Upper Klamath Basin Affordable Power Studies Power Cost Benchmark Report

# **Appendix J**

**PacifiCorp Irrigation Power Cost Supporting Calculations and Documentation** 

# PacifiCorp 2017 - 2018 Average Irrigation Power Price Calculations

State of California

## PacifiCorp California Irrigation Rate Schedule PA-20 Worksheet Calendar Year 2017 and 2018 Irrigation Rate Summary

Period	Number of Days	Total Revenue (\$)	Total Usage (Kwh)	Average Rate (cents/Kwh)
Jan 1, 2017 - Apr 20, 2017	110	14,579,077	94,292,504	15.462
Apr 21, 2017 - Oct 2, 2017	165	14,518,729	94,292,504	15.398
Oct 3, 2017 - Dec 31, 2017	90	14,518,729	94,292,504	15.398
Jan 1, 2018 - Mar 31, 2017	90	14,459,907	94,292,504	15.335
Apr 1, 2018 - Dec 31, 2018	275	14,636,234	94,292,504	15.522
Calendar Year 2017		14,536,916	94,292,504	15.417
Calendar Year 2018		14,592,756	94,292,504	15.476

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp California Irrigation Rate Schedule PA-20 Worksheet
Actual Rates Effective January 1, 2017 and Normalized Jan 2019 - Dec 2019 Usage Forecast from the 2019 California General Rate Case

Charge Type	Units	Tariff	FERC	California	Generation		Public Purpo	se Charges		Generation	Projected	Def.	GHG	CEMA	GHG	Klamath	Total
		Base Rate	Transmission Price	Transmission Price	Price	Schedule 99	Schedule 100	Schedule 191	Schedule 192	Franchise Fee	(Base) ECAC	ECAC	Schedule 92	Schedule 96	Schedule 93	Dam Removal Schedule 199	Charges
			Price	Price		99	100	191	192	ree	Price					Scriedule 199	(\$)
Annual Load Size Charge																	
Single Phase	134	75.27															10,086
Three Phase, 50 KW or Less	1,354	75.27															101,916
Three Phase, 51 KW to 300 KW	526	155.48															81,782 777
Three Phase, Over 300 KW	5	155.48															///
Distribution Demand																	
Single Phase	650	16.27															10,576
Three Phase, 50 KW or Less	34,849	16.27															566,993
Three Phase, 51 KW to 300 KW	52,386	16.27															852,320
Three Phase, Over 300 KW	2,237	16.27															36,396
Generation and Transmission	420,637		1.45	1.36	(0.85)						0.57	0.08					1,097,863
Reactive Power																	56,582
Energy Charge	94,292,504	3.7680			3.8270	0.0430	0.6490	0.4700	0.0450	0.0220	2.8990	0.4010	0.6460	0.0640	(0.5170)	0.2160	11,817,680
Schedule 115 Adjustments																	(53,894)
Totals	94,292,504																14,579,077
	Annual Averag	e Rate (cents	/Kwh)														15.462

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp California Irrigation Rate Schedule PA-20 Worksheet
Actual Rates Effective April 21, 2017 and Normalized Jan 2019 - Dec 2019 Usage Forecast from the 2019 California General Rate Case

Charge Type	Units	Tariff	FERC	California	Generation		Public Purpo	se Charges		Generation	Projected	Def.	GHG	CEMA	GHG	Klamath	Total
		Base Rate	Transmission	Transmission	Price	Schedule	Schedule	Schedule	Schedule	Franchise	(Base)	ECAC	Schedule 92	Schedule 96	Schedule 93	Dam Removal	Charges
			Price	Price		99	100	191	192	Fee	ECAC Price					Schedule 199	(\$)
Annual Load Size Charge																	
Single Phase	134	75.27															10,086
Three Phase, 50 KW or Less	1,354	75.27															101,916
Three Phase, 51 KW to 300 KW	526	155.48															81,782
Three Phase, Over 300 KW	5	155.48															777
Distribution Demand																	
Single Phase	650	16.27															10,576
Three Phase, 50 KW or Less	34,849	16.27															566,993
Three Phase, 51 KW to 300 KW	52,386	16.27															852,320
Three Phase, Over 300 KW	2,237	16.27															36,396
Generation and Transmission	420,637		1.45	1.36	(0.85)						0.57	0.08					1,097,863
Generation and Transmission	420,637		1.45	1.30	(0.65)						0.57	0.06					1,097,003
Reactive Power																	56,582
Energy Charge	94,292,504	3.7680			3.8270	0.0430	0.6490	0.4700	0.0450	0.0220	2.8990	0.4010	0.6460	0.0000	(0.5170)	0.2160	11,757,332
Schedule 115 Adjustments																	(53,894)
Tatala	04 202 504																44 540 700
Totals	94,292,504																14,518,729
	Annual Averag	e Rate (cents	/Kwh)														15.398

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp California Irrigation Rate Schedule PA-20 Worksheet
Actual Rates Effective October 2, 2017 and Normalized Jan 2019 - Dec 2019 Usage Forecast from the 2019 California General Rate Case

Charge Type	Units	Tariff	FERC	California	Generation		Public Purpo	ose Charges		Generation	Projected	Def.	GHG	CEMA	GHG	Klamath	Total
		Base Rate	Transmission	Transmission	Price	Schedule	Schedule	Schedule	Schedule	Franchise	(Base)	ECAC	Schedule 92	Schedule 96	Schedule 93	Dam Removal	Charges
			Price	Price		99	100	191	192	Fee	ECAC Price					Schedule 199	(\$)
Annual Load Size Charge Single Phase Three Phase, 50 KW or Less Three Phase, 51 KW to 300 KW Three Phase, Over 300 KW	134 1,354 526 5	75.27 75.27 155.48 155.48									Filce						10,086 101,916 81,782 777
Distribution Demand Single Phase Three Phase, 50 KW or Less Three Phase, 51 KW to 300 KW Three Phase, Over 300 KW	650 34,849 52,386 2,237	16.27 16.27 16.27 16.27															10,576 566,993 852,320 36,396
Generation and Transmission	420,637		1.45	1.36	(0.85)						0.57	0.08					1,097,863
Reactive Power																	56,582
Energy Charge	94,292,504	3.7680			3.8270	0.0430	0.6490	0.4700	0.0450	0.0220	2.8990	0.4010	0.6460	0.0000	(0.5170)	0.2160	11,757,332
Schedule 115 Adjustments																	(53,894)
Totals	94,292,504																14,518,729
	Annual Averag	e Rate (cents	/Kwh)														15.398

