

**FYI Items**

**New Contract Requests - March 2019**

<b>Contract No.</b>	<b>Contractor</b>	<b>Contract Title</b>	<b>Estimated Contract Value</b>	<b>Date Submitted to Procurement</b>	<b>District Representative</b>	<b>Procurement Officer</b>
430-09358	OsiSoft, LLC	Annual OSiSoft Software Reliance Program (SRP) Subscription Renewal	\$ 29,576.25	3/4/2019	Jeff Mettler	Niconia Butler
130-09365	TBD	Ephrata Headquarters Server Room Fire Protection System Replacement	\$ 100,000.00	3/7/2019	Greg Minden	Niconia Butler
130-09370S	TBD	Tree Removal for Mattawa Feeder	\$ 240,000.00	3/11/2019	William Coe	Patrick Bishop
430-09248	IVOXY Consulting, Inc.	Master Services Agreement with IVOXY	\$ 30,000.00	3/13/2019	Mark Dean	Niconia Butler
130-09366	GE/Alstom Grid, Inc.	Live Tank Breaker Installation and Commissioning Support	\$ 50,000.00	3/14/2019	Chris Johnson	Patrick Bishop
430-09390	Blue Leaf Environmental, Inc.	White Sturgeon Broodstock Collection	\$ 44,043.64	3/14/2019	Chris Mott	Cindy Inch
430-09392	Alvarez & Marsal Corporate Performance Improvement, LLC	Standard Financial Reporting Implementation Project	\$ 915,000.00	3/15/2019	Michael Facey	Betty Snell
430-09378	CDW Government, Inc.	Microsoft Enterprise Agreement	\$ 278,242.00	3/15/2019	Sam Lamb	Niconia Butler
430-09349	Covestic, Inc.	Covestic ServiceNow Fit Gap	\$ 40,000.00	3/19/2019	Sam Lamb	Niconia Butler
-09404		Ephrata Wall Repair and Fall Protection	\$ 150,000.00	3/20/2019	Greg Minden	Niconia Butler
430-09407	Intuitive Safety Solutions, Inc.	Safety Coordinator Services	\$ 200,000.00	3/21/2019	Craig Bressan	Kristin Fleisher
130-09405	TBD	ESC Mini Storage Demolition	\$ 35,000.00	3/25/2019	Greg Minden	Niconia Butler
130-09410H	TBD	Randolph Road Substation Expansion	\$ 2,000,000.00	3/26/2019	Angel Barahona-Sanchez	Patrick Bishop
430-09424	Blue Heron Consulting Corporation	Professional Services with Blue Heron Consulting Corporation	\$ 50,000.00	3/28/2019	James Gollehon	Niconia Butler
430-09430	P.A. Hill Executive Search Inc.	Power Production Engineering Recruitment Services	\$ 40,000.00	3/29/2019	Dale Campbell	Lori Englehart-Jewell

**Contracts Executed - March 2019**

<b>Contract No.</b>	<b>Contractor</b>	<b>Contract Title</b>	<b>Awarded Contract Price</b>	<b>Executed Date</b>	<b>Completion Date</b>	<b>District Representative</b>	<b>Procurement Officer</b>
430-09202	Samsara Networks, Inc.	Samsara Software Subscription	\$ 440,230.00	3/7/2019	3/31/2024	Matthew Wood	Nicona Butler
130-09127	Oath	Conservation Agreement	\$ 81,650.60	3/8/2019	4/30/2019	Eric Hector	Aldea Wolther
130-09283	Energy West, LLC	2019 Wholesale Marketing and Supply Strategies	\$ 150,000.00	3/11/2019	12/31/2019	Richard Flanigan	Nicona Butler
430-09341	Nash Consulting, Inc.	Leadership Training & Development	\$ 155,000.00	3/15/2019	12/31/2020	Thomas Stredwick	Lori Englehart-Jewell
230-09290	Machinists, Inc.	Build and Test Modified Design Spare Gearbox for Priest Rapids Fish Attraction Water Pump	\$ 51,670.00	3/19/2019	9/30/2019	Richard Faber	Betty Snell
430-09076	Beecher Carlson Insurance Services, LLC	Insurance Brokerage and Risk Management Services	\$ 256,500.00	3/19/2019	3/31/2022	Karrie Buescher	Cindy Inch
430-09390	Blue Leaf Environmental, Inc.	White Sturgeon Broodstock Collection	\$ 44,043.64	3/20/2019	7/31/2019	Chris Mott	Cindy Inch
430-09392	Alvarez & Marsal Corporate Performance Improvement, LLC	Standard Financial Reporting Implementation Project	\$ 915,000.00	3/22/2019	7/31/2019	Michael Facey	Betty Snell
430-09378	CDW Government, Inc.	Microsoft Enterprise Agreement	\$ 278,242.00	3/25/2019	8/31/2020	Sam Lamb	Nicona Butler
430-09039	MacKay & Sposito, Inc.	Feasibility & Master Planning Services	\$ 632,000.00	3/25/2019	12/31/2021	Tim Fleisher	Nicona Butler
430-09358	OsiSoft, LLC	Annual OSisoft Software Reliance Program (SRP) Subscription Renewal	\$ 29,576.25	3/27/2019	3/31/2020	Jeff Mettler	Nicona Butler
430-09303	ConvergeOne, Inc.	Annual SmartNet Hardware and Software support and Assurance.	\$ 296,924.16	3/29/2019	1/31/2020	Larry Roberson	Nicona Butler

