

Volume 4A – Section 1  
2017 Test Year Workpapers  
Test Year Adjustments

OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-01 and Supporting Schedule C-8

TY-01  
SD Share  
Page 1 of 3

ADJUSTMENT TO ANNUALIZE PLANT-IN-SERVICE ON CURRENT AND FUTURE CAPITAL PROJECTS

Otter Tail Power Company  
Normalized Plant in Service  
2017 Test Year

ADJUSTMENT TO ANNUALIZE DEPRECIATION & OTHER OPERATING EXPENSE ON CURRENT & FUTURE CAPITAL PROJECTS

	(A)	(B)	(C)	(D)	(E)	
Line No.	<u>Depreciation Expense</u>	<u>OTP Total</u>	<u>Allocation Factor</u>	<u>Allocation Percentage</u>	<u>OTP SD</u>	<u>TAA C-8 Reference</u>
	<b>Additions</b>					
1	Intangible	1,315,879	P90	9.224266%	121,380	
2	<b>Total Depreciation Expense Additions</b>	\$1,315,879			\$121,380	Col (B); Line 12
3	<b>AFUDC in L-T CWIP Removed</b>	0	CWIPLT	0.000000%	-	
4	Operating Income Impact	(\$1,315,879)			(\$121,380)	
5	SD Tax Rate	21.00%				
6	Income Tax Impact	(\$276,335)			(\$25,490)	Col (B); Line 19
7	Net Operating Income Impact	<b>(\$1,039,545)</b>			<b>(\$95,890)</b>	Col (B); Line 23

OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-01 and Supporting Schedule B-5

TY-01  
SD Share  
Page 2 of 3

**ADJUSTMENT TO ANNUALIZE PLANT-IN-SERVICE ON CURRENT AND FUTURE CAPITAL PROJECTS**

Line No.		(A)	(B)	(C)	(D)	(E)
	<u>Plant-in-Service</u>	<u>OTP Total</u>	<u>Allocation Factor</u>	<u>Allocation Percentage</u>	<u>OTP SD</u>	<u>TAA B-5 Reference</u>
	<b>Additions &amp; Retirements</b>					
1	Intangible	\$12,146,579	P90	9.224266%	\$1,120,433	Col (B); Line 5
2						
3	<b>Total Plant-in-Service Additions</b>	<u>\$12,146,579</u>			<u>\$1,120,433</u>	
	 <b><u>Accumulated Depreciation</u></b>					
	<b>Additions &amp; Retirements</b>	<u>OTP Total</u>	<u>Allocation Factor</u>	<u>Allocation Percentage</u>	<u>OTP SD</u>	
4	Intangible	(723,734)	P90	9.224266%	(66,759)	Col (B); Line 11
5	<b>Total A/D Additions</b>	<u>(\$723,734)</u>			<u>(\$66,759)</u>	
	 <b><u>L-T Construction Work-in-Progress</u></b>					
	<b>Transfers</b>	<u>OTP Total</u>	<u>Allocation Factor</u>	<u>Allocation Percentage</u>	<u>OTP SD</u>	
6	Intangible	0	P90	9.224266%	0	
7	<b>Total CWIP Transfers</b>	<u>\$0</u>			<u>\$0</u>	

ADJUSTMENT TO ANNUALIZE PLANT-IN-SERVICE ON CURRENT AND FUTURE CAPITAL PROJECTS

(A)	(B)	(C)	(D)	(E)	(F)	
Projects Moved from CWIP @ 12/31/17 to Capitalized Accounts During 2018						
Line No.	Project	Project Description	Function	Amount in CWIP @ 12/31/17	Additional Charges Incurred During 2018	Total Project Costs
1		Customer Information System	Intangible	11,474,046	4,316,507	15,790,553
2						
3				<u>\$11,474,046</u>	<u>\$4,316,507</u>	<u>\$15,790,553</u>

(A)	(B)	(C)	(D)	(E)	(F)	(G)
Test Year Adjustment to CWIP to Transfer Project Costs to Capitalized Accounts						
Line No.	Project	Project Description	Function	13-Month Avg CWIP @ 12/31/18	NO CWIP to remove SD does not allow LT CWIP	NO AFUDC to Remove SD does not allow
1		Customer Information System	Intangible	14,267,596	0	0
2						
3		<b>Total 2017 Test Year Adjustment to CWIP</b>		<u>\$14,267,596</u>	<u>\$0</u>	<u>\$0</u>

(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Test Year Adjustment to Plant in Service to Transfer Project Costs to Capitalized Accounts							
Line No.	Project	Project Description	Function	Amount Capitalized @ 12/31/17	13-Month Average Plant-in-Service @ 12/31/18	Difference	2017 Test Year Plant-in-Service Adjustment
1		Customer Information System	Intangible	15,790,553	3,643,974	12,146,579	12,146,579
2							
3				<u>\$15,790,553</u>	<u>\$3,643,974</u>	<u>\$12,146,579</u>	<u>\$12,146,579</u>
4		<b>Total 2017 Test Year Adjustment to Plant in Service</b>					<u>\$12,146,579</u>

