

Idaho Public Utilities Commission
Office of the Secretary
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Boise, Idaho

Exhibit 3

Exhibit 3
Klamath Hydro Projects
Customer Benefit Analysis
February 25, 2010

Customer Benefit Analysis:
Revenue Requirement

Market Value of Replacement Power
Cost of Operations:
Less: Ongoing Operations-
Current Investment Cost with Process Costs
Operations Capital
Operations O&M
Total Cost of Operations
Less: Cost of Settlement
Implementation Capital
Implementation O&M
Decommission Cost
Customer Surcharge
Lost Generation
Total Cost of Relicensing
Total Cost of Operations with Settlement

Alternative 1 Relicense FERC Alternative	Alternative 2 Final Settlement Alternative	Variance Alternative 1 Minus Alternative 2
Klamath-2009P44R-RF-FA1	Klamath-2009P44R-FS-FA2	

44-Year Present Value of Revenue Requirement-In Millions of Dollars

\$	999.160	\$	999.160	\$	-
	175.418		140.860		34.558
	73.804		15.403		58.401
	85.056		39.788		45.268
\$	334.278	\$	196.051	\$	138.227
	387.143		9.345		377.798
	20.812		53.028		(32.216)
	2.606		2.880		(0.274)
	-		124.364		(124.364)
	221.865		577.914		(356.049)
\$	632.426	\$	767.531	\$	(135.105)
\$	966.704	\$	963.582	\$	3.122

Levelized Annual Cost

Market Value of Replacement Power
Cost of Operations:
Less: Ongoing Operations -
Current Investment Cost with Process Costs
Operations Capital
Operations O&M
Total Cost of Operations
Less: Cost of Settlement
Implementation Capital
Implementation O&M
Decommission Cost
Customer Surcharge
Lost Generation
Total Cost of Settlement
Total Cost of Operations with Settlement

44-Year Nominal Levelized Cost-In Dollars per MWh

\$	100.83	\$	100.83	\$	-
	17.70		14.22		3.48
	7.45		1.55		5.90
	8.58		4.01		4.57
\$	33.73	\$	19.78	\$	13.95
	39.06		0.95		38.11
	2.10		5.35		(3.25)
	0.27		0.29		(0.02)
	-		12.55		(12.55)
	22.39		58.32		(35.93)
\$	63.82	\$	77.46	\$	(13.64)
\$	97.55	\$	97.24	\$	0.31

Key Assumptions:

1 Official Base Price Curve Date (Mid-C) with 45 CO2 Cost Adder	3/31/09	3/31/09
2 Analysis Period in Years	44	44
3 License Start Date (L1)	2014	2011
4 Discount Rate	7.13%	7.13%
5 Inflation Rate	1.9%	1.9%
6 Decommission Date-Iron Gate, Copco 1, Copco 2 and Fall Creek		2020
7 Decommission Date-JC Boyle		2020
8 Decommission Date-Eastside and Westside	2014	2012
9 Net Book Value at 12-31-2008 (In Thds of Dollars)	\$ 62,557	\$ 62,557
10 Relicensing Costs at 12-31-2008 (In Thds of Dollars)	\$ 56,574	\$ 56,574

