,456	-32,303	-376,643
5 1993 Federal Report - Rate Case Surplus Deficit	-149,631	-30,505	-362,834	-435,527	-517,148	-21,914	-30,139	-155,230	891,946	584,769	130,578	-3,117	-33,984	47,959	-84,777
6 1994 Federal Report - Rate Case Surplus Deficit	-78,408	-3,291	-318,750	-377,662	-179,839	-111,513	-80,322	81,098	466,185	302,564	-66,431	-60,082	-111,841	-37,070	-575,363
7 1995 Federal Report - Rate Case Surplus Deficit	-104,045	-56,794	-256,245	-143,434	132,419	642,213	18,565	7,100	519,371	991,876	365,974	-5,899	-6,367	64,085	2,168,820
8 1996 Federal Report - Rate Case Surplus Deficit	170,608	778,850	1,636,210	1,768,362	1,712,710	1,853,153	326,318	510,314	904,404	1,322,707	1,288,184	164,544	212,887	17,247	12,666,500
9 1997 Federal Report - Rate Case Surplus Deficit	-29,823	118,992	387,753	1,863,530	1,570,452	1,569,191	422,879	805,816	2,015,945	2,234,239	1,410,571	212,978	306,704	293,144	13,182,371
10 1998 Federal Report - Rate Case Surplus Deficit	526,604	430,971	-16,974	231,131	600,906	318,324	22,330	47,776	1,460,912	1,123,539	469,312	137,028	-74,927	6,755	5,283,686
11 1999 Federal Report - Rate Case Surplus Deficit	-85,192	-124,310	121,686	1,295,100	1,018,387	1,656,379	263,224	325,591	798,335	1,325,708	1,240,517	251,853	374,082	21,191	8,482,549
12 2000 Federal Report - Rate Case Surplus Deficit	-60,519	539,999	533,712	563,905	531,841	637,055	293,667	375,722	753,795	455,893	156,244	79,057	-91,111	-96,194	4,673,067
13 2001 Federal Report - Rate Case Surplus Deficit	-90,945	-82,121	-396,679	-349,388	-131,242	-172,364	-149,519	-206,326	162,249	135,020	-123,048	-35,862	-110,835	-117,654	-1,668,713
14 2002 Federal Report - Rate Case Surplus Deficit	-161,669	-170,955	-234,181	-283,745	-200,695	49,546	105,248	325,229	663,890	1,275,743	745,821	10,611	-11,865	-63,335	2,049,642
15 2003 Federal Report - Rate Case Surplus Deficit	-76,494	28,097	-364,889	-333,927	-76,524	391,548	87,874	126,005	461,603	901,859	-96,619	-99,435	-110,982	-101,434	736,683
16 2004 Federal Report - Rate Case Surplus Deficit	-105,645	192,356	-49,910	-248,001	-372,045	22,762	37,192	50,793	472,239	621,689	33,711	-94,278	-34,193	-20,393	506,277
17 2005 Federal Report - Rate Case Surplus Deficit	73,334	135,742	251,533	146,584	528,092	91,542	-87,618	-57,669	380,722	541,530	217,136	-24,375	-72,057	-45,102	2,079,393
18 2006 Federal Report - Rate Case Surplus Deficit	-167,955	150,065	-22,990	743,358	1,107,633	469,603	393,884	264,174	1,319,392	824,362	377,169	-45,445	-87,115	-92,957	5,233,178
19 2007 Federal Report - Rate Case Surplus Deficit	-124,654	52,719	6,932	500,442	136,978	1,134,802	266,947	182,828	646,872	600,096	189,706	-60,662	-108,219	-152,934	3,271,854
20 2008 Federal Report - Rate Case Surplus Deficit	-125,497	70,957	-323,773	30,821	32,368	180,875	5,561	-84,449	975,201	1,552,153	569,932	47,935	92,732	3,281	3,028,097
21 2009 Federal Report - Rate Case Surplus Deficit	-89,630	36,884	-350,060	410,150	14,829	-155,094	302,453	216,521	601,763	527,258	15,595	-91,512	-161,918	-101,071	1,176,169
22 2010 Federal Report - Rate Case Surplus Deficit	-109,275	-22,529	-186,148	-403,535	-295,509	-236,297	-26,567	-108,948	179,841	1,092,324	335,569	-13,864	-63,792	-7,399	133,871
23 2011 Federal Report - Rate Case Surplus Deficit	-129,530	-106,102	200,979	855,721	1,154,054	801,400	623,680	220,611	1,112,720	2,256,930	2,124,080	321,692	170,745	39,955	9,646,937
24 2012 Federal Report - Rate Case Surplus Deficit	-10,626	89,287	-72,834	287,135	493,012	913,089	607,853	690,502	1,298,145	1,833,646	1,521,952	258,543	259,815	-30,300	8,139,217

