

**BEFORE THE PUBLIC UTILITY COMMISSION  
OF OREGON**

UE 219

In the Matter of

PACIFICORP, dba PACIFIC POWER

Application to Implement the Provisions of  
Senate Bill 76.

ORDER

DISPOSITION: DEPRECIATION SCHEDULES ADOPTED

**I. INTRODUCTION**

PacifiCorp, dba Pacific Power (Pacific Power or the Company), owns and operates the Klamath Hydroelectric Project (Klamath Project). The Klamath Project is a 169 megawatt hydroelectric facility on the Klamath River in southern Oregon and northern California that includes, among other facilities, the following four mainstem hydroelectric dams on the Klamath River: Iron Gate, Copco No. 1, Copco No. 2, and J.C. Boyle. The Company operates the Klamath Project under one Federal Energy Regulatory Commission (FERC) license (FERC Project No. 2082). The Klamath Project is partially located on federal lands administered by the Bureau of Land Management and the Bureau of Reclamation.

During FERC relicensing proceedings, settlement discussions occurred among Pacific Power and stakeholders to remove the Klamath Project. As a result, an agreement in principle, the Klamath Hydroelectric Settlement Agreement (KHSA), was reached among Pacific Power, the states of Oregon and California and the United States Department of the Interior.<sup>1</sup> On July 14, 2009, the Oregon legislature passed Senate Bill (SB) 76 to facilitate removal of the Klamath Project pursuant to the KHSA. Among other things, SB 76 establishes procedures to implement the removal of certain Klamath Project dams.

Section 3 of SB 76, codified as ORS 757.734, requires the Public Utility Commission of Oregon (Commission) to determine new depreciation schedules that facilitate removal of certain Klamath Project dams by 2020.<sup>2</sup> ORS 757.734(2) provides that once the

<sup>1</sup> A more expansive description of the Klamath Project and the KHSA will be provided in a subsequent order addressing all issues in this proceeding other than those related to depreciation schedules.

<sup>2</sup> Pacific Power observes, “[t]he ‘Whereas’ clauses to SB 76 indicate that the policy underlying these provisions was to ‘facilitate removal of the Klamath dams’ by requiring the Commission to ‘set rates that allow Pacific

depreciation schedule is determined, the “Commission shall use the depreciation schedules \* \* \* to establish rates and tariffs for the recovery of Oregon’s allocated share of undepreciated amounts prudently invested by Pacific Power in a Klamath River dam.” ORS 757.734(1) requires the Commission to approve the new depreciation schedules within six months of the execution of the KHSA. As the KHSA was executed on February 18, 2010, a new depreciation schedule must be determined by August 18, 2010.

## II. PROCEDURAL HISTORY

On March 18, 2010, Pacific Power filed Advice No. 10-008, as well as an application and direct testimony to implement the provisions of SB 76. Testimony by Andrea L. Kelly addressed the adoption of new depreciation schedules.<sup>3</sup> On June 4, 2010, Staff filed testimony recommending specific proposed depreciation schedules for each of the four dams. On June 21, 2010, Pacific Power filed reply testimony addressing and agreeing with Staff’s proposed depreciation schedules. No other party filed testimony.

While Pacific Power proposed a depreciation methodology in this case, the Company included proposed depreciation rates in its pending general rate case, docket UE 217.<sup>4</sup> On July 12, 2010, an uncontested stipulation was filed in UE 217. The parties to that Stipulation agree that the Commission should implement the new depreciation schedules as determined in this docket.<sup>5</sup>

## III. DISCUSSION

### A. The Proposed Depreciation Rates Conform to the Requirements of ORS 757.734

#### 1. Parties’

Pacific Power proposes depreciation of the net book value of the Klamath Project on a straight-line basis over the remaining life of the plant, anticipated to end as early as December 31, 2019.<sup>6</sup> Under Pacific Power’s proposed methodology, the net book value would be adjusted each month to reflect impact from additions, retirements or any associated net salvage, as would the straight-line depreciation over the remaining period. Pacific Power recommends applying this depreciation methodology to the J. C. Boyle, Copco I, Copco II, and Iron Gate dams.<sup>7</sup> Pacific Power indicates that its proposal is consistent with the

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Power to recover Oregon’s fair share of Pacific Power’s undepreciated investment in the dams.” Pacific Power’s Brief on Depreciation Rate Issues at 3 (July 20, 2010).