Scenario: FERC FES Relicensing
 February 1, 2010

Category	Development	#	Proposed Measure / Facility	Source	Loaded Project Capital Cost (20%)	Annual O&M Cost	In Service Date (License Year)	End Date (License Year)	Total O&M Costs
Aquatics	Iron Gate	1	Iron Gate Upstream Fishway	a	\$43,114,000	\$157,500	5	40	\$5,670,000
		2	Iron Gate Downstream Fishway	a	\$28,391,000	\$56,200	5	40	\$2,023,200
		3	Iron Gate Spillway Improvement	a	\$1,165,000	\$11,200	5	40	\$403,200
		4	100% Iron Gate Hatchery Funding	b	\$0	\$125,000	1	40	\$5,000,000
		5	25% Iron Gate Hatchery Chinook Marking	b	\$1,024,000	\$118,700	1	40	\$4,748,000
	Fall Creek	6	Fall Creek Upstream Fishway	a	\$116,000	\$2,000	5	40	\$72,000
		7	Fall Creek Downstream Fishway	a	\$830,000	\$2,000	5	40	\$72,000
		8	Fall Creek Tailrace Barrier	a	\$198,000	\$3,000	3	40	\$114,000
		9	Rearing Pond Rehabilitation and Operations	b	\$240,000	\$39,000	1	40	\$1,560,000
		10	Spring Creek Upstream Fishway	a	\$350,000	\$2,000	5	40	\$72,000
Copco No. 2	11	Spring Creek Downstream Fishway	a	\$391,000	\$2,000	5	40	\$72,000	
	12	Copco 2 Upstream Fishway*	a	\$7,032,000	\$45,000	6	40	\$1,575,000	
	13	Copco 2 Downstream Fishway	a	\$38,927,000	\$56,200	6	40	\$1,967,000	
	14	Copco 2 Spillway Improvement	a	\$467,000	\$2,000	6	40	\$70,000	
	15	Copco 2 Tailrace Barrier	a	\$12,722,000	\$28,100	8	40	\$927,300	
	16	Copco 2 Bypass Channel Barrier / Impediment Modification	a	\$232,000	\$5,600	2	40	\$218,000	
	17	Copco 1 Upstream Fishway*	a	\$33,407,000	\$45,000	6	40	\$1,575,000	
	18	Copco 1 Downstream Fishway	a	\$44,000,000	\$56,200	6	40	\$1,967,000	
	19	Copco 1 Spillway Improvement	a	\$4,656,000	\$2,000	6	40	\$70,000	
	20	J.C. Boyle Upstream Fishway	a	\$16,762,000	\$45,000	4	40	\$1,665,000	
J.C. Boyle	21	J.C. Boyle Downstream Fishway	a	\$44,000,000	\$56,200	4	40	\$2,079,000	
	22	J.C. Boyle Spillway Improvement	a	\$4,656,000	\$2,000	4	40	\$74,000	
	23	J.C. Boyle Tailrace Barrier	a	\$11,932,000	\$28,100	4	40	\$1,039,700	
	24	J.C. Boyle Synchronous Bypass Valve	c	\$7,393,000	\$5,800	1	40	\$232,000	
	25	J.C. Boyle Bypass Channel Slope Restoration / Impediment Modification	b	\$3,636,000	\$5,800	2	40	\$218,000	
	26	Eliminate Shovel & Negro Creek Screened Diversions	b	\$986,000	\$8,900	2	40	\$347,100	
	27	Fish Passage Resource & Disease Management Plan and Data Collection	d	\$0	\$50,000	1	40	\$2,000,000	
	28	Sediment and Gravel Resource Management Plan	b	\$476,000	\$34,000	1	40	\$1,360,000	
	29	Terrestrial Resources Measures	b	\$1,116,000	\$82,800	2	40	\$3,229,200	
	30	Threatened and Endangered Species - Bald Eagle Management Plan	b	\$18,000	\$15,370	1	40	\$614,800	
Water Quality / Quantity	31	Recreation Enhancements and Management	b	\$18,540,000	variable	1	40	\$6,677,440	
	32	Land Use - Visual Abatement Planting & Vegetation	b	\$581,000	\$23,000	2	40	\$897,000	
	33	Cultural Resources Mapping and Mitigation Measures	b	\$10,012,000	\$125,110	2	40	\$4,046,440	
	34	J.C. Boyle Reservoir Aeration System	d	\$1,306,000	\$25,000	1	40	\$1,000,000	
	35	Copco Reservoir - Epilimnetic Aeration / Mixing	d	\$3,796,000	\$35,000	3	40	\$1,330,000	
	36	Temperature Control Device - Copco Reservoir	e	\$38,520,000	\$6,000	8	40	\$165,000	
	37	Iron Gate Reservoir - Epilimnetic Aeration / Mixing	d	\$4,032,000	\$30,000	3	40	\$1,140,000	
	38	Temperature Control Device - Iron Gate Reservoir	e	\$36,960,000	\$5,000	5	40	\$185,000	
	39	Iron Gate Turbine Venting	d	\$100,000	\$1,000	1	40	\$40,000	
	40	Water Quality Resource Management Plan	d	\$160,000	\$20,000	2	40	\$760,000	
Decommissioning	41	Temperature Control Feasibility Plan	d	\$100,000	\$0	2	40	\$0	
	42	Microsystem Monitoring in Project Reservoirs and Downstream of Iron Gate Dam	b	\$26,000	\$48,000	2	40	\$1,872,000	
	43	Water Quantity and Flow Measurement	b	\$442,000	\$47,380	2	40	\$1,847,820	
	44	Decommission East Side and West Side Facilities	d	\$2,642,500	\$3,171,000	\$0	4	\$61,618,400	