(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Test Year Adjustment to Accumulated Depreciation to Reflect Increase in Plant in Service							
Line No.	Project	Project Description	Function	Annualized Accumulated Depreciation	13-Month Average A/D @ 12/31/18	Difference	2017 Test Year A/D Adjustment
1		Customer Information System	Intangible	(1,579,055)	(855,322)	(723,734)	(723,734)
2							
3				<u>(\$1,579,055)</u>	<u>(\$855,322)</u>	<u>(\$723,734)</u>	<u>(\$723,734)</u>
4		<b>Total 2017 Test Year Adjustment to Accumulated Depreciation</b>					<u>(\$723,734)</u>

(A)	(B)	(C)	(D)	(E)	(F)	(G)	
Test Year Adjustment Depreciation Expense to Reflect Increase in Plant in Service							
Line No.	Project	Project Description	Function	Depreciation Expense 2018	Annual Depreciation Expense	Difference	2017 Test Year Expense Adjustment
1		Customer Information System	Intangible	263,176	1,579,055	1,315,879	1,315,879
2							
3				<u>\$263,176</u>	<u>\$1,579,055</u>	<u>\$1,315,879</u>	<u>\$1,315,879</u>
4		<b>Total 2017 Test Year Adjustment to Depreciation Expense</b>					<u>\$1,315,879</u>

Otter Tail Power Company  
 Big Stone II Transmission adjustment  
 2017 Test Year

Line No.	(A)	(B)
	<b>Transmission portion of Big Stone II Costs</b>	
		<b>SD share of Transmission</b>
1	Remaining in CWIP per order	\$259,898
2	Less: SD Transmission Cost Recovered*	(80,237)
		179,661
3	Plus: SD AFUDC on balance	\$56,001
	Balance of Transmission portion of Big Stone II Costs	\$235,662
	Plus: Rate of return on balance at completion of AFUDC	107,126
4	Transmission Cost to be recovered	\$342,788
6		
7	<b>Add to Expenses annual amortization expense</b>	
8	2 Years and 1 Month amortization: SD Share	\$164,538

\*Transmission and Generation costs recovered were recovered from the Big Stone Area Transmission costs acquired by subsequent projects. The Projects which utilized some of the costs were referred to in OTP's compliance filing dated March 28, 2013 in Docket Number EL13-007

**ADJUSTMENT TO DEPRECIATION EXPENSE TO REFLECT 2018 RATES**

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
1	<u>Production</u>					
2	Base Demand	324,860	E1	9.364273%	30,421	
3	Peak Demand	76,937	D1	9.241806%	7,110	
4	Base Energy	<u>12,105</u>	E2	9.044926%	<u>1,095</u>	
5	<b>Total Production</b>	413,902			38,626	
6	Transmission	241,619	D2	9.187431%	22,199	
7	Distribution	(148,861)	P60	9.486221%	(14,121)	
8	General	(225,176)	P90	9.224266%	(20,771)	
9	Intangible	<u>(41,847)</u>	P90	9.224266%	<u>(3,860)</u>	
10	<b>Total Depreciation Expense</b>	<u>239,637</u>			<u>22,072</u>	Col (D); Line 12
11	Operating Income Impact				(22,072)	
12	Income Tax Impact: SD Tax Rate is	21.00%			<u>(4,635)</u>	Col (D); Line 19
13	Net Operating Income Impact				<u>(17,437)</u>	Col (D); Line 21

**ADJUSTMENT TO DEPRECIATION EXPENSE TO REFLECT 2018 RATES**

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA B-5 Reference
1	<u>Production</u>					
2	Base Demand	(324,860)	E1	9.364273%	(30,421)	
3	Peak Demand	(76,937)	D1	9.241806%	(7,110)	
4	Base Energy	<u>(12,105)</u>	E2	9.044926%	<u>(1,095)</u>	
5	<b>Total Production</b>	(413,902)			(38,626)	Col (C); Line 7
6	Transmission	(241,619)	D2	9.187431%	(22,199)	Col (C); Line 8
7	Distribution	148,861	P60	9.486221%	14,121	Col (C); Line 9
8	General	225,176	P90	9.224266%	20,771	Col (C); Line 10
9	Intangible	<u>41,847</u>	P90	9.224266%	<u>3,860</u>	Col (C); Line 11
10	<b>Total Accumulated Depreciation</b>	<u>(239,637)</u>			<u>(22,072)</u>	Col (C); Line 12