<sup>3</sup> See PPL/200, Kelly/16, ll. 9-19.

<sup>4</sup> See Tab 6, adjustment 6.2, of the Company’s general revenue requirement exhibit, PPL/1102, as filed in UE 217 on March 1, 2010. Bryce Dalley sponsored these depreciation rates in testimony at PPL/1102, Dalley/25.

<sup>5</sup> See *In the matter of PacifiCorp, dba Pacific Power, Request for General Rate Revision*, docket UE 217, Stipulation at 3 (July 12, 2010).

<sup>6</sup> See PPL/200, Kelly/16, ll. 9-13.

<sup>7</sup> The Company did not propose that the new depreciation methodology be applied to the East Side and West Side dams, the two smaller facilities in the Klamath Project. In the Company’s last depreciation study, the Company established a small hydro decommissioning reserve. The costs to decommission East Side and West

Company's proposal in FERC relicensing proceedings, as well as with the provision in the KHSA that Pacific Power retains the responsibility to decommission these facilities.

Staff proposes depreciation schedules using a straight-line depreciation methodology and applies it to Oregon's share of the gross plant value for the four dams.<sup>8</sup> Staff obtained data from Pacific Power by FERC accounts for each of the four dams.<sup>9</sup> Staff divided the remaining net balance for each of the dams as of June 30, 2009, by the remaining 10.5-year life (the period between June 30, 2009, and December 31, 2019).<sup>10</sup> Staff calculated the straight-line depreciation rate as 6.4 percent.<sup>11</sup> Applying this rate to Oregon's share of the gross plant, valued at \$21.38 million, Staff computed a collective \$1.37 million annual depreciation expense for the four dams.<sup>12</sup> Based on these calculations, Staff recommends a depreciation schedule for each dam.<sup>13</sup>

Staff's calculations do not contain any salvage or cost of removal estimates, nor values for interim additions or interim retirements. Staff recommends that depreciation figures be adjusted as the net book value of the dams fluctuates each month due to capital additions and retirement activities—but not removal costs. Staff also recommends that plant balances and remaining life in the schedules (currently calculated from June 2009) be updated to December 2010 as a part of the Company's compliance filing in docket UE 217 prior to implementation of these depreciation rates on January 1, 2011. Staff indicates the updated plant balance should include changes from capital improvements but not removal costs.

In reply testimony, Pacific Power concurs with Staff's calculations. Pacific Power observes that Staff's calculations in the schedules for each dam varied in some respect from the Company's calculations (filed in docket UE 217), but that end results for the revenue requirement and depreciation rate are the same.<sup>14</sup>

## 2. Discussion

We adopt Staff's depreciation schedules, attached as Appendix A, for the J. C. Boyle, Copco I, Copco II, and Iron Gate dams. We direct Pacific Power to update these depreciation schedules to December 2010 as part of the Company's compliance filing in docket UE 217 prior to implementation of these depreciation rates on January 1, 2011. We also adopt the recommendation that as the net book value of the dams fluctuates each month due to capital additions and retirement activities, the associated depreciation rates will be adjusted to fully depreciate such capital improvements by the end of the expected life.

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Side will be charged against that reserve. Pacific Power indicates that the reserve balance will be evaluated and the accrual adjusted during the next depreciation study.

<sup>8</sup> See Staff/202.

<sup>9</sup> Staff/200, Peng 4, ll. 5-6.

<sup>10</sup> Staff/200, Peng/4, ll. 9-10.

<sup>11</sup> Staff/200, Peng/4, l. 11.

<sup>12</sup> Staff/200, Peng/4, ll. 11-13.

<sup>13</sup> Staff/202, Peng/1-9; Staff 200, Peng/5, Table I

<sup>14</sup> Pacific Power's Brief on Depreciation Rate Issues at p. 5.

