

**Otter Tail Power Company
Allocated Cost of Service
2017 Actual Year and Test Year**

Statement N, pages 2 – 9, are the adjusted and actual test period cost of service allocated to class of customer. The remaining detail for the adjusted and actual test period cost of service allocated to customer classes appears in Volume 4A, Tab – 1 2017 Test Year Workpapers and Tab – 2 2017 Actual Year Workpapers, respectively. Adjustments to the Actual Year to arrive at the 2017 Test Year can also be found in Volume 4A, Tab – 1 2017 Test Year Work Papers. Otter Tail’s Cost Allocation Procedures Manual appears in Exhibit __ (SDT-1), Schedule 3.

1. Grouping and allocation of various items of cost and credits to cost of service into functional totals appear in the cost of service study located in Volume 4A, Tab – 1 2017 Test Year Work Papers.
2. Classification of items of cost and credits into demand, energy, customer or other appropriate categories appear in the cost of service study located in Volume 4A, Tab – 1 2017 Test Year Work Papers.
3. Otter Tail does not consider for rate purposes any special facilities to be devoted entirely to the jurisdictional service involved.
4. Computations showing the energy responsibilities of the jurisdictional service, based upon consideration of energy sales under the proposed rate schedules and the kWh delivered from the filing public utility’s supply system, appear in the cost of service study located in Volume 4A, Tab – 1 2017 Test Year Work Papers in the energy allocation factors E1 and E2.
5. Otter Tail’s peak electric hour losses are 11.15%. System energy losses applicable to jurisdictional sales are 3.88% to 9.7% of Otter Tail’s system output depending on the class of service.
6. Details of allocation of general or common or joint costs to various functions appear in Exhibit __ (SDT-1), Schedule 3.
7. Sufficient detailed breakdown of operation and maintenance expense accounts and taxes to disclose how component items have been classified among energy, class of customer or other category of cost appears in Exhibit __ (SDT-1), Schedule 3.

OTTERTAL POWER COMPANY
CLASS COST OF SERVICE STUDY
2017 ACTUAL YEAR - 10 CLASSES

LINE NO.	ITEM	ALLOC	SOUTH DAKOTA	RESIDENTIAL	FARMS	GENERAL SERVICE	LARGE GENERAL SERVICE	IRRIGATION	OUTDOOR LIGHTING	OPA	CONTROLLED WATER HEATING	CONTROLLED SERVICE INTERRUPT	CONTROLLED SERVICE DEFERRED
1	RATE BASE		83,294,792	24,681,770	1,888,314	15,840,528	33,192,538	106,405	1,835,266	779,894	1,420,014	2,599,134	950,929
2	TOTAL AVAILABLE FOR RETURN		4,814,182	1,060,672	117,272	1,558,750	1,838,451	(4,603)	40,023	21,866	(16,525)	186,091	(87,815)
3	RATE OF RETURN EARNED		5.78%	4.30%	6.21%	9.84%	5.84%	-4.33%	2.18%	2.80%	-1.16%	7.16%	-9.23%
4	RATE OF RETURN REQUESTED		7.74%	7.74%	7.74%	7.74%	7.74%	7.74%	7.74%	7.74%	7.74%	7.74%	7.74%
5	OPERATING INCOME REQUIRED		6,447,017	1,910,369	146,156	1,226,057	2,569,102	8,236	142,050	60,384	109,909	201,173	73,602
6	TOTAL AVAILABLE FOR RETURN		4,814,182	1,060,672	117,272	1,558,750	1,838,451	(4,603)	40,023	21,866	(16,525)	186,091	(87,815)
7	OPERATING INCOME DEFICIENCY		1,632,835	849,697	28,883	(332,894)	630,652	12,838	102,027	38,498	126,435	15,082	161,417
8	INCREMENTAL TAXES		882,992	459,493	15,619	(179,912)	341,039	6,943	55,173	20,919	68,372	8,156	87,290
9	REVENUE INCREASE REQUIRED		2,515,827	1,309,190	44,503	(512,605)	971,691	19,781	157,200	59,316	194,807	23,237	248,706
10	PERCENTAGE INCREASE		7.64%	13.70%	6.24%	-7.54%	7.36%	100.74%	25.36%	20.54%	51.81%	2.11%	103.12%
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OTTERTAIL POWER COMPANY
CLASS COST OF SERVICE STUDY
2017 ACTUAL YEAR - 10 CLASSES