Category	Development	#	Proposed Measure / Facility	Source	Loaded Project Capital Cost (20%)	Annual O&M Cost	In Service Date (License Year)	End Date (License Year)	Total O&M Costs
Terrestrial Wildlife	Entire Project	29	Terrestrial Resources Measures	b	\$1,116,000	\$82,800	2	40	\$3,229,200
Recreation	Entire Project	31	Recreation Enhancements and Management	b	\$18,540,000	variable	1	40	\$6,677,440
Land Use	Entire Project	32	Land Use - Visual Abatement Planting & Vegetation	b	\$581,000	\$23,000	2	40	\$897,000
Cultural	Entire Project	33	Cultural Resources Mapping and Mitigation Measures	b	\$10,012,000	\$125,110	2	40	\$4,046,440
Water Quality / Quantity	J.C. Boyle	34	J.C. Boyle Reservoir Aeration System	d	\$1,306,000	\$25,000	1	40	\$1,000,000
	Copco	35	Copco Reservoir - Epilimnetic Aeration / Mixing	d	\$3,796,000	\$35,000	3	40	\$1,330,000
	Iron Gate	36	Temperature Control Device - Copco Reservoir	e	\$38,520,000	\$6,000	8	40	\$165,000
Entire Project	37	Iron Gate Reservoir - Epilimnetic Aeration / Mixing	d	\$4,032,000	\$30,000	3	40	\$1,140,000	
	38	Temperature Control Device - Iron Gate Reservoir	e	\$36,960,000	\$5,000	5	40	\$185,000	
	39	Iron Gate Turbine Venting	d	\$100,000	\$1,000	1	40	\$40,000	
Decommissioning	40	Water Quality Resource Management Plan	d	\$160,000	\$20,000	2	40	\$760,000	
	41	Temperature Control Feasibility Plan	d	\$100,000	\$0	2	40	\$0	
	42	Microsystem Monitoring in Project Reservoirs and Downstream of Iron Gate Dam	b	\$26,000	\$48,000	2	40	\$1,872,000	
	43	Water Quantity and Flow Measurement	b	\$442,000	\$47,380	2	40	\$1,847,820	

Category	Development	#	Proposed Measure / Facility	Source	Loaded Project Capital Cost (20%)	Annual O&M Cost	In Service Date (License Year)	End Date (License Year)	Total O&M Costs
Decommissioning	East Side / West Side	42	Decommission East Side and West Side Facilities	d	\$2,642,500	\$3,171,000	\$0	4	\$61,618,400
Generation Impacts	J.C. Boyle	43	470 cfs/40% Bypass Flow, 2500 cfs Water Right, 2"hr Ramp Rate	d	(137,560)	1	1	40	
	Copco No. 2	44	Release 70 cfs at Copco No. 2 bypass (60 cfs more than current)	d	(6,551)	1	1	40	
	Fall Creek	45	Release 5 cfs into Fall Creek bypass (4.5 cfs more than current)	d	(2,120)	1	1	40	

Sources:
 a - Escalated costs based upon CH2M HILL 422/2008 cost estimates, PacifiCorp, April 28, 2006. Alternative to the Joint United States Fish and Wildlife Service and National Marine Fisheries Service Preliminary Fishway Precisions, Attachment E: Cost Estimates, Prepared by CH2M Hill, Portland, Oregon.
 b - Federal Energy Regulatory Commission, November 2007. Final Environmental Impact Statement for Hydropower License, Klamath Hydroelectric Project FERC Project No. 2082-027, FERC/EIS-0201F, November 2007, Appendix A.
 c - PacifiCorp Responses to Deficiency of License Application - Klamath Hydroelectric Project (FERC No. 2082-027), Table D2.04, July 21, 2004.
 d - PacifiCorp internal cost/generation impact estimate
 e - PacifiCorp, August 1, 2005. Conceptual Design and Preliminary Screening of Temperature Control Alternatives.
 Notes:
 *Copco No. 2 Upstream Fishway would connect to Copco No. 1 Upstream Fishway such that adults do not enter Copco No. 2 reservoir. This would eliminate need for Copco No. 1 tailrace barrier consistent with