**B. Implementation of New Depreciation Rates***1. Parties' Positions*

Pacific Power requested an effective date of January 1, 2011, for new depreciation rates for the Klamath Project. This date coincides with the effective date of new rates resulting from the stipulation filed in docket UE 217.<sup>15</sup> An uncontested stipulation was filed on July 12, 2010 in that docket. The parties to the UE 217 stipulation agree that the Commission should implement the new depreciation schedules determined in this docket.<sup>16</sup>

*2. Discussion*

We agree that implementation of new depreciation rates for the Klamath Project should take effect on the same day, January 1, 2011, as new rates resulting from resolution of Pacific Power's general rate case, docket UE 217. We will address implementation of the new depreciation rates for the Klamath Project by this date in a subsequent order entered in docket UE 217.

**IV. ORDER**

IT IS ORDERED that:

1. New depreciation schedules, attached as Appendix A, are adopted for the following four Klamath Hydroelectric Project dams owned and operated by PacifiCorp, dba Pacific Power: J. C. Boyle, Copco I, Copco II, and Iron Gate.
2. Implementation of new depreciation rates by January 1, 2011, will be addressed by a subsequent order entered in docket UE 217.
3. PacifiCorp, dba Pacific Power will update these new depreciation schedules to December 2010 as part of the Company's compliance filing in docket UE 217 prior to implementation of these depreciation rates on January 1, 2011.

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<sup>15</sup> See *In the Matter of PacifiCorp, dba Pacific Power, Request for General Rate Revision*, docket UE 217, Stipulation at 3.

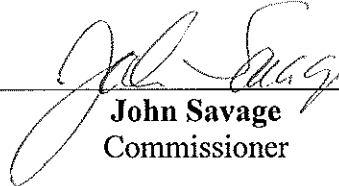
<sup>16</sup> *Id.*

4. As the net book value of the dams fluctuates each month due to capital additions and retirement activities, the associated depreciation rates will be adjusted to fully depreciate such capital improvements by the end of the expected life.

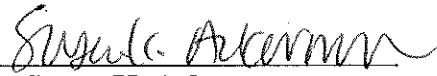
Made, entered, and effective AUG 18 2010.



**Ray Baum**  
Chairman



**John Savage**  
Commissioner



**Susan K. Ackerman**  
Commissioner



A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-014-0095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-013-0070(2). A party may appeal this order by filing a petition for review with the Court of Appeals in compliance with ORS 183.480-183.484.

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OREGON SUMMARY

Location Description	FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Remaining Life	Annual Depreciation	Depreciation Rate%	Oregon Allocation %
JC BOYLE HYDRO PLANT	303-398	LIFE SPAN	12/31/2019	8,824,019	(2,362,303)	6,461,716	10.5	615,401	6.974%	26.177%
IRON GATE HYDRO PLANT	330-398	LIFE SPAN	12/31/2019	5,693,376	(2,030,834)	3,662,542	10.5	348,813	6.127%	26.177%
COPCO #1 HYDRO PLANT	330-397	LIFE SPAN	12/31/2019	2,440,787	(1,138,151)	1,302,635	10.5	124,061	5.083%	26.177%
COPCO #2 HYDRO PLANT	330-398	LIFE SPAN	12/31/2019	4,422,986	(1,484,204)	2,938,782	10.5	279,884	6.328%	26.177%
TOTAL				21,381,167	(7,015,493)	14,365,674	10.5	1,368,159	6.3989%	26.177%

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Depreciation Schedule for 4 Klamath Hydro Dams - Total Company