Change Orders Executed - March 2019

Contract No.	CO No.	Cost Change	Current Contract Price	Contractor	Contract Title	Change Order Description	Approval Level	CO Executed Date	Contract Completion Date	Procurement Officer
230-3737	21	\$ 62,382.58	\$ 106,726,852.14	Alstom Power, Inc.	Priest Rapids Dam Generator Rehabilitation	Extend the warranty of the thrust bearing assembly for Unit 2 by 12 months, package bus ducts for Units 3, 5, 7, and 9 to allow for stacking of crates two high, replace the table in CO 16, Item A.4, repair damage to stator winding, install lower stator baffles of Unit 2, and perform additional work to coupons cutting on the rotor spider of Unit 2.	Department Manager	3/7/2019	12/31/2026	Lori Englehart-Jewell
130-2022	18	\$ 500,000.00	\$ 3,235,000.00	Winterbauer & Diamond	Legal Services Related to Personnel Matters	Increase the Contract Price and increase the hourly rates.	Executive Management (GM/CCO/CFO/CO/Atty)	3/11/2019		Leah Mauceri
430-08950	1	\$ 100,000.00	\$ 184,900.00	Rockcrest Technology Search, Inc.	HCMS Consultation Services	Increase the Contract Price and extend the Contract completion date.	Senior Manager/Plant Manager	3/13/2019	9/30/2019	Nicona Butler
130-3701	2	\$ 130,000.00	\$ 324,920.00	CenturyLink	Backup Internet Connection To Moses Lake Control Center	Increase the Contract Price and extend the Contract completion date.	Executive Management (GM/CCO/CFO/CO/Atty)	3/18/2019	8/8/2022	Nicona Butler
430-3988	3	\$ 257,289.80	\$ 579,335.98	Confederated Tribes and Bands of the Yakama Nation	White River Juvenile Monitoring	Extend the Contract completion date, increase the Contract Price, modify dates in Section 1 and replace Sections 7, 13 and 19.	Managing Director	3/19/2019	6/1/2022	Cindy Inch
430-3989	3	\$ 213,840.58	\$ 482,088.54	Confederated Tribes and Bands of the Yakama Nation	Juvenile Monitoring in Nason Creek	Extend the Contract completion date, increase the Contract Price, modify dates in Section 1 and replace Sections 7, 13 and 19.	Managing Director	3/19/2019	6/1/2022	Cindy Inch
430-08780SR	1	\$ 12,000.00	\$ 245,600.00	Blue Star Enterprises NorthWest Inc.	Drilling 12-Inch Well and Installation of Mechanical Improvements for the Crescent Bar Water System	Immediate need change order to increase the estimated quantity of Bid Item No. 9 by 24 hours.	District Representative	3/19/2019	4/30/2019	Betty Snell
430-3852	3	\$ 20,000.00	\$ 155,350.00	Mercer Health & Benefits	Online Medical Enrollment System	Increase Contract Price, Replace Rate Schedule, and extend Contract completion date.	Senior Manager/Plant Manager	3/20/2019	4/15/2020	Aldea Wolther
