

Appendix K

Upper Klamath Basin Irrigation Power Cost Calculations

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
Summary of Weighted Average Per-unit Power Costs for Upper Klamath Basin Irrigation/Drainage Customers
Calendar Years 2017 and 2018

Year	Oregon On-Project Average Per-unit Power Cost (cents/Kwh)	Oregon Off-Project Average Per-unit Power Cost (cents/Kwh)	California On-Project Average Per-unit Power Cost (cents/Kwh)	Combined Upper Klamath Basin Average Per-unit Power Cost (cents/Kwh)
2017	11.076	11.043	15.031	11.801
2018	11.046	11.029	15.443	11.860
Weighted Average	11.061	11.036	15.237	11.830

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Summary of Weighted Average Per-unit Power Costs for Upper Klamath Basin Irrigation/Drainage Customers
Calendar Years 2017 and 2018

PacifiCorp Ave Rates	2017	2018
Oregon (cents/Kwh)	11.043	11.029
California (cents/Kwh)	15.417	15.476

2017 Summary

Sector	Base PacifiCorp Load (Kwh)	Base PacifiCorp Cost (\$)	USBR Load (Kwh)	USBR Costs (\$)	Sampled Irrigation District Load (kwh)	Sampled Irrigation District Cost (\$)	Total Sector Load (Kwh)	Total Sector Cost (\$)	Sector Average Rate (cents/Kwh)
Oregon On-Project	50,384,432	5,564,005	1,027,428	136,812	588,140	58,940	52,000,000	5,759,758	11.076
Oregon Off-Project	44,000,000	4,858,966	0	0	0	0	44,000,000	4,858,966	11.043
California On-Project	18,746,980	2,890,190	0	0	3,253,020	416,597	22,000,000	3,306,787	15.031
Total Klamath Project	113,131,412		1,027,428		3,841,160		118,000,000	13,925,511	11.801

2018 Summary

Sector	Base PacifiCorp Load (Kwh)	Base PacifiCorp Cost (\$)	USBR Load (Kwh)	USBR Costs (\$)	Sampled Irrigation District Load (kwh)	Sampled Irrigation District Cost (\$)	Total Sector Load (Kwh)	Total Sector Cost (\$)	Sector Average Rate (cents/Kwh)
Oregon On-Project	50,811,123	5,603,721	586,977	77,860	601,900	62,556	52,000,000	5,744,137	11.046
Oregon Off-Project	44,000,000	4,852,554	0	0	0	0	44,000,000	4,852,554	11.029
California On-Project	20,945,400	3,241,521	0	0	1,054,600	156,002	22,000,000	3,397,522	15.443
Total Klamath Project	115,756,523		586,977		1,656,500		118,000,000	13,994,214	11.860

2017-2018 Combined Figures

Sector	Base PacifiCorp Load (Kwh)	Base PacifiCorp Cost (\$)	USBR Load (Kwh)	USBR Costs (\$)	Sampled Irrigation District Load (kwh)	Sampled Irrigation District Cost (\$)	Total Sector Load (Kwh)	Total Sector Cost (\$)	Sector Average Rate (cents/Kwh)
Oregon On-Project	101,195,556	11,167,727	1,614,404	214,672	1,190,040	121,497	104,000,000	11,503,895	11.061
Oregon Off-Project	88,000,000	9,711,520	0	0	0	0	88,000,000	9,711,520	11.036
California On-Project	39,692,380	6,131,711	0	0	4,307,620	572,599	44,000,000	6,704,310	15.237
Total Klamath Project	228,887,936		1,614,404		5,497,660		236,000,000	27,919,725	11.830

USBR/Klamath Project - AWIA Power Cost Benchmark Analysis
Summary of the Klamath Project's USBR Historical Power Costs and Usage
2017 - 2018

Year	Irrigation Power Costs (\$)	Irrigation Power Usage (Kwh)	Irrigation Per-unit Per-Unit Power Cost (\$/Kwh)	Non-Irrigation Power Costs (\$)	Non-Irrigation Power Usage (Kwh)	Non- Irrigation Per-Unit Power Cost (\$/Kwh)	Total Power Costs (\$)	Total Power Usage (Kwh)	Overall Per-Unit Power Cost (\$/Kwh)
2017	136,812	1,027,428	13.316	125,474	1,014,848	12.364	262,287	2,042,276	12.843
2018	77,860	586,977	13.265	82,533	655,547	12.590	160,393	1,242,524	12.909
Average	214,672	1,614,404	13.297	208,008	1,670,396	12.453	422,680	3,284,800	12.868

Note: 1) Reclamation's Klamath Project power costs not associated with agricultural irrigation activities (such as flood control) were excluded from the calculation of average 2017 - 2018 irrigation/drainage power costs in the Upper Klamath Basin.