JC BOYLE HYDRO PLANT-COMPANY

FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate%
[1]	[2]	[3]	[4]	[5]	[6]=[4]+[5]	[7]	[8]=[6]/[7]	[9]=[8]/[4]
3034900	LIFE SPAN	12/31/2019	30,123	(19,306)	10,817	10.5	1,030	3.42%
3301000	LIFE SPAN	12/31/2019	26,277	0	26,277	10.5	2,503	9.52%
3310000	LIFE SPAN	12/31/2019	0	0	0	10.5	-	-
3311000	LIFE SPAN	12/31/2019	2,367,202	(744,800)	1,622,402	10.5	154,514	6.53%
3313000	LIFE SPAN	12/31/2019	53,311	(12,641)	40,671	10.5	3,873	7.27%
3321000	LIFE SPAN	12/31/2019	13,458,694	(4,622,617)	8,836,078	10.5	841,531	6.25%
3322000	LIFE SPAN	12/31/2019	1,086,244	(213,717)	872,527	10.5	83,098	7.65%
3330000	LIFE SPAN	12/31/2019	8,686,453	(1,765,077)	6,921,376	10.5	659,179	7.59%
3340000	LIFE SPAN	12/31/2019	5,276,038	(871,520)	4,404,518	10.5	419,478	7.95%
3347000	LIFE SPAN	12/31/2019	906,455	(136,741)	769,714	10.5	73,306	8.09%
3351000	LIFE SPAN	12/31/2019	145,988	(70,273)	75,715	10.5	7,211	4.94%
3360000	LIFE SPAN	12/31/2019	886,710	(290,016)	596,693	10.5	56,828	6.41%
3910000	LIFE SPAN	12/31/2019	4,677	(3,036)	1,641	10.5	156	3.34%
3912000	LIFE SPAN	12/31/2019	748	(81)	667	10.5	64	8.49%
3920400	LIFE SPAN	12/31/2019	153,544	(44,611)	108,932	10.5	10,375	6.76%
3920500	LIFE SPAN	12/31/2019	47,660	(3,081)	44,580	10.5	4,246	8.91%
3920600	LIFE SPAN	12/31/2019	57,885	(29,705)	28,181	10.5	2,684	4.64%
3920900	LIFE SPAN	12/31/2019	7,507	(797)	6,710	10.5	639	8.51%
3940000	LIFE SPAN	12/31/2019	79,573	(44,029)	35,545	10.5	3,385	4.25%
3950000	LIFE SPAN	12/31/2019	23,346	(14,383)	8,963	10.5	854	3.66%
3970000	LIFE SPAN	12/31/2019	403,740	(135,490)	268,250	10.5	25,548	6.33%
3980000	LIFE SPAN	12/31/2019	6,764	(2,397)	4,367	10.5	416	6.15%

JC BOYLE HYDRO PLANT TOTAL			33,708,941	(9,024,317)	24,684,624		2,350,917	6.97%
COMPANY								

IRON GATE HYDRO PLANT-COMPANY		Accum						
FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate%
[1]	[2]	[3]	[4]	[5]	[6]=[4]+[5]	[7]	[8]=[6]/[7]	[9]=[8]/[4]
3301000	LIFE SPAN	12/31/2019	337,105	0	337,105	10.5	32,105	9.52%
3302000	LIFE SPAN	12/31/2019	4,601	(2,448)	2,154	10.5	205	4.46%
3311000	LIFE SPAN	12/31/2019	1,787,216	(746,799)	1,040,417	10.5	99,087	5.54%
3312000	LIFE SPAN	12/31/2019	2,270,295	(666,071)	1,604,224	10.5	152,783	6.73%
3313000	LIFE SPAN	12/31/2019	502,368	(148,867)	353,501	10.5	33,667	6.70%
3321000	LIFE SPAN	12/31/2019	12,100,121	(4,020,040)	8,080,081	10.5	769,532	6.36%
3322000	LIFE SPAN	12/31/2019	830,121	(409,014)	421,108	10.5	40,105	4.83%
3330000	LIFE SPAN	12/31/2019	1,949,245	(898,884)	1,050,361	10.5	100,034	5.13%
3340000	LIFE SPAN	12/31/2019	215,647	(140,587)	75,060	10.5	7,149	3.31%
3347000	LIFE SPAN	12/31/2019	53,011	(19,682)	33,328	10.5	3,174	5.99%
3351000	LIFE SPAN	12/31/2019	15,459	(7,942)	7,516	10.5	716	4.63%
3352000	LIFE SPAN	12/31/2019	0	0	0	10.5	-	-
3360000	LIFE SPAN	12/31/2019	1,076,116	(415,607)	660,509	10.5	62,906	5.85%
3910000	LIFE SPAN	12/31/2019	7,553	(5,158)	2,395	10.5	228	3.02%
3920400	LIFE SPAN	12/31/2019	25,091	(11,181)	13,910	10.5	1,325	5.28%
3930000	LIFE SPAN	12/31/2019	5,268	(3,681)	1,587	10.5	151	2.87%
3940000	LIFE SPAN	12/31/2019	24,956	(6,313)	18,643	10.5	1,776	7.11%
3950000	LIFE SPAN	12/31/2019	607	(32)	575	10.5	55	9.03%
3970000	LIFE SPAN	12/31/2019	544,052	(255,707)	288,345	10.5	27,461	5.05%
3980000	LIFE SPAN	12/31/2019	631	(49)	582	10.5	55	8.79%
IRON GATE HYDRO PLANT TOTAL			21,749,463	(7,753,061)	13,991,402		1,332,514	6.13%
COMPANY								