Table 10.1.3

Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2024
BP24 Final Proposal Report Date: 11/9/2022
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A LLH-MWh - Surplus Deficit	B Oct	C Nov	D Dec	E Jan	F Feb	G Mar	H Apr1	I Apr16	J May	K Jun	L Jul	M Aug1	N Aug16	O Sep	P Avg
25 2013 Federal Report - Rate Case Surplus Deficit	-57,334	399,467	580,306	162,872	81,470	33,585	498,710	238,679	918,153	921,837	442,067	31,748	-42,695	14,551	4,223,417
26 2014 Federal Report - Rate Case Surplus Deficit	-60,795	-5,724	-315,685	377,050	-213,964	974,827	456,479	305,107	945,806	937,452	488,879	82,730	-9,338	4,245	3,967,070
27 2015 Federal Report - Rate Case Surplus Deficit	-104,545	373,463	534,841	683,726	1,047,727	1,234,181	202,305	2,887	253,552	196,192	-205,235	-69,842	-114,258	-136,800	3,898,194
28 2016 Federal Report - Rate Case Surplus Deficit	-101,878	-76,692	-116,353	-3,420	-201,971	1,088,965	398,275	383,205	704,410	410,279	-18,747	41,562	-96,860	-41,744	2,369,029
29 2017 Federal Report - Rate Case Surplus Deficit	-128,911	550,258	55,943	562,994	633,884	2,171,696	749,276	651,685	1,808,451	1,499,935	262,189	123,693	136,332	-79,687	8,997,739
30 2018 Federal Report - Rate Case Surplus Deficit	-118,206	-212,199	53,400	901,732	1,165,189	913,383	373,080	250,169	1,728,396	975,927	139,767	-41,879	35,817	-128,860	6,035,715
Ranked Averages															
31 Bottom 10 pct	-1,206,852	-1,435,833	-1,807,844	-1,783,101	-1,454,721	-1,466,674	-617,165	-618,286	-1,230,562	-1,185,343	-1,470,329	-664,497	-710,276	-1,304,530	-16,956,011
32 Middle 80 pct	-882,667	-994,049	-1,307,235	-1,249,136	-1,003,814	-949,103	-395,344	-402,982	-687,511	-634,564	-989,373	-474,070	-519,989	-938,171	-11,428,009

Table 10.1.3

Federal Report - Rate Case Surplus Deficit By Water Year

Fiscal Year 2025

BP24 Final Proposal Report Date: 11/9/2022

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LLH-MWh - Surplus Deficit	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Aug1	Aug16	Sep	Avg
A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P
1 1989 Federal Report - Rate Case Surplus Deficit	-154791	-80368	-165745	-162089	-404916	276695	210133	311777	489584	290352	-47082	-3347	-31803	-99757	428643
2 1990 Federal Report - Rate Case Surplus Deficit	-81,007	203,881	148,223	347,073	809,079	246,378	277,175	374,523	374,178	1,011,916	404,754	190,681	269,908	-51,437	4,525,326
3 1991 Federal Report - Rate Case Surplus Deficit	-126,808	619,597	376,249	744,838	983,525	658,537	335,636	161,979	407,074	977,035	798,576	236,175	243,649	-92,002	6,324,060
4 1992 Federal Report - Rate Case Surplus Deficit	-85,653	34,449	-425,866	-146,321	37,778	-181,442	-24,872	-33,041	187,053	418,592	-131,007	-17,623	-40,425	-50,061	-458,439
5 1993 Federal Report - Rate Case Surplus Deficit	-152,663	2,678	-325,750	-388,282	-512,236	-8,116	7,685	-146,663	578,528	340,790	379,771	28,941	16,267	20,315	-158,736
6 1994 Federal Report - Rate Case Surplus Deficit	-86,705	36,648	-287,088	-350,337	-180,619	-84,701	-62,417	44,837	94,137	361,228	-35,640	-24,833	-67,499	-52,609	-695,598
7 1995 Federal Report - Rate Case Surplus Deficit	-107,252	-18,246	-224,126	-125,504	124,422	662,429	36,446	7,657	364,171	900,656	392,432	23,724	43,557	33,631	2,113,998
8 1996 Federal Report - Rate Case Surplus Deficit	142,242	768,738	1,699,794	1,870,730	1,622,733	1,852,835	376,403	512,251	688,152	1,260,674	1,371,014	196,623	327,340	-14,525	12,675,005
9 1997 Federal Report - Rate Case Surplus Deficit	-38,447	152,826	387,115	1,811,746	1,771,101	1,528,188	609,236	786,950	2,062,484	2,224,656	1,432,728	241,492	407,110	245,323	13,622,509
10 1998 Federal Report - Rate Case Surplus Deficit	499,405	416,409	7,451	290,387	523,677	344,296	35,514	73,743	1,341,420	741,318	501,777	210,602	128,449	-11,099	5,103,351
11 1999 Federal Report - Rate Case Surplus Deficit	-90,290	-77,010	135,594	1,275,217	912,729	1,643,798	364,673	384,937	447,670	1,204,093	1,188,753	271,240	460,213	-14,300	8,107,318
12 2000 Federal Report - Rate Case Surplus Deficit	-65,964	507,422	530,344	572,456	480,938	656,954	326,435	359,033	532,499	425,684	163,844	111,560	-40,618	-111,968	4,448,619
13 2001 Federal Report - Rate Case Surplus Deficit	-98,215	-38,178	-365,302	-325,881	-135,022	-140,671	-138,033	-197,414	-58,411	32,539	-96,226	-1,109	-67,483	-133,353	-1,762,758
14 2002 Federal Report - Rate Case Surplus Deficit	-164,313	-131,228	-204,513	-258,555	-201,056	67,883	152,236	311,424	357,925	1,134,667	734,981	97,002	99,200	-86,357	1,909,297
15 2003 Federal Report - Rate Case Surplus Deficit	-81,957	64,784	-333,276	-290,731	-102,197	409,675	73,851	139,068	262,652	841,818	-64,622	-64,381	-67,432	-115,785	671,467
16 2004 Federal Report - Rate Case Surplus Deficit	-111,260	219,643	-15,449	-225,120	-371,593	43,059	51,426	109,296	191,938	565,522	50,490	-69,407	6,087	-44,013	400,618
17 2005 Federal Report - Rate Case Surplus Deficit	57,864	165,759	267,443	187,753	490,157	124,866	-83,540	-10,780	187,162	361,901	245,384	11,314	-29,252	-63,627	1,912,403
18 2006 Federal Report - Rate Case Surplus Deficit	-175,457	185,052	-5,513	730,549	1,051,018	481,382	416,417	258,877	1,136,226	732,266	395,952	-10,647	-50,659	-112,607	5,032,855
19 2007 Federal Report - Rate Case Surplus Deficit	-128,846	89,321	26,199	504,387	136,724	1,174,136	515,472	148,764	435,803	476,564	124,898	-33,183	-76,054	-167,089	3,227,097
20 2008 Federal Report - Rate Case Surplus Deficit	-134,249	104,391	-298,883	57,203	33,648	207,960	73,249	-74,250	748,635	1,341,994	602,152	77,188	150,430	-29,306	2,860,163
21 2009 Federal Report - Rate Case Surplus Deficit	-97,310	67,962	-328,492	424,161	19,401	-140,676	308,184	189,865	358,271	513,387	18,745	-53,911	-120,588	-117,422	1,041,578
22 2010 Federal Report - Rate Case Surplus Deficit	-116,322	13,735	-158,863	-377,215	-296,703	-207,327	11,345	-70,224	14,756	939,290	369,935	-2,975	-49,053	-29,715	40,665
23 2011 Federal Report - Rate Case Surplus Deficit	-134,314	-60,692	212,936	813,276	1,106,412	798,992	642,069	214,021	860,101	2,105,746	2,327,481	371,028	297,930	12,323	9,567,310
24 2012 Federal Report - Rate Case Surplus Deficit	-23,573	124,768	-51,096	339,769	432,045	929,436	700,276	813,439	707,476	1,837,168	1,765,898	279,588	340,545	-58,493	8,137,247