130-08473	3	\$ -	\$ 269,142.00	Contract Resource Group	Ephrata Headquarters Annex Furniture Supply and Install	Extend the Contract Completion date.	Department Manager	3/20/2019	4/15/2019	Nicona Butler
130-08715	1	\$ -	\$ 60,000.00	GE/Alstom Grid, Inc.	GE Breaker Training	Extend the Contract completion date.	Managing Director	3/25/2019	5/31/2019	Patrick Bishop
130-08523H	6	\$ -	\$ 2,278,298.84	Potelco, Inc.	Mountain View Substation Expansion Construction	Extend the Contract completion date.	Senior Manager/Plant Manager	3/26/2019	4/5/2019	Patrick Bishop
230-08901	1	\$ 40,000.00	\$ 165,000.00	WSP Canada Inc.	Priest Rapids Right Embankment Concrete Materials Testing	Increase the Contract Price and extend the Contract completion date.	Department Manager	3/26/2019	9/30/2019	Kristin Fleisher
170-4212A	2	\$ 485,650.00	\$ 1,266,500.00	Anixter, Inc.	Supplying Distribution Transformers	Increase the estimated quantities of Bid Item Nos. 1 through 6 and increase the not to exceed Contract Price.	Commission	3/27/2019	12/31/2020	Patrick Bishop
170-4212C	1	\$ 2,266,306.00	\$ 3,244,454.00	ERMCO	Supplying Distribution Transformers	Increase the estimated quantities of Bid Item Nos. 21-25 and 31-33 and increase the not to exceed Contract Price.	Commission	3/27/2019	12/31/2020	Patrick Bishop
430-08051	2	\$ -	\$ 1,337,451.42	Aronson Security Group	Electronic Access Control and Video Management Systems	Extend the Contract completion date.	Senior Manager/Plant Manager	3/27/2019	12/31/2020	Betty Snell
430-09001	1	\$ 50,000.00	\$ 125,000.00	Bradley-Morris, LLC	Operator Recruiter	Increase the Contract Price and extend the Contract completion date.	Managing Director	3/28/2019	9/30/2019	Betty Snell
430-07472	3	\$ -	\$ 50,000.00	FocusGeo LLC	Cultural Resource Geodatabase Maintenance	Extend the Contract completion date.	Managing Director	3/28/2019	9/30/2019	Lori Englehart-Jewell
430-08332	4	\$ -	\$ 148,238.23	Krueger Sheet Metal Company	Ephrata Service Center Electric Shop Storage Reroof	Extend the Contract completion date.	Department Manager	3/28/2019	4/30/2019	Nicona Butler
130-3992	4	\$ 55,170.00	\$ 811,226.00	NoaNet	Professional Services for Network Operation Center Monitoring & Support	Increase the Contract Price and extend the Contract completion date.	Senior Manager/Plant Manager	3/29/2019	6/30/2019	Aldea Wolther
430-08631	4	\$ -	\$ 1,083,117.00	F.D. Thomas, Inc.	Quincy Chute Penstock & Air Valve Coating	Extend the Contract completion date.	Department Manager	3/1/2019	3/17/2019	Betty Snell
430-3797	4	\$ 439,196.20	\$ 2,321,939.80	Washington Dept. of Fish and Wildlife	Monitoring and Evaluation of Hatchery Programs in the Wenatchee and Methow River Basins	Increase the Contract Price, Extend the Contract completion date and replace Appendix "B" Budget.	Commission	3/1/2019	12/31/2020	Cindy Inch