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COPCO #1 HYDRO PLANT-COMPANY

FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate%
[1]	[2]	[3]	[4]	[5]	[6]=[4]+[5]	[7]	[8]=[6]/[7]	[9]=[8]/[4]
3301000	LIFE SPAN	12/31/2019	143,005	0	143,005	10.5	13,620	9.52%
3302000	LIFE SPAN	12/31/2019	36,340	(34,000)	2,340	10.5	223	0.61%
3304000	LIFE SPAN	12/31/2019	1,030	(1,156)	(127)	10.5	(12)	0.00%
3311000	LIFE SPAN	12/31/2019	1,278,255	(469,036)	809,219	10.5	77,069	6.03%
3313000	LIFE SPAN	12/31/2019	87,722	(38,577)	49,145	10.5	4,680	5.34%
3321000	LIFE SPAN	12/31/2019	2,641,584	(1,887,263)	754,321	10.5	71,840	2.72%
3330000	LIFE SPAN	12/31/2019	3,582,357	(1,288,287)	2,294,070	10.5	218,483	6.10%
3340000	LIFE SPAN	12/31/2019	1,334,814	(549,941)	784,874	10.5	74,750	5.60%
3347000	LIFE SPAN	12/31/2019	59,036	(27,569)	31,467	10.5	2,997	5.08%
3351000	LIFE SPAN	12/31/2019	1,262	(644)	618	10.5	59	4.67%
3360000	LIFE SPAN	12/31/2019	105,442	(32,983)	72,458	10.5	6,901	6.54%
3900000	LIFE SPAN	12/31/2019	0	0	0	10.5	-	-
3920400	LIFE SPAN	12/31/2019	23,777	(10,167)	13,609	10.5	1,296	5.45%
3940000	LIFE SPAN	12/31/2019	6,784	(3,504)	3,280	10.5	312	4.60%
3970000	LIFE SPAN	12/31/2019	22,726	(4,764)	17,962	10.5	1,711	7.53%
<b>COPCO #1 HYDRO PLANT TOTAL</b>					<b>9,324,133</b>		<b>473,928</b>	<b>5.08%</b>
<b>COMPANY</b>					<b>(4,347,891)</b>		<b>4,976,243</b>	