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp California Irrigation Rate Schedule PA-20 Worksheet
Actual Rates Effective January 1, 2018 and Normalized Jan 2019 - Dec 2019 Usage Forecast from the 2019 California General Rate Case

Charge Type	Units	Tariff	FERC	California	Generation		Public Purpo	ose Charges		Generation	Projected	Def.	GHG	CEMA	GHG	Klamath	Total
		Base Rate	Transmission	Transmission	Price	Schedule	Schedule	Schedule	Schedule	Franchise	(Base)	ECAC	Schedule 92	Schedule 96	Schedule 93	Dam Removal	Charges
			Price	Price		99	100	191	192	Fee	ECAC Price					Schedule 199	(\$)
Annual Load Size Charge Single Phase Three Phase, 50 KW or Less Three Phase, 51 KW to 300 KW Three Phase, Over 300 KW	134 1,354 526 5	75.27 75.27 155.48 155.48									riice						10,086 101,916 81,782 777
Distribution Demand Single Phase	650	16.27															10,576
Three Phase, 50 KW or Less Three Phase, 51 KW to 300 KW Three Phase, Over 300 KW	34,849 52,386 2,237	16.27 16.27 16.27															566,993 852,320 36,396
Generation and Transmission	420,637		1.45	1.36	(0.85)						0.57	0.05					1,085,243
Reactive Power																	56,582
Energy Charge	94,292,504	3.7680			3.8270	0.0460	0.6490	0.4700	0.0450	0.0220	2.8990	0.2420	0.7880	0.0000	(0.5520)	0.2160	11,711,129
Schedule 115 Adjustments																	(53,894)
Totals	94,292,504																14,459,907
	Annual Averag	e Rate (cents	/Kwh)														15.335

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp California Irrigation Rate Schedule PA-20 Worksheet
Actual Rates Effective April 1, 2018 and Normalized Jan 2019 - Dec 2019 Usage Forecast from the 2019 California General Rate Case

Charge Type	Units	Tariff	FERC	California	Generation		Public Purpo	ose Charges		Generation	Projected	Def.	GHG	CEMA	GHG	Klamath	Total
		Base Rate	Transmission	Transmission	Price	Schedule	Schedule	Schedule	Schedule	Franchise	(Base)	ECAC	Schedule 92	Schedule 96	Schedule 93	Dam Removal	Charges
			Price	Price		99	100	191	192	Fee	ECAC Price					Schedule 199	(\$)
Annual Load Size Charge Single Phase Three Phase, 50 KW or Less Three Phase, 51 KW to 300 KW Three Phase, Over 300 KW	134 1,354 526 5	75.27 75.27 155.48 155.48									rice						10,086 101,916 81,782 777
Distribution Demand Single Phase Three Phase, 50 KW or Less Three Phase, 51 KW to 300 KW Three Phase, Over 300 KW	650 34,849 52,386 2,237	16.27 16.27 16.27 16.27															10,576 566,993 852,320 36,396
Generation and Transmission	420,637		1.45	1.36	(0.85)						0.57	0.05					1,085,243
Reactive Power																	56,582
Energy Charge	94,292,504	3.7680			3.8270	0.0460	0.6490	0.4700	0.0450	0.0220	2.8990	0.2420	0.7880	0.1870	(0.5520)	0.2160	11,887,456
Schedule 115 Adjustments																	(53,894)
Totals	94,292,504																14,636,234
	Annual Averag	e Rate (cents	/Kwh)														15.522

PacifiCorp California Irrigation Rate Schedule PA-20 Worksheet

Actual Base Rates in Effect from Jul 2016 - Jun 2017 and Normalized Jan 2019 - Dec 2019 Usage Forecast from the 2019 California General Rate Case

Charge Type	Units	Tariff Base Rate	FERC Transmission Price	California Transmission Price	Generation Price	Generation Franchise Fee	Projected (Base) ECAC Price	Total Charges (\$)
Annual Load Size Charge								
Single Phase	134	75.27						10,086
Three Phase, 50 KW or Less	1,354	75.27						101,916
Three Phase, 51 KW to 300 KW Three Phase, Over 300 KW	526 5	155.48 155.48						81,782 777
Distribution Demand								
Single Phase	650	16.27						10,576
Three Phase, 50 KW or Less	34,849	16.27						566,993
Three Phase, 51 KW to 300 KW	52,386	16.27						852,320
Three Phase, Over 300 KW	2,237	16.27						36,396
Generation and Transmission	420,637		1.45	1.36	(0.85)		0.57	1,064,212
Reactive Power								56,582
Energy Charge	94,292,504	3.7680			3.8270	0.0220	2.8990	9,915,800
Schedule 115 Adjustments								(53,894)
Totals	94,292,504							12,643,546
	Annual Average	Rate (cents/Kwh	)					13.409

Data source: Pacific Power 2019 State of California General Rate Case filing, California Public Utilities Commission Docket No. A-18-04-002, Exhibit No. PAC/2002 (pages 3 & 9) to the Testimony of Judith M. Ridenour.