**Closed Contracts - March 2019**

<b>Contract No.</b>	<b>Contractor</b>	<b>Contract Title</b>	<b>Current Contract Price</b>	<b>Close Out Date</b>	<b>District Representative</b>	<b>Procurement Officer</b>
170-08939	Sherman and Reilly, Inc.	Supplying One 10,000 Pound Underground Cable Puller	\$ 179,924.40	3/5/2019	William Coe	Emilie DeLong
430-07390	KRCI LLC	On-Island Improvements Crescent Bar Recreation Area - Stage 2	\$ 1,904,942.61	3/11/2019	Vanessa Seldal	Lori Englehart-Jewell
130-4155	North Central ESD	Electrical Safety, Water/Energy Programs in Grant County Schools	\$ 140,829.11	3/13/2019	Chuck Allen	Aldea Wolther
130-07829	Cascade Energy, Inc.	Cascade Energy - Sabey	\$ 9,968.00	3/13/2019	Richard Cole	Aldea Wolther
430-08068	Full Swoon	Graphic & Website Design	\$ 40,000.00	3/13/2019	Chuck Allen	Aldea Wolther
430-09056	Network Computing Architects Inc.	Fortinet Firewall Services Install	\$ 31,000.00	3/13/2019	Kyle Hussey	Aldea Wolther
130-08110	Paladin Data Systems	Professional Services for Oracle Database Administration	\$ 63,821.00	3/18/2019	James Gollehon	Niconia Butler
430-4087	West Company, Inc.	Crescent Bar Off-Island Construction	\$ 7,842,336.36	3/20/2019	Brandon Little	Betty Snell
430-08439	Emerson Process Management	Ovation Load Control Upgrade	\$ 350,475.00	3/21/2019	Jeff Reams	Betty Snell

April 8, 2019

Mr. Chet Perry / Mr. Jim Schroeder  
PacifiCorp

Mr. Bruce True  
Portland General Electric

Mr. Jay Hiner / Jonathan Hart  
Eugene Water & Electric

Mr. Paul Downey / Mr. Keith Hormann  
City of Forest Grove

Mr. Rahul Venkatesh  
Puget Sound Energy, Inc.

Mr. Matt Boast  
Kittitas County PUD

Mr. Rick Applegate  
Tacoma Power

Ms. Jaime Phillips  
McMinnville Water & Light

Ms. Hina Arai  
City of Seattle, City Light Dept.

Mr. Mike Watkins  
City of Milton-Freewater

Mr. Steve Lentini  
Avista Corp.

Mr. Bob Essex  
Cowlitz PUD

Subject: Priest Rapids Project Highlights for March

**UNIT STATUS:** Unit availability for the projects is as follows:

**Wanapum Generator Operations/Turbine Restoration:**

W-1, 2, 3, 4, 5, 6, 8, 9, 10: Operational.

W-7 was removed from service December 11, 2018 for generator rotor rebuild and governor replacement. W-7 is scheduled to return to service July 12, 2019.

**Priest Rapids Generator Operations/Turbine Restoration:**

P-1, 3, 4, 5, 6, 7, 8, 9, 10: Operational.

P-2 was removed from service January 29, 2018 due to turbine/generator rehabilitation. P-2 was returned to service March 18, 2019.

P-8 was removed from service March 25, 2019 for pre-outage testing. P-8 was returned to service March 28, 2019.

Priest Rapids Project Highlights  
April 8, 2019

**GENERATION STATUS REPORTS:** March Generation Reports are attached for your information and use.

**ELECTRIC SERVICE INTERRUPTION REPORTS:** March Electric Service Interruption Reports are attached for your information and use.

The regular monthly meeting of the Grant County P.U.D. Power Purchasers' Advisory Committee will be held on Wednesday, June 26<sup>th</sup> at 10:00 a.m. at the District's Ephrata Headquarters Building in Conference Room "E".

The District representative is Phillip Law. Phillip's telephone number is: 509-754-5090.

Sincerely,



Dale Campbell, P.E.  
Senior Manager of Power Production Engineering

DC:cec

Attachments

C:	HED Main Files 1.1.1.2	Kevin Marshall
	Tom Flint	Rich Wallen
	Dale Walker	Dale Campbell
	Larry Schaapman	Mark Beattie
	Judy Wilson	Ty Ehrman
	Nelson Cox	Phillip Law
	Chief Operator/Wanapum	Bonnie Overfield
	Chief Operator/Priest Rapids	

# Wanapum

## Public Utility District of Grant County, Ephrata, Washington MONTHLY REPORT OF POWER OPERATIONS

March 2019

Installed Capacity (A)	1,111,800	kW	Hours Plant Operated:	743	
Gross Generation (B)	328,999,100	kWH	Plant Use	781,900	kWH
Max. Hourly Generation (C)	924,300	kWH	Net Generation	328,217,200	kWH
Time of Max. Hourly Gen.	03/09/2019 1900		Water for Generation (D)	4,750,210	A.F.
Plant Factor	39.83%		Water Bypassed (E)	179,780	A.F.
Utilization Factor	83.14%		Water for Fish (F)	58,260	A.F.
Water Factor:	95.23%		Average Hydraulic Head:	78.8	Feet

