Okanogan PUD Figures on Cumulative Debt*

Year	Enloe MW av yr	Hrs/yr	Enloe MWh/yr	$/MWh	Enloe Gen $	Enloe O&M $	Enloe Construction Debt $	Enloe Construction + O&M $	Enloe Debt $	Cumul Enloe Debt $
2015							-$2,018,000	-$2,018,000	-$2,018,000	-$2,018,000
2016							-$2,018,000	-$2,018,000	-$2,018,000	-$4,036,000
2017							-$2,018,000	-$2,018,000	-$2,018,000	-$6,054,000
2018							-$2,018,000	-$2,018,000	-$2,018,000	-$8,072,000
2019	4.5	8,760	39,420	$77	$3,035,340	-$1,719,000	-$2,018,000	-$3,737,000	-$701,660	-$8,773,660
2020	4.5	8,760	39,420	$77	$3,035,340	-$1,761,975	-$2,018,000	-$3,779,975	-$744,635	-$9,518,295
2021	4.5	8,760	39,420	$77	$3,035,340	-$1,806,024	-$2,018,000	-$3,824,024	-$788,684	-$10,306,979
2022	4.5	8,760	39,420	$77	$3,035,340	-$1,851,175	-$2,018,000	-$3,869,175	-$833,835	-$11,140,814
2023	4.5	8,760	39,420	$77	$3,035,340	-$1,897,454	-$2,018,000	-$3,915,454	-$880,114	-$12,020,929
2024	4.5	8,760	39,420	$77	$3,035,340	-$1,944,891	-$2,018,000	-$3,962,891	-$927,551	-$12,948,479
2025	4.5	8,760	39,420	$77	$3,035,340	-$1,993,513	-$2,018,000	-$4,011,513	-$976,173	-$13,924,652
2026	4.5	8,760	39,420	$77	$3,035,340	-$2,043,351	-$2,018,000	-$4,061,351	-$1,026,011	-$14,950,663
2027	4.5	8,760	39,420	$77	$3,035,340	-$2,094,435	-$2,018,000	-$4,112,435	-$1,077,095	-$16,027,758
2028	4.5	8,760	39,420	$77	$3,035,340	-$2,146,795	-$2,018,000	-$4,164,795	-$1,129,455	-$17,157,213
2029	4.5	8,760	39,420	$77	$3,035,340	-$2,200,465	-$2,018,000	-$4,218,465	-$1,183,125	-$18,340,339
2030	4.5	8,760	39,420	$77	$3,035,340	-$2,255,477	-$2,018,000	-$4,273,477	-$1,238,137	-$19,578,476
2031	4.5	8,760	39,420	$77	$3,035,340	-$2,311,864	-$2,018,000	-$4,329,864	-$1,294,524	-$20,872,999
2032	4.5	8,760	39,420	$77	$3,035,340	-$2,369,660	-$2,018,000	-$4,387,660	-$1,352,320	-$22,225,320
2033	4.5	8,760	39,420	$77	$3,035,340	-$2,428,902	-$2,018,000	-$4,446,902	-$1,411,562	-$23,636,882
2034	4.5	8,760	39,420	$77	$3,035,340	-$2,489,625	-$2,018,000	-$4,507,625	-$1,472,285	-$25,109,166
2035	4.5	8,760	39,420	$77	$3,035,340	-$2,551,865	-$2,018,000	-$4,569,865	-$1,534,525	-$26,643,692
2036	4.5	8,760	39,420	$77	$3,035,340	-$2,615,662	-$2,018,000	-$4,633,662	-$1,598,322	-$28,242,013
2037	4.5	8,760	39,420	$77	$3,035,340	-$2,681,053	-$2,018,000	-$4,699,053	-$1,663,713	-$29,905,727
2038	4.5	8,760	39,420	$77	$3,035,340	-$2,748,080	-$2,018,000	-$4,766,080	-$1,730,740	-$31,636,466
2039	4.5	8,760	39,420	$77	$3,035,340	-$2,816,782	-$2,018,000	-$4,834,782	-$1,799,442	-$33,435,908
2040	4.5	8,760	39,420	$77	$3,035,340	-$2,887,201	-$2,018,000	-$4,905,201	-$1,869,861	-$35,305,769
2041	4.5	8,760	39,420	$77	$3,035,340	-$2,959,381	-$2,018,000	-$4,977,381	-$1,942,041	-$37,247,811
2042	4.5	8,760	39,420	$77	$3,035,340	-$3,033,366	-$2,018,000	-$5,051,366	-$2,016,026	-$39,263,836
2043	4.5	8,760	39,420	$77	$3,035,340	-$3,109,200	-$2,018,000	-$5,127,200	-$2,091,860	-$41,355,696
2044	4.5	8,760	39,420	$77	$3,035,340	-$3,186,930	-$2,018,000	-$5,204,930	-$2,169,590	-$43,525,286
2045	4.5	8,760	39,420	$77	$3,035,340	-$3,266,603	-$2,018,000	-$5,284,603	-$2,249,263	-$45,774,549
2046	4.5	8,760	39,420	$77	$3,035,340	-$3,348,268		-$3,348,268	-$312,928	-$46,087,477
2047	4.5	8,760	39,420	$77	$3,035,340	-$3,431,975		-$3,431,975	-$396,635	-$46,484,112
2048	4.5	8,760	39,420	$77	$3,035,340	-$3,517,774		-$3,517,774	-$482,434	-$46,966,547
2049	4.5	8,760	39,420	$77	$3,035,340	-$3,605,719		-$3,605,719	-$570,379	-$47,536,925
2050	4.5	8,760	39,420	$77	$3,035,340	-$3,695,862		-$3,695,862	-$660,522	-$48,197,447
2051	4.5	8,760	39,420	$77	$3,035,340	-$3,788,258		-$3,788,258	-$752,918	-$48,950,365
2052	4.5	8,760	39,420	$77	$3,035,340	-$3,882,965		-$3,882,965	-$847,625	-$49,797,990
2053	4.5	8,760	39,420	$77	$3,035,340	-$3,980,039		-$3,980,039	-$944,699	-$50,742,689
2054	4.5	8,760	39,420	$77	$3,035,340	-$4,079,540		-$4,079,540	-$1,044,200	-$51,786,888
2055	4.5	8,760	39,420	$77	$3,035,340	-$4,181,528		-$4,181,528	-$1,146,188	-$52,933,077
2056	4.5	8,760	39,420	$77	$3,035,340	-$4,286,066		-$4,286,066	-$1,250,726	-$54,183,803
2057	4.5	8,760	39,420	$77	$3,035,340	-$4,393,218		-$4,393,218	-$1,357,878	-$55,541,681
2058	4.5	8,760	39,420	$77	$3,035,340	-$4,503,049		-$4,503,049	-$1,467,709	-$57,009,390
2059	4.5	8,760	39,420	$77	$3,035,340	-$4,615,625		-$4,615,625	-$1,580,285	-$58,589,674
2060	4.5	8,760	39,420	$77	$3,035,340	-$4,731,015		-$4,731,015	-$1,695,675	-$60,285,350
2061	4.5	8,760	39,420	$77	$3,035,340	-$4,849,291		-$4,849,291	-$1,813,951	-$62,099,300
2062	4.5	8,760	39,420	$77	$3,035,340	-$4,970,523		-$4,970,523	-$1,935,183	-$64,034,483
2063	4.5	8,760	39,420	$77	$3,035,340	-$5,094,786		-$5,094,786	-$2,059,446	-$66,093,929
2064	4.5	8,760	39,420	$77	$3,035,340	-$5,222,156		-$5,222,156	-$2,186,816	-$68,280,745
2065	4.5	8,760	39,420	$77	$3,035,340	-$5,352,710		-$5,352,710	-$2,317,370	-$70,598,115
2066	4.5	8,760	39,420	$77	$3,035,340	-$5,486,527		-$5,486,527	-$2,451,187	-$73,049,302
2067	4.5	8,760	39,420	$77	$3,035,340	-$5,623,691		-$5,623,691	-$2,588,351	-$75,637,653
2068	4.5	8,760	39,420	$77	$3,035,340	-$5,764,283		-$5,764,283	-$2,728,943	-$78,366,596
				TOTALS	$151,767,000	-$167,575,596	-$62,558,000	-$230,133,596	-$78,366,596	