# PacifiCorp 2017 - 2018 Average Irrigation Power Price Calculations

State of Idaho

PacifiCorp/Rocky Mountain Power Idaho Irrigation Rate Schedule 10 Worksheet
Calendar Year 2017 and 2018 Irrigation Rate Summary

Period	Number	Total	Total	Average
	of Days	Revenue	Usage	Rate
		(\$)	(Kwh)	(cents/Kwh)
Jan 1, 2017 - May 31, 2017	151	51,774,504	533,515,541	9.704
Jun 1, 2017 - Sep 30, 2017	122	51,297,814	533,515,541	9.615
Oct 1, 2017 - May 31, 2018	243	50,971,765	533,515,541	9.554
Jun 1, 2018 - Dec 31, 2018	214	49,454,025	533,515,541	9.269
Calendar Year 2017		51,412,838	533,515,541	9.637
Calendar Year 2018		50,081,912	533,515,541	9.387

PacifiCorp/Rocky Mountain Power Idaho Irrigation Rate Schedule 10 Worksheet
Actual Rates Effective January 1, 2017 and Normalized Usage from the 2006 State of Idaho General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 94 (cents/Kwh)	Schedule 197 (cents/Kwh)	BPA ResEx Credit/Sch 34 (cents/Kwh)	DSM Sch 191 (%)	Total Charges (\$)
Small Customer Charge - Summer Season (\$/Month)	2,206	14.00				2.70	126,871
Large Customer Charge - Summer Season (\$/Month)	13,904	41.00				2.70	2,341,823
Post-Summer Season Customer Charge (\$/Month)	11,459	23.00				2.70	2,165,384
Total Customer Charges	27,569						
Demand Charges (\$/KW)	1,289,312	5.9800				2.70	7,918,258
Energy Charges Summer Season (Cents/Kwh)							
First 25,000 Kwh (Jun 1 - Sep 15)	178,587,572	8.8711	0.4280	0.0000	(0.7762)	2.70	15,669,230
Next 225,000 Kwh (Jun 1 - Sep 15)	243,286,269	6.6296	0.4280	0.0000	(0.7762)	2.70	15,745,378
All Additional Kwh (Jun 1 - Sep 15)	24,859,497	4.9616	0.4280	0.0000	0.0000	2.70	1,376,003
Energy Charges Post-Summer Season (Cents/Kwh)							
All Kwh (Sep 16 - May 31)	86,782,203	7.5441	0.4280	0.0000	(0.7762)	2.70	6,431,556
Totals	533,515,541						51,774,504

Annual Average Rate (cents/Kwh)

9.704

- 2) The Units (i.e. normalized usage figures) were taken from Rocky Mountain Power's 2006 State of Idaho General Rate Case Filing, Idaho Public Utilities Commission Case No. PAC-E-06-04, Exhibit Nos. 2 & 3 to the testimony of Jeffrey K. Larsen.
- 3) The Schedule 191 charges are computed prior to the application of the BPA ResEx/Schedule 34 Credit, as is specified in Rocky Mountain Power's Schedule 191 Tariff Sheet.

PacifiCorp/Rocky Mountain Power Idaho Irrigation Rate Schedule 10 Worksheet
Actual Rates Effective June 1, 2017 and Normalized Usage from the 2006 Idaho General Rate Case

Charge Type	Units	Tariff	Schedule	Schedule	BPA ResEx	DSM	Total
		Base Rate	94	197	Credit/Sch 34	Sch 191	Charges
			(cents/Kwh)	(cents/Kwh)	(cents/Kwh)	(%)	(\$)
Small Customer Charge - Summer Season (\$/Month)	2,206	14.00				2.70	126,871
Large Customer Charge - Summer Season (\$/Month)	13,904	41.00				2.70	2,341,823
Post-Summer Season Customer Charge (\$/Month)	11,459	23.00				2.70	2,165,384
Total Customer Charges	27,569						,,
Demand Charges (\$/KW)	1,289,312	5.9800				2.70	7,918,258
Energy Charges Summer Season (Cents/Kwh)							
First 25,000 Kwh (Jun 1 - Sep 15)	178,587,572	8.8711	0.3410	0.0000	(0.7762)	2.70	15,509,664
Next 225,000 Kwh (Jun 1 - Sep 15)	243,286,269	6.6296	0.3410	0.0000	(0.7762)	2.70	15,528,004
All Additional Kwh (Jun 1 - Sep 15)	24,859,497	4.9616	0.3410	0.0000	0.0000	2.70	1,353,791
Energy Charges Post-Summer Season (Cents/Kwh)							
All Kwh (Sep 16 - May 31)	86,782,203	7.5441	0.3410	0.0000	(0.7762)	2.70	6,354,017
Totals	533,515,541						51,297,814

Annual Average Rate (cents/Kwh)

9.615

- 2) The Units (i.e. normalized usage figures) were taken from Rocky Mountain Power's 2006 State of Idaho General Rate Case Filing, Idaho Public Utilities Commission Case No. PAC-E-06-04, Exhibit Nos. 2 & 3 to the testimony of Jeffrey K. Larsen.
- 3) The Schedule 191 charges are computed prior to the application of the BPA ResEx/Schedule 34 Credit, as is specified in Rocky Mountain Power's Schedule 191 Tariff Sheet.

PacifiCorp/Rocky Mountain Power Idaho Irrigation Rate Schedule 10 Worksheet
Actual Rates Effective October 1, 2017 and Normalized Usage from the 2006 Idaho General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 94 (cents/Kwh)	Schedule 197 (cents/Kwh)	BPA ResEx Credit/Sch 34	DSM Sch 191	Total Charges
			(Cents/Kwii)	(Cents/Kwii)	(cents/Kwh)	(%)	(\$)
Small Customer Charge - Summer Season (\$/Month)	2,206	14.00				2.70	126,871
Large Customer Charge - Summer Season (\$/Month)	13,904	41.00				2.70	2,341,823
Post-Summer Season Customer Charge (\$/Month)	11,459	23.00				2.70	2,165,384
Total Customer Charges	27,569						
Demand Charges (\$/KW)	1,289,312	5.9800				2.70	7,918,258
Energy Charges Summer Season (Cents/Kwh)							
First 25,000 Kwh (Jun 1 - Sep 15)	178,587,572	8.8711	0.3410	0.0000	(0.8403)	2.70	15,395,189
Next 225,000 Kwh (Jun 1 - Sep 15)	243,286,269	6.6296	0.3410	0.0000	(0.8403)	2.70	15,372,058
All Additional Kwh (Jun 1 - Sep 15)	24,859,497	4.9616	0.3410	0.0000	0.0000	2.70	1,353,791
Energy Charges Post-Summer Season (Cents/Kwh)							
All Kwh (Sep 16 - May 31)	86,782,203	7.5441	0.3410	0.0000	(0.8403)	2.70	6,298,390
Totals	533,515,541						50,971,765

