

**Otter Tail Power Company**  
 Estimated Project Savings Impacts on Revenue Requirements (Customer Savings) and Earnings (Reduced Shareholder Return) of the  
 Big Stone Air Quality Control System

		(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	
		Customer Impact										Shareholder Impact					
Line No.	Yr	Original cost Total Project	Final Cost Total Project	Project Savings (1)	OTP Total share @ 53.9%	OTP SD share	OTP SD Base Balance (30 Year Life)	Rate Annual Avoided Depreciation	OTP SD Total Rate Base Revenue Requirement (Column F x 9.42% Factor) (4)	OTP SD Total Annual Avoided Revenue Requirement (Column G + Column H)	OTP SD Avoided Revenue Requirement	OTP SD NPV Requirement (5)	OTP SD Available for Return (Column F x 5.47% Equity Return Factor) (6)	OTP SD 30 Years Avoided Available for Return	OTP SD Avoided Available for Return (4)	NPV	Notes
1	2015	\$491,000,000	\$365,513,806	\$125,486,194	\$67,637,059	9.341629%	\$6,318,403	\$210,613	\$595,194	\$805,807			\$345,568				
2	2016						\$6,107,790	\$210,613	\$687,737	\$898,351			\$334,049				
3	2017 Test Year						\$5,897,176	\$210,613	\$664,022	\$874,635			\$322,530				Test Year
4	2018						\$5,686,563	\$210,613	\$640,307	\$850,920			\$311,012				
5	2019						\$5,475,949	\$210,613	\$616,592	\$827,205			\$299,493				
6	2020						\$5,265,336	\$210,613	\$592,877	\$803,490			\$287,974				
7	2021						\$5,054,723	\$210,613	\$569,162	\$779,775			\$276,455				
8	2022						\$4,844,109	\$210,613	\$545,447	\$756,060			\$264,936				
9	2023						\$4,633,496	\$210,613	\$521,732	\$732,345			\$253,417				
10	2024						\$4,422,882	\$210,613	\$498,017	\$708,630	\$8,037,219	\$5,473,181	\$241,898	\$2,937,331	\$2,023,050		Initial 10 Years
11	2025						\$4,212,269	\$210,613	\$474,301	\$684,915			\$230,379				
12	2026						\$4,001,655	\$210,613	\$450,586	\$661,200			\$218,860				
13	2027						\$3,791,042	\$210,613	\$426,871	\$637,485			\$207,341				
14	2028						\$3,580,428	\$210,613	\$403,156	\$613,770			\$195,822				
15	2029						\$3,369,815	\$210,613	\$379,441	\$590,055			\$184,303				
16	2030						\$3,159,202	\$210,613	\$355,726	\$566,340			\$172,784				
17	2031						\$2,948,588	\$210,613	\$332,011	\$542,624			\$161,265				
18	2032						\$2,737,975	\$210,613	\$308,296	\$518,909			\$149,746				
19	2033						\$2,527,361	\$210,613	\$284,581	\$495,194			\$138,227				
20	2034						\$2,316,748	\$210,613	\$260,866	\$471,479			\$126,708				
21	2035						\$2,106,134	\$210,613	\$237,151	\$447,764			\$115,189				
22	2036						\$1,895,521	\$210,613	\$213,436	\$424,049			\$103,671				
23	2037						\$1,684,908	\$210,613	\$189,721	\$400,334			\$92,152				
24	2038						\$1,474,294	\$210,613	\$166,006	\$376,619			\$80,633				
25	2039						\$1,263,681	\$210,613	\$142,290	\$352,904			\$69,114				
26	2040						\$1,053,067	\$210,613	\$118,575	\$329,189			\$57,595				
27	2041						\$842,454	\$210,613	\$94,860	\$305,474			\$46,076				
28	2042						\$631,840	\$210,613	\$71,145	\$281,759			\$34,557				
29	2043						\$421,227	\$210,613	\$47,430	\$258,044			\$23,038				
30	2044						\$210,613	\$210,613	\$23,715	\$234,329			\$11,519				
31	<b>Total</b>							<b>\$6,318,403</b>	<b>\$10,911,250</b>		<b>\$17,229,654</b>	<b>\$7,843,928</b>		<b>\$5,356,309</b>	<b>\$2,706,167</b>		<b>Life of Project</b>

Steam production plant jurisdictional allocator	Base / Peak %
E1	9.364273% (2)
D1	9.241806% (2)
<b>SD Jurisdictional Share %</b>	<b>9.341629%</b>

(1) Phinney Direct Table 1, Page 10

(2) JCOSS Page 15-1

(3) Workpaper C-1 (Base/Peak Split)

(4) Rate Base Revenue Requirement Factor

9.42% Pg 2 of 2

(5) Net Present Value (NPV) computed using ROR Discount Rate

7.96% Pg 2 of 2

(6) Rate Base Equity Return Factor reflects the after-tax earnings

5.47% Pg 2 of 2

OTTER TAIL POWER COMPANY					
Revenue Requirement Factor Calculation					
To be used when estimating revenue requirement on rate base amount changes		Amounts rounded to 4 decimal places =			
1	Effective Tax Rate	SD	21.0000%		
2	SDPUC Special Hearing Fund Assessment		0.0015		
3	<b>Capital Structure</b>	Rate	Ratio	Cost	Weighted Debt Cost
4	LT Debt	5.3000%	46.90%	2.4900%	5.30%
5	ST Debt	0.0000%	0.00%	0.0000%	
6	Common Equity	10.3000%	53.10%	5.4692%	
7	Required Rate of Return			7.9592%	
8	Equity Return Tax RR (5.41% Equity X Tax Effect 1.61) - 5.41% Equity)			1.4608%	
9	<b>Rate Base Revenue Requirement Factor</b>			9.4200%	
10					
11					
12	Tax Effect 1 / (1 - Tax Rate)	1.267724	Gross Up of Equity %	6.93%	
13			Equity %	5.47%	
14			Difference	1.46%	
15					
16	<b>PROOF - EXAMPLE</b>		Total	Debt	Equity
17	Rate Base	\$	10,000	\$ 4,690	\$ 5,310
18					
19	Revenue Requirement	9.42%	\$ 942		
20	Interest on Debt (Weighted Debt Cost X Debt Amt)		\$ 249		
21	Taxable Income		\$ 693		
22	Taxes	21.1500%	\$ 146.66		
23	Return on Rate Base		\$ 795	7.95% ROR	
24	Available for Return (Equity 5.41% X RB)		\$ 547	10.30% ROE	
25					
26	<b>Equity Return</b>				
27	Revenue	\$	942		
28	Interest Expense	\$	249		
29	Taxes	\$	147		
30	Available for Return	\$	547		
31	Equity	\$	5,310		
32	ROE (Line 30/Line 31)		10.30%		
33					
34					