Otter Tail Power Company

TY-04  
Page 1 of 1

**ADJUSTMENT TO NORMALIZE SPECIAL DEPOSITS**

Line No.	(A) Description	(B) Amount
1	Total 2017 Actual Year 13-Month Average Special Deposits	\$5,654,324
2	OTP - Total Adjusted 2017 Actual Year 13-Month Average Special Deposits	\$7,500
3	OTP - SD Adjusted 2017 Actual Year 13-Month Average Special Deposits	<u>\$591</u>

**Note: The SD amount of this adjustment has an impact on the Cash Working Capital calculation. It is not a separate component of Rate Base.**



OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 TY-05 and Supporting Schedule C-8

TY-05  
SD Share  
Page 1 of 1

**ADJUSTMENT FOR WEATHER NORMALIZATION**

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD (2)	(E) TAA C-8 Reference
1	2017 Revenue Adjustment	335,353	N/A	Directly Assigned	335,353	Col (E); Line 2
2	2017 Expense Adjustment	<u>1,422,737</u> (1)	E1	9.364273%	<u>133,229</u>	Col (E); Line 4
3	Operating Income Impact	(1,087,385)			202,124	
4	Income Tax Impact: SD Tax Rate is 21.00%				<u>42,446</u>	Col (E); Line 19
5	Net Operating Income Impact				<u><u>159,678</u></u>	

OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 TY-06 and Supporting Schedule C-8

## ADJUSTMENT FOR RETAIL REVENUE NORMALIZATION

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
1	2017 Revenue Adjustment	4,325	N/A	Directly Assigned	4,325	Col (F); Line 2
2	2017 Fuel Expense Adjustment	<u>23,269</u>	E1	9.364273%	<u>2,179</u>	Col (F); Line 4
3	Operating Income Impact	(18,944)			2,146	
4	Income Tax Impact: SD Tax Rate is 21.00%				<u>451</u>	Col (F); Line 19
5	Net Operating Income Impact				<u><u>1,695</u></u>	

ADJUSTMENT FOR TOTAL WAGES, KPA AND MANAGEMENT INCENTIVES

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
<u>Production</u>						
1	Base Demand	9,038	E1	9.364273%	846	
2	Peak Demand	2,365	D1	9.241806%	219	
3	Total Production Expense	11,403			1,065	Col (G); Line 4
4	Transmission Expense	4,740	D2	9.187431%	435	Col (G); Line 5
<u>Distribution Expense</u>						
5	Primary Demand	2,749	D3	9.826674%	270	
6	Secondary Demand	1,122	D4	10.166941%	114	
7	Primary Customer	1,774	C2	8.713550%	155	
8	Secondary Customer	1,214	C3	8.711531%	106	
9	Streetlighting	793	C4	11.025726%	87	
10	Area Lighting	75	C5	6.574691%	5	
11	Meters	1,093	C6	9.162435%	100	
12	Load Management	-		9.659829%	-	
13	Total Distribution Expense	8,818			836	Col (G); Line 6
<u>Customer Accounting Expense</u>						
14	Meter Reading	2,750	C7	9.043283%	249	
15	Other	3,151	C8	8.711988%	275	
16	Total Customer Accounts	5,901			523	Col (G); Line 7
<u>Customer Service &amp; Info Expense (MN CIP)</u>						
17	- MN	805	Direct	0.000000%	-	
18	- ND	-	Direct	0.000000%	-	
19	- SD	57	Direct	100.000000%	57	
20	- Other	279	C1	8.740052%	24	
21	Total Customer Service & Information Expense	1,141			81	Col (G); Line 8
<u>Administrative and General Expense</u>						
<u>Salaries, Supplies, Pensions &amp; Benefits</u>						
22	Production	7,081	OXPD	9.343471%	662	
23	Transmission	2,944	D2	9.187431%	270	
24	Distribution	5,477	OXD	9.490372%	520	
25	Customer Accounts	3,664	OXC	8.866368%	325	
26	Customer Service & Information	708	C1	8.740052%	62	
		19,873			1,839	Col (G); Line 10
27	Total	51,877			4,780	Col (G); Line 14
28	Operating Income Impact	(51,877)			(4,780)	
29	Income Tax Impact: SD Tax Rate is	21.00%			(1,004)	Col (G); Line 19
30	Net Operating Income Impact				(3,776)	Col (G); Line 21