Annual Average Rate (cents/Kwh)

9.554

- 2) The Units (i.e. normalized usage figures) were taken from Rocky Mountain Power's 2006 State of Idaho General Rate Case Filing, Idaho Public Utilities Commission Case No. PAC-E-06-04, Exhibit Nos. 2 & 3 to the testimony of Jeffrey K. Larsen.
- 3) The Schedule 191 charges are computed prior to the application of the BPA ResEx/Schedule 34 Credit, as is specified in Rocky Mountain Power's Schedule 191 Tariff Sheet.

PacifiCorp/Rocky Mountain Power Idaho Irrigation Rate Schedule 10 Worksheet
Actual Rates Effective June 1, 2018 and Normalized Usage from the 2006 Idaho General Rate Case

Charge Type	Units	Tariff	Schedule	Schedule	BPA ResEx	DSM	Total
		Base Rate	94	197	Credit/Sch 34	Sch 191	Charges
			(cents/Kwh)	(cents/Kwh)	(cents/Kwh)	(%)	(\$)
Small Customer Charge - Summer Season (\$/Month)	2,206	14.00				2.70	126,871
Large Customer Charge - Summer Season (\$/Month)	13,904	41.00				2.70	2,341,823
Post-Summer Season Customer Charge (\$/Month)	11,459	23.00				2.70	2,165,384
Total Customer Charges	27,569						,,
Demand Charges (\$/KW)	1,289,312	5.9800				2.70	7,918,258
Energy Charges Summer Season (Cents/Kwh)							
First 25,000 Kwh (Jun 1 - Sep 15)	178,587,572	8.8711	0.276	(0.2120)	(0.8403)	2.70	14,887,145
Next 225,000 Kwh (Jun 1 - Sep 15)	243,286,269	6.6296	0.276	(0.2120)	(0.8403)	2.70	14,679,960
All Additional Kwh (Jun 1 - Sep 15)	24,859,497	4.9616	0.276	(0.2120)	0.0000	2.70	1,283,071
Energy Charges Post-Summer Season (Cents/Kwh)							
All Kwh (Sep 16 - May 31)	86,782,203	7.5441	0.276	(0.2120)	(0.8403)	2.70	6,051,513
Totals	533,515,541						49,454,025

Annual Average Rate (cents/Kwh)

9.269

- 2) The Units (i.e. normalized usage figures) were taken from Rocky Mountain Power's 2006 State of Idaho General Rate Case Filing, Idaho Public Utilities Commission Case No. PAC-E-06-04, Exhibit Nos. 2 & 3 to the testimony of Jeffrey K. Larsen.
- 3) The Schedule 191 charges are computed prior to the application of the BPA ResEx/Schedule 34 Credit, as is specified in Rocky Mountain Power's Schedule 191 Tariff Sheet.

# PacifiCorp 2017 - 2018 Average Irrigation Power Price Calculations

State of Oregon

PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet Calendar Year 2017 and 2018 Irrigation Rate Summary

Period	Number	Total	Total	Average
	of Days	Revenue	Usage	Rate
		(\$)	(Kwh)	(cents/Kwh)
Jan 1, 2017 - Jan 10, 2017	10	24,482,973	222,051,683	11.026
Jan 11, 2017 - Jan 24, 2017	14	24,558,316	222,051,683	11.060
Jan 25, 2017 - Jan 31, 2017	7	24,558,316	222,051,683	11.060
Feb 1, 2017 - Sep 30, 2017	242	24,530,919	222,051,683	11.047
Oct 1, 2017 - Dec 31, 2017	92	24,492,106	222,051,683	11.030
Jan 1, 2018 - Jan 1 2018	1	24,494,641	222,051,683	11.031
Jan 2, 2018 - Jul 5, 2018	185	24,494,641	222,051,683	11.031
Jul 6, 2018 - Dec 31, 2018	179	24,483,225	222,051,683	11.026
Calendar Year 2017		24,521,398	222,051,683	11.043
Calendar Year 2018		24,489,043	222,051,683	11.029

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 1, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser				
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW Three Phase > 300 KW	6,116 1,071 21	0 310 1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment												
Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/KW Winter All Additional Kwh/KW Summer, All Kwh/KW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0120 0.0120 0.0120	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service	388,834											
Totals	222,051,683											
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 1, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se	ervice								
Schedule 197	Schedule 299	Base Supply Schedule 200 200	Cost-Based Supply Schedule 201	Schedule 202	Schedule 203	Schedule 204	Schedule 205	Klam Dam Rem JCB Schedule 199	Klam Dam Rem C/IG Schedule 199	Energy Conservation Schedule 297	BPA Res Ex Credit Schedule 98	Public Purpose Schedule 290 (%)	Total Charges (\$)
													0 332,010 25,410
													1,590,930 951,830 70,938
													24,805 135,450
0.0430 0.0430 0.0430	(0.5950) (0.5950) (0.5950)	3.1560	4.0300 2.7460 2.7460	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0370 0.0370 0.0370	0.0330 0.0230 0.0230	0.0380 0.0380 0.0380	0.1160 0.1160 0.1160	0.3170	(0.7680)	3.0000	336,904 222,776 20,654,820
													93,813 43,287
													24,482,973
													11.026