### UNIT SERVICE RECORD

Unit No	Monthly Gen. (mWH)	Hrs. Operation	Hrs Down For Maint.	Availability Factor (G)	Nature of Maintenance
W-1	34,965	463.67	9.05	0.99	Slip Ring Maintenance
W-2	48,605	656.07	14.33	0.98	GCB spring charging circuit inoperable Slip Ring Maintenance Unit Restoration Exercise
W-3	30,587	403.67	8.68	0.99	Exciter, slip ring maintenance
W-4	35,245	477.70	9.80	0.99	Slip Ring Maintenance
W-5	15,950	203.77	8.80	0.99	Slip Ring Maintenance
W-6	45,734	626.87	12.32	0.98	Repair Exciter Bridge Fan Power Supply W-6 Slip ring maintenance
W-7	0	0.00	743.00	0.00	Generator Rotor Replacement and Unit Governor Replacement
W-8	36,852	491.00	7.90	0.99	Scheduled Slip Ring Maintenance
W-9	47,922	655.63	9.53	0.99	Slip ring maintenance
W-10	33,140	438.03	9.22	0.99	Slip Ring Maintenance (Schwint)

(G) Availability  
Factor=

Hours in Month - Hours Down for Maint.  
Hours in Month



# Wanapum

Public Utility District of Grant County, Ephrata, Washington  
MONTHLY REPORT OF POWER OPERATIONS

March 2019

$$\text{Plant Factor} = \frac{(B) * 100}{(A) * \text{Hours in Month}}$$

$$\text{Utilization Factor} = \frac{(C)}{(A)} * 100$$

$$\text{Water Factor} = \frac{(D)}{(D) + (E) + (F)} * 100$$

# Plant Service Interruptions

Plant: WANAPUM

March, 2019

Date	Time	Duration		Unit	Circuit Breaker Tripped	Relays Operated		Remarks
		Month	Total			Type	Cause	
03/01/2019	0000	743:00	2655:49	W-7	W-732	MAN	11	Generator Rotor Replacement and Unit Governor Replacement
03/01/2019	0800	2:59	2:59	W-6	W-632	MAN	11	Repair Exciter Bridge Fan Power Supply
03/11/2019	0624	8:41	8:41	W-3	W-332	MAN	11	Exciter, slip ring maintenance
03/12/2019	0615	9:32	9:32	W-9	W-932	MAN	11	Slip ring maintenance
03/13/2019	0636	9:13	9:13	W-10	W-1032	MAN	11	Slip Ring Maintenance (Schwint)
03/18/2019	0631	7:54	7:54	W-8	W-832	MAN	11	Scheduled Slip Ring Maintenance
03/19/2019	0617	7:24	7:24	W-2	W-232	MAN	11	Slip Ring Maintenance
03/20/2019	0630	9:20	9:20	W-6	W-632	MAN	11	W-6 Slip ring maintenance
03/22/2019	1045	4:58	4:58	W-2	W-232	MAN	6	GCB spring charging circuit inoperable
03/24/2019	0758	1:58	1:58	W-2	W-232	MAN	11	Unit Restoration Exercise
03/25/2019	0700	9:40	9:40	W-4	W-432	MAN	11	Slip Ring Maintenance
03/26/2019	0654	8:48	8:48	W-5	W-532	MAN	11	Slip Ring Maintenance
03/27/2019	0648	9:03	9:03	W-1	W-132	MAN	11	Slip Ring Maintenance

**Relay Types:** MAN - Manual OC - Overcurrent DIFF - Differential FREQ - Frequency GRD - Ground V - Voltage THER - Thermal TRIP - 86E Trip OTH - Other

**Causes:** 1 Lightning 2 All other weather 3 Trees, etc. into line 4 Malicious damage 5 Line down 6 Defective equipment 7 Inadequate system 8 Trouble on another system 9 Operation error 10 Relay error 12 Cause unknown 11 Prearranged outage 13 Computer control 14 Other