Difference between Power Revenue & O/M Costs	-$15,808,596	$151,767,000 + (-$167,575,596) = -$15,807,596
What OkPUD has sunk cost thus far on Enloe	-$12,000,000	
Construction loan (-$39,000,000) + Interest (-$23,558,000)	-$62,558,000	(-$39,000,000) + (-$23,575,596) = -$62,558,000
Est. Total Enloe Debt Generated in 50 yrs	-$90,366,596	(-$15,807,596) + (-$62,558,000 + (-$12,000,000) = -$90,366,596

Formulas used to calculate numbers:

(Enloe MW Generation) X (Hrs/Yr) = Enloe MWHrs/Yr

(Cost $$ /MWHr) X (Enloe MWHr/Yr) = Enloe Power Revenue/Yr

(Enloe Generation $) + (Enloe O&M $ + Enloe Capital Cost + Plant Investment Cost) = Total Enloe Debt

Considerations to be Weighed

- Enloe Operations & Maintenance costs will always be more than generation revenue.
- Enloe O&M Debt accumulates each year will reach (-$45,774,549) by 2045 when Enloe's loan is paid off.
- The cumulative Enloe O&M + Loan Debt by 2068 (end of Enloe's 50 yr license) will be will be -$78,366,596.
- The amount PUD will be budgeting for Enloe Re-electrification is not identified in the years 2015-2018 before it is operational for engineering, FERC license requirements, and construction along with permits, etc. In 2015 the PUD has budgeted $1,760,000 for Enloe, but these costs will come out of the Plant Investment Cost of $39,100,000 loan if they decide to build Enloe.
- We used Dan Boettger's (OkPUD Environmental Manager) November 17th Report, "Revised Cost Figure—2014 D-2 (excluding sunk costs)", page 15 by Christensen Associates Inc and Dale Dunkle's (OkPUD Power Resource Analyst) spreadsheet Blended Enloe with his 2.5% escalator on Enloe O&M costs.
- Year 2019 is planned start of Enloe generation.
- Year 2045 is when construction loan will be paid off.
- Year 2068 is the end of FERC's 50 year license to operate Enloe Dam.

*** All numbers are based on 10-30 cfs flow over Similkameen Falls. The flow may need to be increased to 100 cfs or higher—what effect will it have on OkPUD's power generation and increase in Enloe Debt?**