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 11, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser	vice			
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW	6,116 1,071	0 310										
Three Phase > 300 KW	21	1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment												
Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/KW Winter All Additional Kwh/KW Summer, All Kwh/KW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0120 0.0120 0.0120	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service	388,834											
Totals	222,051,683											
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 11, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se	rvice								
Schedule 197	Schedule 299	Base Supply Schedule 200 200	Cost-Based Supply Schedule 201	Schedule 202	Schedule 203	Schedule 204	Schedule 205	Klam Dam Rem JCB Schedule 199	Klam Dam Rem C/IG Schedule 199	Energy Conservation Schedule 297	BPA Res Ex Credit Schedule 98	Public Purpose Schedule 290 (%)	Total Charges (\$)
													0 332,010 25,410
													1,590,930 951,830 70,938
													24,805 135,450
0.0430 0.0430 0.0430	(0.5950) (0.5950) (0.5950)	3.1560	4.0300 2.7460 2.7460	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	0.0370 0.0370 0.0370	0.0330 0.0230 0.0230	0.0380 0.0380 0.0380	0.1160 0.1160 0.1160	0.3500 0.3500 0.3500	(0.7680)	3.0000	337,830 223,570 20,728,444
													93,813 43,287
													24,558,316
													11.060

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 25, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser	vice			
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW	6,116 1,071	0 310										
Three Phase > 300 KW	21	1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment												
Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/KW Winter All Additional Kwh/KW Summer, All Kwh/KW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0120 0.0120 0.0120	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service	388,834											
Totals	222,051,683											
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 25, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se	ervice								
Schedule 197	Schedule 299	Base Supply Schedule 200 200	Cost-Based Supply Schedule 201	Schedule 202	Schedule 203	Schedule 204	Schedule 205	Klam Dam Rem JCB Schedule 199	Klam Dam Rem C/IG Schedule 199	Energy Conservation Schedule 297	BPA Res Ex Credit Schedule 98	Public Purpose Schedule 290 (%)	Total Charges (\$)
													0 332,010 25,410
													1,590,930 951,830 70,938
													24,805 135,450
0.0430 0.0430 0.0430	(0.5950) (0.5950) (0.5950)	3.1560	4.0300 2.7460 2.7460	0.0000 0.0000 0.0000	0.0050 0.0050 0.0050	0.0370 0.0370 0.0370	0.0330 0.0230 0.0230	0.0380	0.1160 0.1160 0.1160	0.3500 0.3500 0.3500	(0.7680)	3.0000	337,830 223,570 20,728,444
													93,813 43,287
													24,558,316
													11.060

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective February 1, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser	vice			
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW	6,116 1,071	0 310										
Three Phase > 300 KW	21	1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment												
Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/KW Winter All Additional Kwh/KW Summer, All Kwh/KW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service	388,834											
Totals	222,051,683											
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective February 1, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se	ervice			]					
Schedule 197	Schedule 299	Base Supply Schedule 200 200	Cost-Based Supply Schedule 201	Schedule 202	Schedule 203	Schedule 204	Schedule 205	Klam Dam Rem JCB Schedule 199	Klam Dam Rem C/IG Schedule 199	Energy Conservation Schedule 297	BPA Res Ex Credit Schedule 98	Public Purpose Schedule 290 (%)	Total Charges (\$)
													0 332,010 25,410
													1,590,930 951,830 70,938
													24,805 135,450
0.0430 0.0430 0.0430	(0.5950) (0.5950) (0.5950)	3.1560	2.7460	0.0000 0.0000 0.0000	0.0050 0.0050 0.0050	0.0370 0.0370 0.0370	0.0330 0.0230 0.0230	0.0380	0.1160 0.1160 0.1160	0.3500 0.3500 0.3500	(0.7680)	3.0000	337,493 223,281 20,701,671
													93,813 43,287
													24,530,919
													11.047

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective October 1, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser				
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW Three Phase > 300 KW	6,116 1,071 21	0 310 1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment												
Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/kW Winter All Additional Kwh/kW Summer, All Kwh/kW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service	388,834											
Totals	222,051,683											
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective October 1, 2017 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se	ervice								
Schedule 197	Schedule 299	Base Supply Schedule 200 200	Cost-Based Supply Schedule 201	Schedule 202	Schedule 203	Schedule 204	Schedule 205	Klam Dam Rem JCB Schedule 199	Klam Dam Rem C/IG Schedule 199	Energy Conservation Schedule 297	BPA Res Ex Credit Schedule 98	Public Purpose Schedule 290 (%)	Total Charges (\$)
													0 332,010 25,410
													1,590,930 951,830 70,938
													24,805 135,450
0.0430 0.0430 0.0430	(0.5950) (0.5950) (0.5950)	3.1560	4.0300 2.7460 2.7460	0.0000 0.0000 0.0000	0.0050 0.0050 0.0050	0.0370 0.0370 0.0370	0.0330 0.0230 0.0230	0.0380	0.1160 0.1160 0.1160	0.3500 0.3500 0.3500	(0.7850)	3.0000	337,017 222,872 20,663,744
													93,813 43,287
													24,492,106
													11.030

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 1, 2018 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser				
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW Three Phase > 300 KW	6,116 1,071 21	0 310 1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment												
Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/kW Winter All Additional Kwh/kW Summer, All Kwh/kW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service	388,834											
Totals	222,051,683											
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 1, 2018 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se	ervice								
Schedule 197	Schedule 299	Base Supply Schedule 200 200	Cost-Based Supply Schedule 201	Schedule 202	Schedule 203	Schedule 204	Schedule 205	Klam Dam Rem JCB Schedule 199	Klam Dam Rem C/IG Schedule 199	Energy Conservation Schedule 297	BPA Res Ex Credit Schedule 98	Public Purpose Schedule 290 (%)	Total Charges (\$)
													0 332,010 25,410
													1,590,930 951,830 70,938
													24,805 135,450
0.0430 0.0430 0.0430	(0.5950) (0.5950) (0.5950)	3.1560	4.0580 2.7650 2.7650	0.0000 0.0000 0.0000	0.0050 0.0050 0.0050	0.0370 0.0370 0.0370	0.0290 0.0200 0.0200	0.0380	0.1160 0.1160 0.1160	0.3320	(0.7850)	3.0000	222,896
													93,813 43,287
													24,494,641
													11.031