**WANAPUM POWERPLANT GENERATION SUMMARY  
MARCH 2019**

UNIT	GENERATION (MWH)			MAINTENANCE HOURS	
	100% RATED INSTALLED CAPACITY	CURRENT	YTD	CURRENT	YTD
W-1	112.00	34,965	120,196	9.05 (A)	9.05
W-2	112.00	48,605	154,158	14.33 (A, B)	14.33
W-3	112.00	30,587	107,446	8.68 (A, C)	8.68
W-4	103.80	35,245	127,299	9.80 (A)	9.80
W-5	112.00	15,950	67,697	8.80 (A)	11.60
W-6	112.00	45,734	148,333	12.32 (A, D)	12.44
W-7	112.00	0	0	743.00 (E)	2,159.00
W-8	112.00	36,852	133,902	7.90 (A)	7.90
W-9	112.00	47,922	129,347	9.53 (A)	11.35
W-10	112.00	33,140	123,446	9.22 (A)	9.22
<b>PROJECT TOTAL:</b>	<b>1111.80</b>	<b>329,000</b>	<b>1,111,824</b>	<b>832.63</b>	<b>2,253.37</b>
<b>PLANT USE:</b>		<b>782</b>	<b>2,272</b>		
<b>NET GENERATION:</b>		<b>328,218</b>	<b>1,109,552</b>		

**PLANT RATING CURVE CAPACITY BASED ON 40 YR WATER**

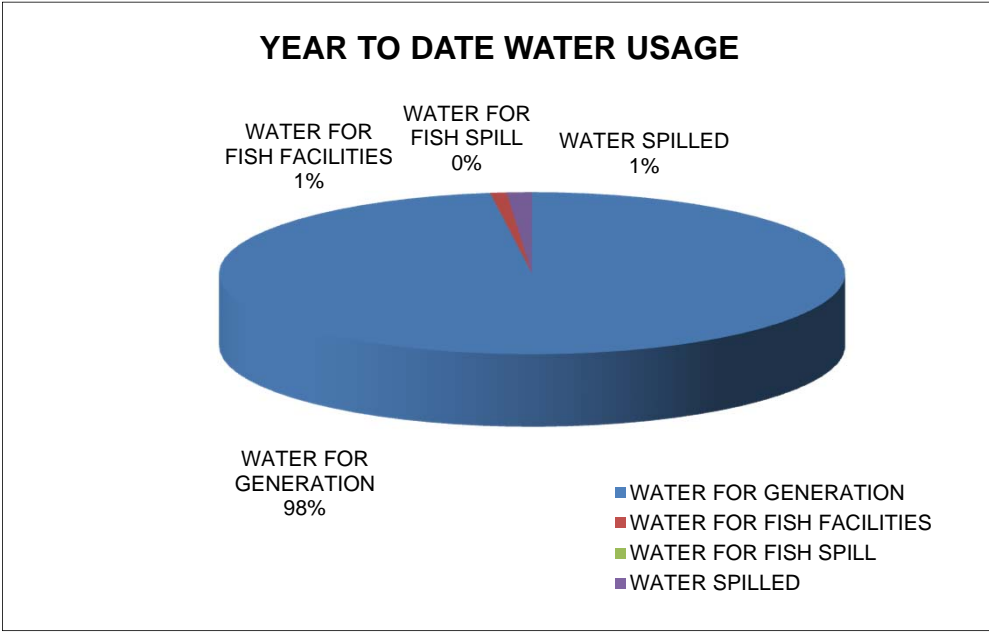
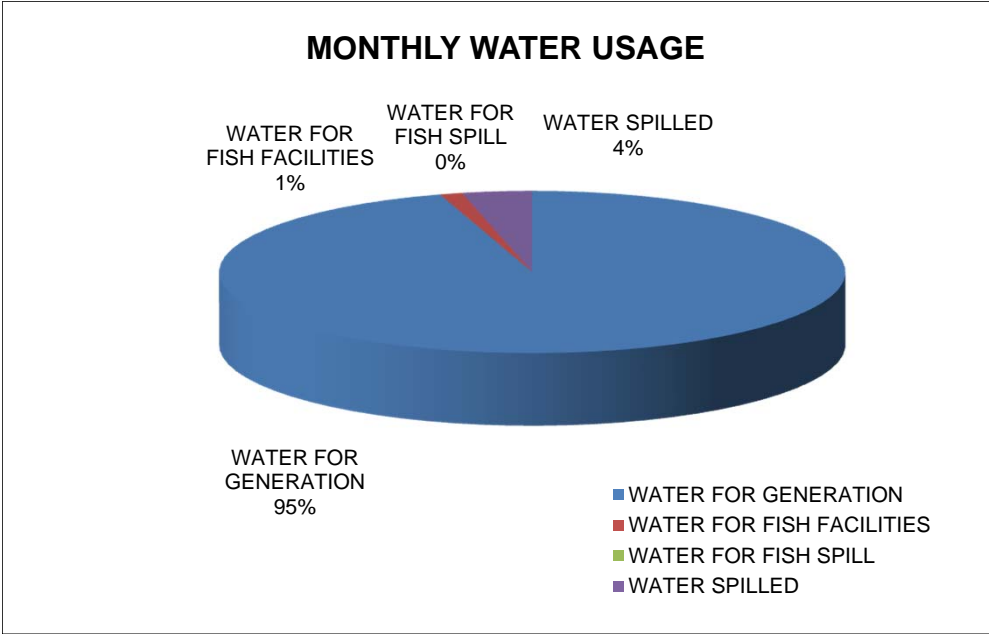
996,910