Scenario: Final Klamath Hydroelectric Settlement Agreement
February 1, 2010

Category	Development	#	KHSA IM#	Proposed Measure / Facility	Source	Loaded Project Capital Cost	Annual O&M Cost	In Service Date (License Year)	End Date (License Year)	Total O&M Costs
Process Costs	Entire Project	1		Implementation and Management Costs	a	\$0	\$0	1	11	\$16,800,000
Flow Release / Measurement	J.C. Boyle	2	9	J.C. Boyle Powerhouse Gage ¹	a	\$0	\$0	1	11	\$0
	Iron Gate	3	12	J.C. Boyle Bypass Reach and Spencer Creek Gaging	a	\$90,000	\$15,000	1	11	\$165,000
	Iron Gate	4	5	Iron Gate Flow Variability	a	\$0	\$15,000	1	11	\$165,000
Water Quality	Iron Gate	5	3	Iron Gate Turbine Venting	a	\$120,000	\$1,000	1	11	\$11,000
	Entire Project	6	15	Water Quality Monitoring	b	\$0	\$500,000	1	11	\$5,500,000
	Entire Project	7	11	Interim Water Quality Improvements	b	\$6,480,000	\$560,000	4	11	\$5,230,000
	Entire Project	8	10	Water Quality Conference	b	\$0	\$100,000	1	1	\$100,000
Habitat Enhancement	J.C. Boyle	9	7	J.C. Boyle Gravel Placement and/or Habitat Enhancement	b	\$180,000	\$150,000	1	11	\$1,500,000
	Copco	10	8	J.C. Boyle Bypass Barrier Removal	a	\$600,000	\$0	3	11	\$0
	Entire Project	11	16	Water Diversions	b	\$0	\$75,000	10	10	\$75,000
Hatcheries	Entire Project	12	4	Hatchery and Genetics Management Plan	a	\$0	\$600,000	1	19	\$1,400,000
	Entire Project	13	18	Hatchery Funding ²	b	\$1,620,000	\$750,000	1	11	\$8,250,000
	Entire Project	14	19a	Hatchery Production Continuity - Iron Gate Hatchery Study	a	\$0	\$500,000	1	1	\$500,000
	Entire Project	15	19b	Hatchery Production Continuity - Alternative Development	a	\$0	\$5,273,000	10	10	\$5,273,000
Lands	Entire Project	16	20	Hatchery Funding After Removal of Iron Gate Dam	a/b	\$0	\$1,250,000	12	19	\$10,000,000
	Entire Project	17	21.A	BLM Road Maintenance	b	\$0	\$15,000	1	11	\$165,000
	Entire Project	18	21.B	BLM Weed Management	b	\$0	\$10,000	1	11	\$110,000
Cultural Lands	Entire Project	19	21.C	BLM Cultural Resource Management	b	\$0	\$10,000	1	11	\$110,000
	Entire Project	20	21.D	BLM Road Management Plan	b	\$0	\$11,818	1	11	\$130,000
Restoration & Study Funding	California	21	2	California Klamath Restoration Fund / Coho Enhancement Fund	b	\$0	\$510,000	1	11	\$5,610,000
	Entire Project	22	6	Fish Disease Relationship and Control Studies	b	\$0	\$500,000	1	1	\$500,000
						\$9,090,000				\$71,694,000
Decommissioning	East Side / West Side	23		Decommission East Side and West Side Facilities	a	\$2,642,500	\$3,171,000		4	
Customer Surcharge	Entire Project	24		\$17.200 million per year customer surcharge (2010 - 2019)			\$17,200,000	1	10	\$172,000,000
										\$172,000,000

Category	Development	#	Baseline Generation (MWh)	Annual Generation Impact from Baseline (MWh)	In Service Date (License Year)	End Date (License Year)
Generation Impacts	J.C. Boyle	25	0	0	1	11
	J.C. Boyle	26	0	17,700	2	11
	East Side	27	15,417	(15,417)	4	11
	West Side	28	3,419	(3,419)	4	11
	J.C. Boyle	29	330,296	(330,296)	11	11
	Copco No. 1	30	105,482	(105,482)	11	11
	Copco No. 2	31	134,632	(134,632)	11	11
	Fall Creek	32	12,041	(2,120)	1	11
	Iron Gate	33	115,533	(115,533)	11	11

Sources:

- a - PacifiCorp internal cost estimate.
- b - Settlement agreement cost estimate / cost cap.

Notes:

- 1 This interim measure represents the continuation of an existing commitment with the funding captured in existing O&M costs.
- 2 Hatchery funding identified here is an increment above the current funding level contained in existing O&M budget.
- 3 Interim Measure 14 generation benefit is modeled from water availability from 1959-2007 and is assumed to bring total J.C. Boyle generation back in line with historic generation of 330,296 MWh per year beginning January 1, 2011.