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 2, 2018 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser				
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW Three Phase > 300 KW	6,116 1,071 21	0 310 1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment												
Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/kW Winter All Additional Kwh/kW Summer, All Kwh/kW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service	388,834											
Totals	222,051,683											
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective January 2, 2018 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se	rvice								
Schedule 197	Schedule 299	Base Supply Schedule 200 200	Cost-Based Supply Schedule 201	Schedule 202	Schedule 203	Schedule 204	Schedule 205	Klam Dam Rem JCB Schedule 199	Klam Dam Rem C/IG Schedule 199	Energy Conservation Schedule 297	BPA Res Ex Credit Schedule 98	Public Purpose Schedule 290 (%)	Total Charges (\$)
													0 332,010 25,410
													1,590,930 951,830 70,938
													24,805 135,450
0.0430 0.0430 0.0430	(0.5950) (0.5950) (0.5950)	3.1560	4.0580 2.7650 2.7650	0.0000 0.0000 0.0000	0.0050 0.0050 0.0050	0.0370 0.0370 0.0370	0.0290 0.0200 0.0200	0.0380	0.1160 0.1160 0.1160	0.3320 0.3320 0.3320	(0.7850) (0.7850) (0.7850)	3.0000	337,297 222,896 20,665,975
													93,813 43,287
													24,494,641
													11.031

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective July 6, 2018 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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								Delivery Ser				
Charge Type	Units	Tariff Base Rate	Transmission & Ancillary	System Usage S200	System Usage T&A&S201	GIA Schedule 80	Schedule 93	Schedule 95	Schedule 96	Schedule 97	Schedule 192	Schedule 196
Basin Charge, Single Phase or Three Phase < 50 KW Single Phase or Three Phase < 50 KW Three Phase, 50 to 300 KW Three Phase > 300 KW	6,116 1,071 21	0 310 1,210										
Annual Load Size KW Charge Single Phase, Three Phase <50 KW Three Phase 51 to 300 KW Three Phase > 301 KW	106,062 95,183 11,823	15.00 10.00 6.00										
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment Energy Charge - Schedule 200/201 Winter 1st 100 Kwh/KW Winter All Additional Kwh/KW Summer, All Kwh/KW	2,722,361 2,336,220 216,604,268	3.5690 3.5690 3.5690	0.3660 0.3660 0.3660	0.0740 0.0740 0.0740	0.0760 0.0760 0.0760	0.1660 0.1660 0.1660	0.0000 0.0000 0.0000	0.0010 0.0010 0.0010	0.0000 0.0000 0.0000	0.0000 0.0000 0.0000	(0.0380) (0.0380) (0.0380)	(0.0210) (0.0210) (0.0210)
Reactive Power (Secondary) Additional costs for Primary Service Totals	388,834 222,051,683										(,	(-13_14)
	Annual Average Ra	ate (cents/Kwh)										

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet
Actual Rates Effective July 6, 2018 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

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				Supply Se									
Schedule	Schedule	Base Supply	Cost-Based	Schedule	Schedule	Schedule	Schedule	Klam Dam	Klam Dam	Energy	BPA	Public	Total
197	299	Schedule 200	Supply	202	203	204	205	Rem JCB	Rem C/IG	Conservation	Res Ex Credit	Purpose	Charges
		200	Schedule					Schedule	Schedule	Schedule	Schedule	Schedule 290	(\$)
-			201					199	199	297	98	(%)	
													0
													332,010
													25,410
													20,110
													1,590,930
													951,830
													70,938
													24,805
													135,450
0.0430	(0.5950)	4.6290	4.0580	0.0000	0.0050	0.0370	0.0290	0.0370	0.1120	0.3320	(0.7850)	3.0000	337,157
0.0430	(0.5950)		2.7650	0.0000	0.0050	0.0370	0.0200		0.1120		(0.7850)		
0.0430	(0.5950)		2.7650	0.0000	0.0050	0.0370	0.0200		0.1120	0.3320			20,654,820
	(0.0000)										()		
													93,813
													43,287
													24,483,225
													11.026

PacifiCorp Oregon Irrigation Rate Schedule 41 Worksheet

Actual Base Rates in Effect from Jul 2011 - Jun 2012 and Normalized Jul 2011 - Jun 2012 Usage from the 2013 Oregon General Rate Case

Charge Type	Units	Tariff Base Rate	Total Charges (\$)
Transmission and Ancillary Services	221,662,849	0.2930	649,472
T & A and Schedule 201 Related	221,662,849	0.0000	0
Schedule 200 Related	221,662,849	0.0000	0
Basin Charge, Single Phase or Three Phase < 50 KW			
Single Phase or Three Phase < 50 KW	6,166	0	0
Three Phase, 50 to 300 KW Three Phase > 300 KW	1,071 21	320	342,720
Three Phase > 500 KW	21	1,250	26,250
Annual Load Size KW Charge			
Single Phase, Three Phase <50 KW	106,062	15.00	1,590,930
Three Phase 51 to 300 KW	95,183	10.00	951,830
Three Phase > 301 KW	11,823	6.00	70,938
Single Phase Net Minimum Bills Adjustment			24,805
Three Phase Net Minimum Bills Adjustment			135,450
Distribution Energy Charge	221,662,849	3.7080	8,219,258
Reactive Power			93,813
Energy Charge - Schedule 200			
Winter 1st 100 Kwh/KW	2,722,361	3.9750	108,214
Winter All Additional Kwh/KW	2,336,220	2.7090	63,288
Summer, All Kwh/KW	216,694,268	2.7090	5,870,248
Energy Charge - Schedule 201			
Winter 1st 100 Kwh/KW	2,722,361	4.0500	110,256
Winter All Additional Kwh/KW	2,336,220	2.7590	64,456
Summer, All Kwh/KW	216,694,268	2.7590	5,978,595
Additional costs for Primary Service	388,834		43,287
Totals	222,051,683		24,343,810
	Annual Average Ra	te (cents/Kwh)	10.963

Data source: Pacific Power's 2013 State of Oregon General Rate Case, Oregon Public Utilities Commission Case No. UE-263, Stipulation Agreement Exhibit D, page 5.