Table 10.1.3

Federal Report - Rate Case Surplus Deficit By Water Year
Fiscal Year 2025
BP24 Final Proposal Report Date: **11/9/2022**
S239-RC-20221121-114438

LLH-MWh - Surplus Deficit	Oct	Nov	Dec	Jan	Feb	Mar	Apr1	Apr16	May	Jun	Jul	Aug1	Aug16	Sep	Avg
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
25 2013 Federal Report - Rate Case Surplus Deficit	-66,709	396,264	578,786	204,921	89,724	54,609	529,931	241,676	590,663	950,779	479,492	70,318	5,691	-10,329	4,115,817
26 2014 Federal Report - Rate Case Surplus Deficit	-68,340	33,245	-291,775	402,759	-223,115	976,655	475,624	299,195	757,527	725,395	513,489	158,690	136,740	-19,570	3,876,520
27 2015 Federal Report - Rate Case Surplus Deficit	-109,874	368,872	531,412	683,138	957,123	1,244,302	254,498	-631	-14,381	148,558	-176,662	-35,530	-75,948	-151,959	3,622,918
28 2016 Federal Report - Rate Case Surplus Deficit	-106,231	-37,966	-89,033	22,133	-202,672	1,108,885	549,710	604,624	481,825	353,581	-120,031	-26,547	-52,673	-61,979	2,423,627
29 2017 Federal Report - Rate Case Surplus Deficit	-136,736	497,815	82,458	526,390	603,102	2,124,632	818,022	752,607	1,495,549	1,423,165	292,358	149,432	109,705	-109,539	8,628,960
30 2018 Federal Report - Rate Case Surplus Deficit	-121,677	-163,264	71,719	879,152	1,112,176	919,574	369,189	252,407	1,752,675	777,246	168,228	-15,302	86,303	-155,407	5,933,019
Ranked Averages															
31 Bottom 10 pct	-1,160,408	-1,409,954	-1,782,115	-1,760,213	-1,424,451	-1,442,861	-607,027	-608,148	-1,446,066	-1,380,433	-1,444,734	-626,418	-744,920	-1,268,509	-17,106,257
32 Middle 80 pct	-851,612	-968,327	-1,282,293	-1,226,172	-986,766	-925,180	-374,964	-390,943	-912,203	-799,092	-964,950	-437,797	-528,229	-918,736	-11,567,264