COPCO #2 HYDRO PLANT-COMPANY

FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate%
[1]	[2]	[3]	[4]	[5]	[6]=[4]+[5]	[7]	[8]=[6]/[7]	[9]=[8]/[4]
3301000	LIFE SPAN	12/31/2019	20,914	0	20,914	10.5	1,992	9.52%
3311000	LIFE SPAN	12/31/2019	2,184,729	(760,806)	1,423,923	10.5	135,612	6.21%
3321000	LIFE SPAN	12/31/2019	2,954,724	(2,704,856)	249,869	10.5	23,797	0.81%
3330000	LIFE SPAN	12/31/2019	3,485,850	(1,421,954)	2,063,896	10.5	196,562	5.64%
3340000	LIFE SPAN	12/31/2019	6,553,106	(260,500)	6,292,606	10.5	599,296	9.15%
3347000	LIFE SPAN	12/31/2019	259,420	(124,611)	134,808	10.5	12,839	4.95%
3351000	LIFE SPAN	12/31/2019	0	0	0	10.5	-	
3360000	LIFE SPAN	12/31/2019	479,588	(95,507)	384,081	10.5	36,579	7.63%
3910000	LIFE SPAN	12/31/2019	1,934	(1,831)	103	10.5	10	0.51%
3912000	LIFE SPAN	12/31/2019	749	(81)	668	10.5	64	8.49%
3913000	LIFE SPAN	12/31/2019	1,572	(679)	892	10.5	85	5.41%
3920400	LIFE SPAN	12/31/2019	147,247	(38,575)	108,671	10.5	10,350	7.03%
3920600	LIFE SPAN	12/31/2019	180,294	(3,809)	176,485	10.5	16,808	9.32%
3920900	LIFE SPAN	12/31/2019	14,207	(762)	13,445	10.5	1,281	9.01%
3930000	LIFE SPAN	12/31/2019	3,367	(17)	3,350	10.5	319	9.48%
3940000	LIFE SPAN	12/31/2019	57,759	(39,436)	18,324	10.5	1,745	3.02%
3970000	LIFE SPAN	12/31/2019	534,770	(211,912)	322,859	10.5	30,748	5.75%
3972000	LIFE SPAN	12/31/2019	3,649	(511)	3,138	10.5	299	8.19%
3980000	LIFE SPAN	12/31/2019	12,523	(4,014)	8,509	10.5	810	6.47%
<b>COPCO #2 HYDRO PLANT TOTAL</b>			<b>16,896,402</b>	<b>(5,669,860)</b>	<b>11,226,542</b>		<b>1,069,194</b>	<b>6.33%</b>

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JC BOYLE HYDRO PLANT-OREGON

FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate%	Oregon Allocation%
3034900	LIFE SPAN	12/31/2019	7,885	(5,054)	2,832	10.5	270	3.42%	26.177%
3301000	LIFE SPAN	12/31/2019	6,879	0	6,879	10.5	655	9.52%	26.177%
3310000	LIFE SPAN	12/31/2019	0	0	0	10.5	0		26.177%
3311000	LIFE SPAN	12/31/2019	619,665	(194,967)	424,697	10.5	40,447	6.53%	26.177%
3313000	LIFE SPAN	12/31/2019	13,955	(3,309)	10,646	10.5	1,014	7.27%	26.177%
3321000	LIFE SPAN	12/31/2019	3,523,094	(1,210,066)	2,313,028	10.5	220,288	6.25%	26.177%
3322000	LIFE SPAN	12/31/2019	284,347	(55,945)	228,402	10.5	21,753	7.65%	26.177%
3330000	LIFE SPAN	12/31/2019	2,273,861	(462,046)	1,811,815	10.5	172,554	7.59%	26.177%
3340000	LIFE SPAN	12/31/2019	1,381,113	(228,139)	1,152,975	10.5	109,807	7.95%	26.177%
3347000	LIFE SPAN	12/31/2019	237,284	(35,795)	201,489	10.5	19,189	8.09%	26.177%
3351000	LIFE SPAN	12/31/2019	38,215	(18,395)	19,820	10.5	1,888	4.94%	26.177%
3360000	LIFE SPAN	12/31/2019	232,115	(75,918)	156,197	10.5	14,876	6.41%	26.177%
3910000	LIFE SPAN	12/31/2019	1,224	(795)	430	10.5	41	3.34%	26.177%
3912000	LIFE SPAN	12/31/2019	196	(21)	175	10.5	17	8.49%	26.177%
3920400	LIFE SPAN	12/31/2019	40,193	(11,678)	28,515	10.5	2,716	6.76%	26.177%
3920500	LIFE SPAN	12/31/2019	12,476	(806)	11,670	10.5	1,111	8.91%	26.177%
3920600	LIFE SPAN	12/31/2019	15,153	(7,776)	7,377	10.5	703	4.64%	26.177%
3920900	LIFE SPAN	12/31/2019	1,965	(209)	1,756	10.5	167	8.51%	26.177%
3940000	LIFE SPAN	12/31/2019	20,830	(11,525)	9,305	10.5	886	4.25%	26.177%
3950000	LIFE SPAN	12/31/2019	6,111	(3,765)	2,346	10.5	223	3.66%	26.177%
3970000	LIFE SPAN	12/31/2019	105,687	(35,467)	70,220	10.5	6,688	6.33%	26.177%
3980000	LIFE SPAN	12/31/2019	1,771	(627)	1,143	10.5	109	6.15%	26.177%
<b>JC BOYLE HYDRO PLANT -TOTAL OREGON</b>				<b>(2,362,303)</b>	<b>6,461,716</b>		<b>615,401</b>	<b>6.97%</b>	