# PacifiCorp 2017 - 2018 Average Irrigation Power Price Calculations

State of Washington

## PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet Calendar Year 2017 and 2018 Irrigation Rate Summary

Period	Number	Total	Total	Average
	of Days	Revenue	Usage	Rate
		(\$)	(Kwh)	(cents/Kwh)
Jan 1, 2017 - Mar 31, 2017	90	12,537,614	148,745,367	8.429
Apr 1, 2017 - May 7, 2017	37	12,537,614	148,745,367	8.429
May 8, 2017 - Jul 31, 2017	85	12,455,804	148,745,367	8.374
Aug 1, 2017 - Sep 14, 2017	45	12,492,991	148,745,367	8.399
Sep 15, 2017 - Sep 30, 2017	16	12,799,928	148,745,367	8.605
Oct 1, 2017 - Nov 29, 2017	60	12,698,781	148,745,367	8.537
Nov 30, 2017 - Mar 31, 2018	122	12,698,781	148,745,367	8.537
Apr 1, 2018 - Jul 31, 2018	122	13,191,128	148,745,367	8.868
Aug 1, 2018 - Oct 31, 2018	92	13,125,680	148,745,367	8.824
Nov 1, 2018 - Dec 31, 2018	61	12,542,598	148,745,367	8.432
Calendar Year 2017		12,565,183	148,745,367	8.447
Calendar Year 2018		12,944,847	148,745,367	8.703

PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Rates Effective January 1, 2017 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 92 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge							
Three Phase < 301 KW	421.71	370.00					156,033
Three Phase > 300 KW	13.00	1,504.00					19,552
Annual Load Size KW Charge							
Single Phase	3,152	26.0200					82,028
Three Phase < 51 KW	51,993	26.0200					1,352,855
Three Phase < 301 KW	40,499	18.1000					733,038
Three Phase > 300 KW	5,276	14.1600					74,708
Single Phase Net Minimum Bills Adjustment							43,722
Three Phase Net Minimum Bills Adjustment							145,932
Energy Charges (Cents/Kwh)	148,745,367	7.0350	0.3300	0.0000	0.0590	(0.7470)	9,931,728
Excess Kvar Charges							30,337
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						12,537,614

Annual Average Rate (cents/Kwh)

# PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet Actual Rates Effective April 1, 2017 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 92 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge							
Three Phase < 301 KW	421.71	370.00					156,033
Three Phase > 300 KW	13.00	1,504.00					19,552
Annual Load Size KW Charge							
Single Phase	3,152	26.0200					82,028
Three Phase < 51 KW	51,993	26.0200					1,352,855
Three Phase < 301 KW	40,499	18.1000					733,038
Three Phase > 300 KW	5,276	14.1600					74,708
Single Phase Net Minimum Bills Adjustment							43,722
Three Phase Net Minimum Bills Adjustment							145,932
Energy Charges (Cents/Kwh)	148,745,367	7.0350	0.3300	0.0000	0.0590	(0.7470)	9,931,728
Excess Kvar Charges							30,337
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						12,537,614

Annual Average Rate (cents/Kwh)

PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Rates Effective May 8, 2017 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 92 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge							
Three Phase < 301 KW	421.71	370.00					156,033
Three Phase > 300 KW	13.00	1,504.00					19,552
Annual Load Size KW Charge							
Single Phase	3,152	26.0200					82,028
Three Phase < 51 KW	51,993	26.0200					1,352,855
Three Phase < 301 KW	40,499	18.1000					733,038
Three Phase > 300 KW	5,276	14.1600					74,708
Single Phase Net Minimum Bills Adjustment							43,722
Three Phase Net Minimum Bills Adjustment							145,932
Energy Charges (Cents/Kwh)	148,745,367	7.0350	0.3300	0.0000	0.0040	(0.7470)	9,849,918
Excess Kvar Charges							30,337
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						12,455,804

Annual Average Rate (cents/Kwh)

PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Rates Effective August 1, 2017 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 92 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge							
Three Phase < 301 KW	421.71	370.00					156,033
Three Phase > 300 KW	13.00	1,504.00					19,552
Annual Load Size KW Charge							
Single Phase	3,152	26.0200					82,028
Three Phase < 51 KW	51,993	26.0200					1,352,855
Three Phase < 301 KW	40,499	18.1000					733,038
Three Phase > 300 KW	5,276	14.1600					74,708
Single Phase Net Minimum Bills Adjustment							43,722
Three Phase Net Minimum Bills Adjustment							145,932
Energy Charges (Cents/Kwh)	148,745,367	7.0350	0.3550	0.0000	0.0040	(0.7470)	9,887,105
Excess Kvar Charges							30,337
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						12,492,991

Annual Average Rate (cents/Kwh)

# PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet Actual Rates Effective September 15, 2017 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 92 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge	404.74	270.00					450,000
Three Phase < 301 KW	421.71	379.00					159,828
Three Phase > 300 KW	13.00	1,539.00					20,007
Annual Load Size KW Charge							
Single Phase	3,152	26.6300					83,951
Three Phase < 51 KW	51,993	26.6300					1,384,571
Three Phase < 301 KW	40,499	18.5300					750,453
Three Phase > 300 KW	5,276	14.4900					76,449
Single Phase Net Minimum Bills Adjustment							43,722
Three Phase Net Minimum Bills Adjustment							145,932
Energy Charges (Cents/Kwh)	148,745,367	7.2030	0.3550	0.0000	0.0040	(0.7470)	10,136,997
Excess Kvar Charges							30,337
							22,007
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						12,799,928

Annual Average Rate (cents/Kwh)

PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Rates Effective October 1, 2017 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 92 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge							
Three Phase < 301 KW	421.71	379.00					159,828
Three Phase > 300 KW	13.00	1,539.00					20,007
Annual Load Size KW Charge							
Single Phase	3,152	26.6300					83,951
Three Phase < 51 KW	51,993	26.6300					1,384,571
Three Phase < 301 KW	40,499	18.5300					750,453
Three Phase > 300 KW	5,276	14.4900					76,449
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment							43,722 145,932
	440.745.007	7,0000	0.0550	0.0000	0.0040	(0.0450)	40.005.050
Energy Charges (Cents/Kwh)	148,745,367	7.2030	0.3550	0.0000	0.0040	(0.8150)	10,035,850
Excess Kvar Charges							30,337
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						12,698,781

Annual Average Rate (cents/Kwh)

PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Rates Effective November 30, 2017 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 92 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge	404.74	270.00					450,000
Three Phase < 301 KW	421.71	379.00					159,828
Three Phase > 300 KW	13.00	1,539.00					20,007
Annual Load Size KW Charge							
Single Phase	3,152	26.6300					83,951
Three Phase < 51 KW	51,993	26.6300					1,384,571
Three Phase < 301 KW	40,499	18.5300					750,453
Three Phase > 300 KW	5,276	14.4900					76,449
Single Phase Net Minimum Bills Adjustment							43,722
Three Phase Net Minimum Bills Adjustment							145,932
Energy Charges (Cents/Kwh)	148,745,367	7.2030	0.3550	0.0000	0.0040	(0.8150)	10,035,850
Excess Kvar Charges							30,337
Ĭ							, , , , , , , , , , , , , , , , , , ,
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						12,698,781

Annual Average Rate (cents/Kwh)

# PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet Actual Rates Effective April 1, 2018 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 93 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge							
Three Phase < 301 KW	421.71	379.00					159,828
Three Phase > 300 KW	13.00	1,539.00					20,007
Annual Load Size KW Charge							
Single Phase	3,152	26.6300					83,951
Three Phase < 51 KW	51,993	26.6300					1,384,571
Three Phase < 301 KW	40,499	18.5300					750,453
Three Phase > 300 KW	5,276	14.4900					76,449
Single Phase Net Minimum Bills Adjustment Three Phase Net Minimum Bills Adjustment							43,722 145,932
Energy Charges (Cents/Kwh)	148,745,367	7.2030	0.3550	0.3310	0.0040	(0.8150)	10,528,197
Excess Kvar Charges							30,337
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						13,191,128

Annual Average Rate (cents/Kwh)

PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Rates Effective August 1, 2018 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 93 (cents/Kwh)	Schedule 95 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge							
Three Phase < 301 KW	421.71	379.00					159,828
Three Phase > 300 KW	13.00	1,539.00					20,007
Annual Load Size KW Charge							
Single Phase	3,152	26.6300					83,951
Three Phase < 51 KW	51,993	26.6300					1,384,571
Three Phase < 301 KW	40,499	18.5300					750,453
Three Phase > 300 KW	5,276	14.4900					76,449
Single Phase Net Minimum Bills Adjustment							43,722
Three Phase Net Minimum Bills Adjustment							145,932
Energy Charges (Cents/Kwh)	148,745,367	7.2030	0.3110	0.3310	0.0040	(0.8150)	10,462,749
Excess Kvar Charges							30,337
Misc Charges/(Credits)							(32,319)
Totals	148,745,367						13,125,680

Annual Average Rate (cents/Kwh)

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Rates Effective November 1, 2018 and Normalized 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Schedule 191 (cents/Kwh)	Schedule 93 (cents/Kwh)	Schedule 95 (cents/Kwh)	Schedule 97 (cents/Kwh)	BPA ResEx Credit (cents/Kwh)	Total Charges (\$)
Annual Load Size Charge								
Three Phase < 301 KW	421.71	379.00						159,828
Three Phase > 300 KW	13.00	1,539.00						20,007
Annual Load Size KW Charge								
Single Phase	3,152	26.6300						83,951
Three Phase < 51 KW	51,993	26.6300						1,384,571
Three Phase < 301 KW	40,499	18.5300						750,453
Three Phase > 300 KW	5,276	14.4900						76,449
Single Phase Net Minimum Bills Adjustment								43,722
Three Phase Net Minimum Bills Adjustment								145,932
Energy Charges (Cents/Kwh)	148,745,367	7.2030	0.3110	0.3310	0.0040	(0.3920)	(0.8150)	9,879,667
Excess Kvar Charges								30,337
Misc Charges/(Credits)								(32,319)
Totals	148,745,367							12,542,598

Annual Average Rate (cents/Kwh)

PacifiCorp Washington Irrigation Rate Schedule 40 Worksheet
Actual Base Rates in Effect during CY 2013 and Normalized CY 2013 Usage from the 2014 Washington General Rate Case

Charge Type	Units	Tariff Base Rate	Total Charges (\$)
Annual Load Size Charge			
Three Phase < 301 KW	421.71	357.00	150,550
Three Phase > 300 KW	13.00	1,457.00	18,941
Annual Load Size KW Charge			
Single Phase	3,152	25.2659	79,651
Three Phase < 51 KW	51,993	25.1712	1,308,725
Three Phase < 301 KW	40,499	17.5284	709,890
Three Phase > 300 KW	5,276	13.7179	72,376
  Single Phase Net Minimum Bills Adjustment			43,722
Three Phase Net Minimum Bills Adjustment			145,932
Energy Charges (Cents/Kwh)	148,745,367	6.8160	10,138,484
Excess Kvar Charges			30,337
Misc Charges/(Credits)			(32,319)
Totals	148,745,367		12,666,288
	Annual Average Ra	te (cents/Kwh)	8.515

### Notes:

<sup>1)</sup> Data Source - Pacific Power's 2014 State of Washington General Rate Case Filing, Washington Utilities and Transportation Commission, Docket No. UE-140762, Exhibit No. JRS-6 to the testimony of Joelle R. Steward.