**OTTER TAIL POWER COMPANY**  
**Reference Workpaper for 2017 SD TY-07 and Supporting Schedule C-8**

**ADJUSTMENT FOR 2018 APRIL AND NOVEMBER ANNUAL WAGE INCREASES**

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD
<u>Production</u>					
1	Base Demand	57,465	E1	9.364273%	5,381
2	Peak Demand	15,038	D1	9.241806%	1,390
3	Total Production Expense	72,503			6,771
4	Transmission Expense	30,140	D2	9.187431%	2,769
<u>Distribution Expense</u>					
5	Primary Demand	17,479	D3	9.826674%	1,718
6	Secondary Demand	7,133	D4	10.166941%	725
7	Primary Customer	11,278	C2	8.713550%	983
8	Secondary Customer	7,722	C3	8.711531%	673
9	Streetlighting	5,040	C4	11.025726%	556
10	Area Lighting	476	C5	6.574691%	31
11	Meters	6,948	C6	9.162435%	637
12	Load Management	-		9.659829%	-
13	Total Distribution Expense	56,076			5,321
<u>Customer Accounting Expense</u>					
14	Meter Reading	17,484	C7	9.043283%	1,581
15	Other	20,036	C8	8.711988%	1,746
16	Total Customer Accounts	37,520			3,327
<u>Customer Service &amp; Info Expense (MN CIP)</u>					
17	- MN	5,119	Direct	0.000000%	-
18	- ND	-	Direct	0.000000%	-
19	- SD	359	Direct	100.000000%	359
20	- Other	1,772	C1	8.740052%	155
21	Total Customer Service & Information Expense	7,250			514
<u>Administrative and General Expense</u>					
<u>Salaries, Supplies, Pensions &amp; Benefits</u>					
22	Production	45,021	OXPD	9.343471%	4,207
23	Transmission	18,716	D2	9.187431%	1,720
24	Distribution	34,822	OXD	9.490372%	3,305
25	Customer Accounts	23,298	OXC	8.866368%	2,066
26	Customer Service & Information	4,501	C1	8.740052%	393
		126,358			11,690
27	Total	329,847			30,392
28	Operating Income Impact	(329,847)			(30,392)
29	Income Tax Impact: SD Tax Rate is	21.00%			(6,382)
30	Net Operating Income Impact				(24,010)

OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-07 and Supporting Schedule C-8

ADJUSTMENT FOR KPA and MANAGEMENT INCENTIVES

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD
<u>Production</u>					
1	Base Demand	(48,427)	E1	9.364273%	(4,535)
2	Peak Demand	(12,673)	D1	9.241806%	(1,171)
3	Total Production Expense	(61,100)			(5,706)
4	Transmission Expense	(25,400)	D2	9.187431%	(2,334)
<u>Distribution Expense</u>					
5	Primary Demand	(14,730)	D3	9.826674%	(1,447)
6	Secondary Demand	(6,011)	D4	10.166941%	(611)
7	Primary Customer	(9,504)	C2	8.713550%	(828)
8	Secondary Customer	(6,508)	C3	8.711531%	(567)
9	Streetlighting	(4,247)	C4	11.025726%	(468)
10	Area Lighting	(401)	C5	6.574691%	(26)
11	Meters	(5,855)	C6	9.162435%	(536)
12	Load Management	-			
13	Total Distribution Expense	(47,258)			(4,485)
<u>Customer Accounting Expense</u>					
14	Meter Reading	(14,734)	C7	9.043283%	(1,332)
15	Other	(16,885)	C8	8.711988%	(1,471)
16	Total Customer Accounts	(31,619)			(2,803)
<u>Customer Service &amp; Info Expense (MN CIP)</u>					
17	- MN	(4,314)	Direct	0.000000%	-
18	- ND	-	Direct	0.000000%	-
19	- SD	(302)	Direct	100.000000%	(302)
20	- Other	(1,493)	C1	8.740052%	(130)
21	Total Customer Service & Information Expense	(6,109)			(433)
<u>Administrative and General Expense</u> <u>Salaries, Supplies, Pensions &amp; Benefits</u>					
22	Production	(37,940)	OXPD	9.343471%	(3,545)
23	Transmission	(15,772)	D2	9.187431%	(1,449)
24	Distribution	(29,345)	OXD	9.490372%	(2,785)
25	Customer Accounts	(19,634)	OXC	8.866368%	(1,741)
26	Customer Service & Information	(3,793)	C1	8.740052%	(332)
		(106,485)			(9,852)
27	Total	(277,970)			(25,613)
28	Operating Income Impact	277,970			25,613
29	Income Tax Impact: SD Tax Rate is	21.00%			5,379
30	Net Operating Income Impact				20,234