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IRON GATE HYDRO PLANT-OREGON

FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate%	Oregon Allocation%
[1]	[2]	[3]	[4]	[5]	[6]=[4]+[5]	[7]	[8]=[6]/[7]	[9]=[8]/[4]	[10]
3301000	LIFE SPAN	12/31/2019	88,244	0	88,244	10.5	8,404	9.52%	26.177%
3302000	LIFE SPAN	12/31/2019	1,204	(641)	564	10.5	54	4.46%	26.177%
3311000	LIFE SPAN	12/31/2019	467,841	(195,490)	272,351	10.5	25,938	5.54%	26.177%
3312000	LIFE SPAN	12/31/2019	594,297	(174,358)	419,939	10.5	39,994	6.73%	26.177%
3313000	LIFE SPAN	12/31/2019	131,505	(38,969)	92,536	10.5	8,813	6.70%	26.177%
3321000	LIFE SPAN	12/31/2019	3,167,459	(1,052,329)	2,115,130	10.5	201,441	6.36%	26.177%
3322000	LIFE SPAN	12/31/2019	217,302	(107,068)	110,234	10.5	10,498	4.83%	26.177%
3330000	LIFE SPAN	12/31/2019	510,256	(235,302)	274,954	10.5	26,186	5.13%	26.177%
3340000	LIFE SPAN	12/31/2019	56,450	(36,802)	19,649	10.5	1,871	3.31%	26.177%
3347000	LIFE SPAN	12/31/2019	13,877	(5,152)	8,724	10.5	831	5.99%	26.177%
3351000	LIFE SPAN	12/31/2019	4,047	(2,079)	1,968	10.5	187	4.63%	26.177%
3352000	LIFE SPAN	12/31/2019	0	0	0	10.5	0		26.177%
3360000	LIFE SPAN	12/31/2019	281,696	(108,794)	172,902	10.5	16,467	5.85%	26.177%
3910000	LIFE SPAN	12/31/2019	1,977	(1,350)	627	10.5	60	3.02%	26.177%
3920400	LIFE SPAN	12/31/2019	6,568	(2,927)	3,641	10.5	347	5.28%	26.177%
3930000	LIFE SPAN	12/31/2019	1,379	(963)	416	10.5	40	2.87%	26.177%
3940000	LIFE SPAN	12/31/2019	6,533	(1,653)	4,880	10.5	465	7.11%	26.177%
3950000	LIFE SPAN	12/31/2019	159	(8)	151	10.5	14	9.03%	26.177%
3970000	LIFE SPAN	12/31/2019	142,417	(66,937)	75,480	10.5	7,189	5.05%	26.177%
3980000	LIFE SPAN	12/31/2019	165	(13)	152	10.5	15	8.79%	26.177%
IRON GATE HYDRO PLANT TOTAL			5,693,376	(2,030,834)	3,662,542		348,813	6.13%	
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COPCO #1 HYDRO PLANT - OREGON

FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate%	Oregon Allocation%
3301000	LIFE SPAN	12/31/2019	37,435	0	37,435	10.5	3,565	9.52%	26.177%
3302000	LIFE SPAN	12/31/2019	9,513	(8,900)	613	10.5	58	0.61%	26.177%
3304000	LIFE SPAN	12/31/2019	269	(303)	(33)	10.5	(3)	0.00%	26.177%
3311000	LIFE SPAN	12/31/2019	334,610	(122,780)	211,830	10.5	20,174	6.03%	26.177%
3313000	LIFE SPAN	12/31/2019	22,963	(10,098)	12,865	10.5	1,225	5.34%	26.177%
3321000	LIFE SPAN	12/31/2019	691,490	(494,031)	197,459	10.5	18,806	2.72%	26.177%
3330000	LIFE SPAN	12/31/2019	937,757	(337,236)	600,521	10.5	57,192	6.10%	26.177%
3340000	LIFE SPAN	12/31/2019	349,416	(143,958)	205,457	10.5	19,567	5.60%	26.177%
3347000	LIFE SPAN	12/31/2019	15,454	(7,217)	8,237	10.5	784	5.08%	26.177%
3351000	LIFE SPAN	12/31/2019	330	(168)	162	10.5	15	4.67%	26.177%
3360000	LIFE SPAN	12/31/2019	27,602	(8,634)	18,968	10.5	1,806	6.54%	26.177%
3900000	LIFE SPAN	12/31/2019	0	0	0	10.5	0		26.177%
3920400	LIFE SPAN	12/31/2019	6,224	(2,662)	3,563	10.5	339	5.45%	26.177%
3940000	LIFE SPAN	12/31/2019	1,776	(917)	859	10.5	82	4.60%	26.177%
3970000	LIFE SPAN	12/31/2019	5,949	(1,247)	4,702	10.5	448	7.53%	26.177%
<b>COPCO #1 HYDRO PLANT TOTAL</b>			<b>2,440,787</b>	<b>(1,138,151)</b>	<b>1,302,635</b>		<b>124,061</b>	<b>5.08%</b>	
<b>OREGON</b>									

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COPCO #2 HYDRO PLANT - OREGON

FERC Account	Methodology	End Life	Plant Balance at 6/30/2009	Accum Depreciation at 6/30/2009	Amount to Recover	Rem Life	Annual Depreciation	Depreciation Rate	Oregon Allocation%
[1]	[2]	[3]	[4]	[5]	[6]=[4]+[5]	[7]	[8]=[6]/[7]	[9]=[8]/[4]	[10]
3301000	LIFE SPAN	12/31/2019	5,475	0	5,475	10.5	521	9.52%	26.177%
3311000	LIFE SPAN	12/31/2019	571,898	(199,157)	372,742	10.5	35,499	6.21%	26.177%
3321000	LIFE SPAN	12/31/2019	773,461	(708,052)	65,408	10.5	6,229	0.81%	26.177%
3330000	LIFE SPAN	12/31/2019	912,494	(372,226)	540,268	10.5	51,454	5.64%	26.177%
3340000	LIFE SPAN	12/31/2019	1,715,412	(68,191)	1,647,221	10.5	156,878	9.15%	26.177%
3347000	LIFE SPAN	12/31/2019	67,909	(32,620)	35,289	10.5	3,361	4.95%	26.177%
3351000	LIFE SPAN	12/31/2019	0	0	0	10.5	0		26.177%
3360000	LIFE SPAN	12/31/2019	125,542	(25,001)	100,541	10.5	9,575	7.63%	26.177%
3910000	LIFE SPAN	12/31/2019	506	(479)	27	10.5	3	0.51%	26.177%
3912000	LIFE SPAN	12/31/2019	196	(21)	175	10.5	17	8.49%	26.177%
3913000	LIFE SPAN	12/31/2019	411	(178)	234	10.5	22	5.41%	26.177%
3920400	LIFE SPAN	12/31/2019	38,545	(10,098)	28,447	10.5	2,709	7.03%	26.177%
3920600	LIFE SPAN	12/31/2019	47,196	(997)	46,199	10.5	4,400	9.32%	26.177%
3920900	LIFE SPAN	12/31/2019	3,719	(199)	3,520	10.5	335	9.01%	26.177%
3930000	LIFE SPAN	12/31/2019	881	(4)	877	10.5	84	9.48%	26.177%
3940000	LIFE SPAN	12/31/2019	15,120	(10,323)	4,797	10.5	457	3.02%	26.177%
3970000	LIFE SPAN	12/31/2019	139,987	(55,472)	84,515	10.5	8,049	5.75%	26.177%
3972000	LIFE SPAN	12/31/2019	955	(134)	821	10.5	78	8.19%	26.177%
3980000	LIFE SPAN	12/31/2019	3,278	(1,051)	2,227	10.5	212	6.47%	26.177%
COPCO #2 HYDRO PLANT TOTAL OREGON			4,422,986	(1,484,204)	2,938,782		279,884	6.33%	

TOTAL OREGON

21,381,167 (7,015,493) 14,365,674

1,368,159 6.40%