- (A) Slip Ring Maintenance
- (B) GCB Spring Charging Circuit Inoperable and Unit Restoration Exercise
- (C) Exciter
- (D) Repair Exciter Bridge Fan Power Supply
- (E) Generator Rotor Replacement/Unit Governor Replacement

**WANAPUM POWERPLANT  
WATER UTILIZATION  
MARCH 2019**

	WATER UTILIZED (ACRE FEET)	EQUIVALENT ENERGY (MWH)
TOTAL RIVER FLOW	4,988,250	345,486
WATER FOR GENERATION	4,750,210	328,999
WATER FOR FISH FACILITIES	58,260	4,035
WATER FOR FISH SPILL	0	0
WATER SPILLED	179,780	12,452

# Wanapum Water Utilization Report March 2019



# Priest Rapids

## Public Utility District of Grant County, Ephrata, Washington MONTHLY REPORT OF POWER OPERATIONS

March 2019

Installed Capacity (A)	955,600	kW	Hours Plant Operated:	743	
Gross Generation (B)	336,294,700	kWH	Plant Use	852,400	kWH
Max. Hourly Generation (C)	799,200	kWH	Net Generation	335,442,300	kWH
Time of Max. Hourly Gen.	03/06/2019 1900		Water for Generation (D)	4,898,730	A.F.
Plant Factor	47.36%		Water Bypassed (E)	18,740	A.F.
Utilization Factor	83.63%		Water for Fish (F)	15,800	A.F.
Water Factor:	99.30%		Average Hydraulic Head:	78.6	Feet

### UNIT SERVICE RECORD

Unit No	Monthly Gen. (mWH)	Hrs. Operation	Hrs Down For Maint.	Availability Factor (G)	Nature of Maintenance
P-1	40,215	609.02	0.87	1.00	Midway A-992 Trip at 0029
P-2	24,768	320.07	422.52	0.43	P-02 Turbine Replacement
P-3	49,294	741.72	0.75	1.00	Midway A-992 OPENED at 0029
P-4	17,665	249.62	0.00	1.00	
P-5	28,566	417.05	0.00	1.00	
P-6	49,539	743.00	0.00	1.00	
P-7	31,235	460.08	0.00	1.00	
P-8	21,850	213.52	82.57	0.89	Pre-Shutdown Testing for Generator & Turbine. (M. Stussy)
P-9	44,351	640.50	0.00	1.00	
P-10	28,813	423.87	0.00	1.00	

(G) Availability Factor =

$\frac{\text{Hours in Month} - \text{Hours Down for Maint.}}{\text{Hours in Month}}$

$$\text{Plant Factor} = \frac{(B) * 100}{(A) * \text{Hours in Month}}$$

$$\text{Utilization Factor} = \frac{(C)}{(A)} * 100$$

$$\text{Water Factor} = \frac{(D)}{(D) + (E) + (F)} * 100$$

# Plant Service Interruptions

Plant: PRIEST  
RAPIDS

March, 2019

Date	Time	Duration		Unit	Circuit Breaker Tripped	Relays Operated		Remarks
		Month	Total			Type	Cause	
03/01/2019	0000	422:31	9919:19	P-2	232	OTH	11	P-02 Turbine Replacement
03/13/2019	0030	0:52	0:52	P-1	132	FREQ	14	Midway A-992 Trip at 0029
03/13/2019	0037	0:45	0:45	P-3	332	FREQ	14	Midway A-992 OPENED at 0029
03/25/2019	0600	82:34	82:34	P-8	832	MAN	11	Pre-Shutdown Testing for Generator & Turbine. (M. Stussy)