ADJUSTMENT FOR EMPLOYEE BENEFITS TOTAL

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
<u>Production</u>						
1	Base Demand	140,211	E1	9.364273%	13,130	
2	Peak Demand	31,806	D1	9.241806%	2,939	
3	Total Production Expense	172,017			16,069	Col (H); Line 4
4	Transmission Expense	71,509	D2	9.187431%	6,570	Col (H); Line 5
<u>Distribution Expense</u>						
5	Primary Demand	41,470	D3	9.826674%	4,075	
6	Secondary Demand	16,924	D4	10.166941%	1,721	
7	Primary Customer	26,758	C2	8.713550%	2,332	
8	Secondary Customer	18,322	C3	8.711531%	1,596	
9	Streetlighting	11,958	C4	11.025726%	1,318	
10	Area Lighting	1,130	C5	6.574691%	74	
11	Meters	16,484	C6	9.162435%	1,510	
12	Load Management	-				
13	Total Distribution Expense	133,046			12,627	Col (H); Line 6
<u>Customer Accounting Expense</u>						
14	Meter Reading	41,481	C7	9.043283%	3,751	
15	Other	47,536	C8	8.711988%	4,141	
16	Total Customer Accounts	89,017			7,894	Col (H); Line 7
<u>Customer Service &amp; Info Expense (MN CIP)</u>						
17	- MN	12,144	Direct	0.000000%	-	
18	- ND	-	Direct	0.000000%	-	
19	- SD	852	Direct	100.000000%	852	
20	- Other	4,203	C1	8.740052%	367	
21	Total Customer Service & Information Expense	17,199			1,219	Col (H); Line 8
<u>Administrative and General Expense</u>						
<u>Salaries, Supplies, Pensions &amp; Benefits</u>						
22	Production	106,814	OXPD	9.343470%	9,980	
23	Transmission	44,404	D2	9.187431%	4,080	
24	Distribution	82,615	OXD	9.490372%	7,841	
25	Customer Accounts	55,276	OXC	8.866368%	4,901	
26	Customer Service & Information	10,680	C1	8.740052%	933	
	Total A&G Salaries, Supplies, Pensions & Benefits	299,789			27,734	Col (H); Line 10
27	<b>Total</b>	782,577			72,111	Col (H); Line 14
28	Operating Income Impact	(782,577)			(72,111)	
29	Income Tax Impact: SD Tax Rate is	21.00%			(15,143)	Col (H); Line 19
30	Net Operating Income Impact				(56,967)	Col (H); Line 21

OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-08 and Supporting Schedule C-8

ADJUSTMENT FOR EMPLOYEE BENEFITS MEDICAL/DENTAL

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD
<u>Production</u>					
1	Base Demand	(57,453)	E1	9.364273%	(5,380)
2	Peak Demand	(13,033)	D1	9.241806%	(1,204)
3	Total Production Expense	<u>(70,486)</u>			<u>(6,585)</u>
4	Transmission Expense	(29,302)	D2	9.187431%	<b>(2,692)</b>
<u>Distribution Expense</u>					
5	Primary Demand	(16,993)	D3	9.826674%	(1,670)
6	Secondary Demand	(6,935)	D4	10.166941%	(705)
7	Primary Customer	(10,964)	C2	8.713550%	(955)
8	Secondary Customer	(7,508)	C3	8.711531%	(654)
9	Streetlighting	(4,900)	C4	11.025726%	(540)
10	Area Lighting	(463)	C5	6.574691%	(30)
11	Meters	(6,755)	C6	9.162435%	(619)
12	Load Management				
13	Total Distribution Expense	<u>(54,517)</u>			<u>(5,174)</u>
<u>Customer Accounting Expense</u>					
14	Meter Reading	(16,997)	C7	9.043283%	(1,537)
15	Other	(19,479)	C8	8.711988%	(1,697)
16	Total Customer Accounts	<u>(36,476)</u>			<u>(3,233)</u>
<u>Customer Service &amp; Info Expense (MN CIP)</u>					
17	- MN	(4,976)	Direct	0.000000%	-
18	- ND	-	Direct	0.000000%	-
19	- SD	(349)	Direct	100.000000%	(349)
20	- Other	(1,722)	C1	8.740052%	(151)
21	Total Customer Service & Information Expense	<u>(7,047)</u>			<u>(499)</u>
<u>Administrative and General Expense</u>					
<u>Salaries, Supplies, Pensions &amp; Benefits</u>					
22	Production	(43,769)	OXPD	9.343470%	(4,090)
23	Transmission	(18,195)	D2	9.187431%	(1,672)
24	Distribution	(33,853)	OXD	9.490372%	(3,213)
25	Customer Accounts	(22,650)	OXC	8.866368%	(2,008)
26	Customer Service & Information	(4,376)	C1	8.740052%	(382)
	Total A&G Salaries, Supplies, Pensions & Benefits	<u>(122,843)</u>			<u>(11,366)</u>
27	<b>Total</b>	<u>(320,671)</u>			<u>(29,550)</u>
28	Operating Income Impact	320,671			<b>29,550</b>
29	Income Tax Impact: SD Tax Rate is	21.00%			<u>6,205</u>
30	Net Operating Income Impact				<u><b>23,344</b></u>

ADJUSTMENT FOR POSTEMPLOYMENT MEDICAL BENEFITS

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD
<u>Production</u>					
1	Base Demand	81,274	E1	9.364273%	7,611
2	Peak Demand	18,436	D1	9.241806%	1,704
3	Total Production Expense	99,710			9,315
4	Transmission Expense	41,451	D2	9.187431%	3,808
<u>Distribution Expense</u>					
5	Primary Demand	24,039	D3	9.826674%	2,362
6	Secondary Demand	9,810	D4	10.166941%	997
7	Primary Customer	15,510	C2	8.713550%	1,352
8	Secondary Customer	10,620	C3	8.711531%	925
9	Streetlighting	6,931	C4	11.025726%	764
10	Area Lighting	655	C5	6.574691%	43
11	Meters	9,555	C6	9.162435%	875
12	Load Management	-			
13	Total Distribution Expense	77,121			7,319
<u>Customer Accounting Expense</u>					
14	Meter Reading	24,045	C7	9.043283%	2,174
15	Other	27,554	C8	8.711988%	2,401
16	Total Customer Accounts	51,599			4,575
<u>Customer Service &amp; Info Expense (MN CIP)</u>					
17	- MN	7,039	Direct	0.000000%	-
18	- ND	-	Direct	0.000000%	-
19	- SD	494	Direct	100.000000%	494
20	- Other	2,436	C1	8.740052%	213
21	Total Customer Service & Information Expense	9,969			707
<u>Administrative and General Expense</u>					
<u>Salaries, Supplies, Pensions &amp; Benefits</u>					
22	Production	61,915	OXPD	9.343470%	5,785
23	Transmission	25,739	D2	9.187431%	2,365
24	Distribution	47,888	OXD	9.490372%	4,545
25	Customer Accounts	32,041	OXC	8.866368%	2,841
26	Customer Service & Information	6,190	C1	8.740052%	541
	Total A&G Salaries, Supplies, Pensions & Benefits	173,774			16,076
27	<b>Total</b>	453,624			41,800
28	Operating Income Impact	(453,624)			(41,800)
29	Income Tax Impact: SD Tax Rate is 21.00%				(8,778)
30	Net Operating Income Impact				(33,022)



OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-08 and Supporting Schedule C-8

ADJUSTMENT FOR POST RETIREMENT BENEFITS

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD
<u>Production</u>					
1	Base Demand	94,426	E1	9.364273%	8,842
2	Peak Demand	21,420	D1	9.241806%	1,980
3	Total Production Expense	<u>115,846</u>			<u>10,823</u>
4	Transmission Expense	48,158	D2	9.187431%	<b>4,425</b>
<u>Distribution Expense</u>					
5	Primary Demand	27,929	D3	9.826674%	2,744
6	Secondary Demand	11,397	D4	10.166941%	1,159
7	Primary Customer	18,020	C2	8.713550%	1,570
8	Secondary Customer	12,339	C3	8.711531%	1,075
9	Streetlighting	8,053	C4	11.025726%	888
10	Area Lighting	761	C5	6.574691%	50
11	Meters	11,102	C6	9.162435%	1,017
12	Load Management	-			
13	Total Distribution Expense	<u>89,601</u>			<u>8,503</u>
<u>Customer Accounting Expense</u>					
14	Meter Reading	27,936	C7	9.043283%	2,526
15	Other	32,014	C8	8.711988%	2,789
16	Total Customer Accounts	<u>59,949</u>			<u>5,315</u>
<u>Customer Service &amp; Info Expense (MN CIP)</u>					
17	- MN	8,178	Direct	0.000000%	-
18	- ND	-	Direct	0.000000%	-
19	- SD	573	Direct	100.000000%	573
20	- Other	2,831	C1	8.740052%	247
21	Total Customer Service & Information Expense	<u>11,583</u>			<u>821</u>
<u>Administrative and General Expense</u> <u>Salaries, Supplies, Pensions &amp; Benefits</u>					
22	Production	71,935	OXPD	9.343470%	6,721
23	Transmission	29,904	D2	9.187431%	2,747
24	Distribution	55,638	OXD	9.490372%	5,280
25	Customer Accounts	37,226	OXC	8.866368%	3,301
26	Customer Service & Information	7,192	C1	8.740052%	629
	Total A&G Salaries, Supplies, Pensions & Benefits	<u>201,895</u>			<u>18,678</u>
27	<b>Total</b>	<u>527,032</u>			<u>48,564</u>
28	Operating Income Impact	(527,032)			<b>(48,564)</b>
29	Income Tax Impact: SD Tax Rate is	21.00%			<u>(10,198)</u>
30	Net Operating Income Impact				<u><b>(38,366)</b></u>

OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-08 and Supporting Schedule C-8