Relay Types: MAN - Manual OC - Overcurrent DIFF - Differential FREQ - Frequency GRD - Ground V - Voltage THER - Thermal TRIP - 86E Trip OTH - Other

Causes: 1 Lightning 2 All other weather 3 Trees, etc. into line 4 Malicious damage 5 Line down 6 Defective equipment 7 Inadequate system 8 Trouble on another system 9 Operation error 10 Relay error 12 Cause unknown 11 Prearranged outage 13 Computer control 14 Other

**PRIEST RAPIDS POWERPLANT GENERATION SUMMARY  
MARCH 2019**

UNIT	GENERATION (MWH)			MAINTENANCE HOURS	
	100% RATED INSTALLED CAPACITY	CURRENT	YTD	CURRENT	YTD
P-1	95.00	40,215	135,928	0.87 (A)	13.29
P-2	97.80	24,768	25,004	422.52 (B)	1,838.52
P-3	95.00	49,294	146,067	0.75 (C)	12.23
P-4	95.00	17,665	105,906	0.00	11.32
P-5	95.00	28,566	116,778	0.00	107.47
P-6	95.00	49,539	147,302	0.00	0.00
P-7	95.00	31,235	125,208	0.00	0.00
P-8	95.00	21,850	105,618	82.57 (D)	82.57
P-9	97.80	44,351	87,155	0.00	534.44
P-10	95.00	28,813	103,819	0.00	9.08
<b>PROJECT TOTAL:</b>	<b>955.60</b>	<b>336,296</b>	<b>1,098,785</b>	<b>506.71</b>	<b>2,608.92</b>
<b>PLANT USE:</b>		<b>852</b>	<b>2,783</b>		
<b>NET GENERATION:</b>		<b>335,444</b>	<b>1,096,003</b>		

**PLANT RATING CURVE CAPACITY BASED ON 40 YR WATER**

912,300

- (A) Midway A-992 Trip at 0029
- (B) P-2 Turbine/Generator Rehabilitation
- (C) Midway A-992 Opened at 0029
- (D) Pre-Shutdown for Generator/Turbine Testing

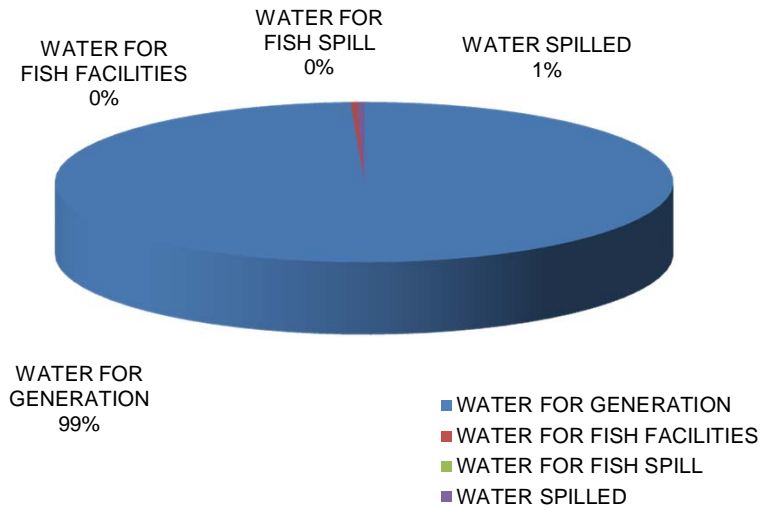


**PRIEST RAPIDS POWERPLANT  
WATER UTILIZATION  
MARCH 2019**

	WATER UTILIZED (ACRE FEET)	EQUIVALENT ENERGY (MWH)
TOTAL RIVER FLOW	4,933,270	338,666
WATER FOR GENERATION	4,898,730	336,295
WATER FOR FISH FACILITIES	15,800	1,085
WATER FOR FISH SPILL	0	0
WATER SPILLED	18,740	1,286

# PRIEST RAPIDS WATER UTILIZATION REPORT MARCH 2019

## MONTHLY WATER USAGE



## YEAR TO DATE WATER USAGE