ADJUSTMENT FOR FASB 87 PENSION COSTS

Line No.	Description from JCOSS INPUT SUMMARY	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD
<u>Production</u>					
1	Base Demand	21,964	E1	9.364273%	2,057
2	Peak Demand	4,982	D1	9.241806%	460
3	Total Production Expense	<u>26,947</u>			<u>2,517</u>
4	Transmission Expense	11,202	D2	9.187431%	<b>1,029</b>
<u>Distribution Expense</u>					
5	Primary Demand	6,496	D3	9.826674%	638
6	Secondary Demand	2,651	D4	10.166941%	270
7	Primary Customer	4,192	C2	8.713550%	365
8	Secondary Customer	2,870	C3	8.711531%	250
9	Streetlighting	1,873	C4	11.025726%	207
10	Area Lighting	177	C5	6.574691%	12
11	Meters	2,582	C6	9.162435%	237
12	Load Management				
13	Total Distribution Expense	<u>20,842</u>			<u>1,978</u>
<u>Customer Accounting Expense</u>					
14	Meter Reading	6,498	C7	9.043283%	588
15	Other	7,447	C8	8.711988%	649
16	Total Customer Accounts	<u>13,945</u>			<u>1,236</u>
<u>Customer Service &amp; Info Expense (MN CIP)</u>					
17	- MN	1,902	Direct	0.000000%	-
18	- ND	-	Direct	0.000000%	-
19	- SD	133	Direct	100.000000%	133
20	- Other	658	C1	8.740052%	58
21	Total Customer Service & Information Expense	<u>2,694</u>			<u>191</u>
<u>Administrative and General Expense</u> <u>Salaries, Supplies, Pensions &amp; Benefits</u>					
22	Production	16,733	OXPD	9.343470%	1,563
23	Transmission	6,956	D2	9.187431%	639
24	Distribution	12,942	OXD	9.490372%	1,228
25	Customer Accounts	8,659	OXC	8.866368%	768
26	Customer Service & Information	1,673	C1	8.740052%	146
	Total A&G Salaries, Supplies, Pensions & Benefits	<u>46,963</u>			<u>4,345</u>
27	<b>Total</b>	<u>122,593</u>			<u>11,297</u>
28	Operating Income Impact	(122,593)			<b>(11,297)</b>
29	Income Tax Impact: SD Tax Rate is 21.00%				<u>(2,372)</u>
30	Net Operating Income Impact				<u><b>(8,925)</b></u>

OTTER TAIL POWER COMPANY  
 Reference Workpaper for 2017 SD TY-09 and Supporting Schedule B-5

TY-09  
 SD Share  
 Page 1 of 2

UNAMORTIZED RATE CASE EXPENSE ADJUSTMENT

		(A)	(B)	(C)	(D)	(E)
Line No.	Rate Base	OTP Total	Allocation Factor	Allocation Percentage	OTP SD	TAA B-5 Reference
1	Unamortized Rate Case Expense	458,334	Direct	N/A	458,334	Col (D); Line 29

OTTER TAIL POWER COMPANY  
 Reference Workpaper for 2017 SD TY-09 and Supporting Schedule C-8

TY-09  
 SD Share  
 Page 2 of 2

UNAMORTIZED RATE CASE EXPENSE ADJUSTMENT

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
1	2017 Rate Case Expense Adjustment	N/A	Directly Assigned	100.00%	183,333	Col (I); Line 10
2	Income Tax Impact: SD Tax Rate from Supporting Sch C-7 is	21.00%			<u>(38,500)</u>	Col (I); Line 19
3	Net Operating Income Impact				<u>(144,833)</u>	Col (I); Line 23

**ADJUSTMENT FOR NORMALIZED STORM REPAIR EXPENSE**

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
1	2017 Storm Repair Adjustment	<u>559,500</u>	NEPIS	7.873620%	<u>44,053</u>	Col (J); Line 10
2	Operating Income Impact	(559,500)			(44,053)	
3	Income Tax Impact: SD Tax Rate from Supporting Sch C-7 is	21.00%			<u>(9,251)</u>	Col (J); Line 19
4	Net Operating Income Impact				<u><u>(34,802)</u></u>	Col (J); Line 23

Otter Tail Power Company  
 Reference Workpaper for 2017 TY-10 and Supporting Schedule C-8  
 Storm Repair Charges Expensed

TY-10  
 SD Share  
 Page 2 of 2

	2013 - 2017						
	(A)	(B)	(C)	(D)	(E)	(F)	
	Budget	5 - Year Average	2017	2016	2015	2014	2013
Storm Repair Costs Incurred	\$1,000,000	<b>\$955,978</b>	\$396,478	\$1,942,945	\$892,930	\$876,689	\$670,847
Adjustment to 2018 account 924 (A)	<b><u>559,500</u></b>						

**OTTER TAIL POWER COMPANY**  
Reference Workpaper for 2017 SD TY-11 and Supporting Schedule C-8

TY-11  
SD Share  
Page 1 of 1

**ADJUSTMENT TO REMOVE ASHTABULA AND LANGDON FEDERAL PRODUCTION TAX CREDITS**

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
1	2017 Ashtabula Federal PTC	3,935,633	EPIS	8.40225%	<b>330,682</b>	
2	2017 Langdon Federal PTC	3,591,183	EPIS	8.40225%	<b>301,740</b>	
3	Adjustment to Production Tax Credits	<u>(7,526,816)</u>			<u><b>(632,422)</b></u>	Col (K); Line 17

OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-12 and Supporting Schedule C-8

TY-12  
SD Share  
Page 1 of 2

ADJUSTMENT FOR PLANT O&M OUTAGE EXPENSES

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
1	2018 Plant Outage Adjustment	<u>1,607,911</u>	E2	9.044926%	<u>145,434</u>	Col (L); Line 4
2	Operating Income Impact	(1,607,911)			(145,434)	
3	Income Tax Impact: SD Tax Rate is 21.00%				<u>(30,541)</u>	Col (L); Line 19
4	Net Operating Income Impact				<u>(114,893)</u>	Col (L); Line 23



OTTER TAIL POWER COMPANY  
Reference Workpaper for 2017 SD TY-12 and Supporting Schedule C-8

TY-12  
SD Share  
Page 2 of 2

Normalization of Plant O&M Outage Expenses  
(A)

Line No.	Description	(B) Total	(C) Partners share of Plant	(D) OTP Total
1	2016 Actual Coyote Outage Costs	\$6,544,092	35.0%	\$2,290,432
2	2018 Budgeted BSP Outage Costs	4,700,000	53.9%	2,533,300
3	Total Plant Outage Costs	\$11,244,092		<u>\$4,823,732</u>
4	Major Plant Outage occurs every 3 years			3
5	Additional outage costs per year for a normalzied year			\$1,607,911
6	2017 Actual Major Outage Costs			-
7	Removal of excess ougtage costs from the 2018 O&M Budget			1,607,911

**OTTER TAIL POWER COMPANY**  
Reference Workpaper for 2017 SD TY-13 and Supporting Schedule C-8

TY-13  
SD Share  
Page 1 of 1

**ADJUSTMENT TO REMOVE PROJECT TRANSMISSION RIDER REVENUE**

Line No.	Description	(A) OTP SD	(B) TAA C-8 Reference
1	2017 Transmission Project Revenues	(245,070)	Col (M); Line 1
2	Income Tax Impact: SD Tax Rate is 21%	(51,465)	Col (M); Line 19
3	Net Operating Income Impact	<u>(193,605)</u>	Col (M); Line 23

**OTTER TAIL POWER COMPANY**

Reference Workpaper for 2017 SD TY-14 and Supporting Schedule C-8

TY-14  
SD Share  
Page 1 of 1

**ADJUSTMENT TO REMOVE PROJECT ENVIROMENTAL RIDER REVENUE**

Line No.	Description	(A) OTP SD	(B) TAA C-8 Reference
1	2017 Environmental Project Revenues	<b>(2,374,465)</b>	Col (N); Line 1
2	Income Tax Impact: SD Tax Rate is 21%	<b>(498,638)</b>	Col (N); Line 19
3	Net Operating Income Impact	<b><u>(1,875,827)</u></b>	Col (N); Line 23

Otter Tail Power Company  
Reference Workpaper for 2017 SD TY-15 and Supporting Schedule C-8

TY-15  
SD Share  
Page 1 of 3

## ADJUSTMENT TO DEFERRED INCOME TAXES TO REFLECT 2018 RATES

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA C-8 Reference
10	Total Federal Deferred Income Tax	<u>(8,388,163)</u>	NEPIS	7.873620%	<u>(660,452)</u>	Col (O); Line 18

Otter Tail Power Company  
Reference Workpaper for 2017 SD TY-15 and Supporting Schedule B-5

TY-15  
SD Share  
Page 2 of 3

## ADJUSTMENT TO DEFERRED INCOME TAXES TO REFLECT 2018 RATES

Line No.	Description	(A) OTP Total	(B) Allocator	(C) Allocator %	(D) OTP SD	(E) TAA B-5 Reference
10	Total Accumulated Deferred Income Tax	<u>6,050,058</u>	NEPIS	7.873620%	<u>476,359</u>	Col (E); Line 28

2017 Actual Year South Dakota CCOSS  
 Impact of Using 2018 Tax Rates

(A) (B) (C)

Line No.	Deferred Tax Expense	Total Company Expense	Total Company ADIT
1	<b>Accumulated Deferred Income tax (Simple Average)</b>		
2	Federal		\$ 5,961,045
3	Minnesota		70,359
4	North Dakota		18,654
5	<b>Total ADIT</b>		<b>\$ 6,050,058</b>
6			
7	<b>Deferred Income tax expense</b>		
8	Federal	\$ (8,210,973)	
9	Minnesota	(144,422)	
10	North Dakota	(32,768)	
11	<b>Total Deferred Income tax expense</b>	<b>\$ (8,388,163)</b>	