LINE NO.	ITEM	ALLOC	SOUTH DAKOTA	RESIDENTIAL	FARMS	GENERAL SERVICE	LARGE GENERAL SERVICE	IRRIGATION	OUTDOOR LIGHTING	OPA	CONTROLLED WATER HEATING	CONTROLLED SERVICE INTERRUPT	CONTROLLED SERVICE DEFERRED
1	ELECTRIC PLANT IN SERVICE		161,400,619	48,110,926	3,687,860	30,785,233	63,805,645	213,994	3,626,933	1,510,390	2,820,189	5,005,409	1,833,840
2	ACCUMULATED DEPRECIATION		(68,956,035)	(20,732,186)	(1,586,481)	(13,194,309)	(27,009,330)	(93,918)	(1,581,856)	(645,553)	(1,226,619)	(2,109,751)	(775,932)
3	NET PLANT EXCLUDING BIG STONE PLANT CAPITALIZED ITEMS		92,444,584	27,378,741	2,101,379	17,590,924	36,796,514	120,077	2,044,976	864,837	1,593,569	2,895,658	1,057,907
4	NET CAPITALIZED ITEMS - BIG STONE PLANT		0	0	0	0	0	0	0	0	0	0	0
5	NET ELECTRIC PLANT IN SERVICE		92,444,584	27,378,741	2,101,379	17,590,924	36,796,514	120,077	2,044,976	864,837	1,593,569	2,895,658	1,057,907
6	PLANT HELD FOR FUTURE USE		2,786	885	75	549	747	8	111	24	90	154	43
7	CONSTRUCTION WORK IN PROGRESS		0	0	0	0	0	0	0	0	0	0	0
8	MATERIALS AND SUPPLIES		1,831,014	573,001	43,766	354,807	665,548	3,082	48,253	16,855	37,118	66,819	21,766
9	FUEL STOCKS		845,834	207,672	16,902	158,208	434,877	0	8,590	8,422	3,841	1,752	5,592
10	PREPAYMENTS		(1,939,692)	(574,455)	(44,091)	(369,089)	(772,056)	(2,519)	(42,907)	(18,146)	(33,436)	(60,756)	(22,197)
11	CUSTOMER ADVANCES		(73,314)	(21,713)	(1,867)	(13,951)	(29,182)	(95)	(1,622)	(686)	(1,264)	(2,296)	(839)
12	CASH WORKING CAPITAL		2,772,420	845,481	58,195	514,793	1,106,892	2,229	56,441	26,352	37,288	92,037	32,713
13	ACCUMULATED DEFERRED INCOME TAXES		(12,637,581)	(3,742,794)	(287,268)	(2,404,757)	(5,030,245)	(16,415)	(279,557)	(118,227)	(217,848)	(395,849)	(144,621)
14	UNAMORTIZED HOLDING COMPANY FORMATION EXPENSE		0	0	0	0	0	0	0	0	0	0	0
15	UNAMORTIZED RATE CASE EXPENSE		0	0	0	0	0	0	0	0	0	0	0
16	TOTAL AVERAGE RATE BASE		83,246,093	24,686,918	1,887,292	15,831,485	33,173,094	106,366	1,834,275	779,431	1,419,359	2,597,517	950,955

OTTERTAL POWER COMPANY
CLASS COST OF SERVICE STUDY
2017 ACTUAL YEAR - 10 CLASSES

LINE NO.	ITEM	ALLOC	SOUTH DAKOTA	RESIDENTIAL	FARMS	GENERAL SERVICE	LARGE GENERAL SERVICE	IRRIGATION	OUTDOOR LIGHTING	OPA	CONTROLLED WATER HEATING	CONTROLLED SERVICE INTERRUPT	CONTROLLED SERVICE DEFERRED
1	OPERATING REVENUES												
2	SALES OF ELECTRICITY		32,929,872	9,569,127	713,979	6,891,617	13,207,451	19,637	619,352	289,270	375,980	1,103,386	241,174
3	OTHER OPERATING REVENUE		2,446,167	749,689	59,297	463,314	866,992	2,798	46,315	22,883	37,890	80,231	28,949
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5	TOTAL OPERATING REVENUE		35,376,040	10,308,826	767,676	7,256,931	14,174,443	22,434	665,667	311,652	413,670	1,183,617	270,122
6													
7	OPERATING EXPENSES												
8	PRODUCTION EXPENSES		14,201,172	3,248,537	261,694	2,440,539	7,047,505	5,345	142,631	132,696	146,052	563,423	209,850
9	TRANSMISSION EXPENSES		2,998,416	919,518	64,654	609,600	1,249,320	0	20,734	28,653	3,252	33,230	8,196
10	SALES AND DELIVERY EXPENSES		1,266,656	426,615	30,145	276,234	578,681	6,362	19,652	13,677	16,454	17,185	3,043
11	CUSTOMER ACCOUNTING EXPENSES		1,044,837	703,306	30,141	276,234	84,890	1,832	3,552	13,697	36,697	17,185	4,629
12	CUSTOMER SERVICE AND INFORMATION EXPENSES		863,245	503,396	19,331	125,020	3,088	858	2,002	6,677	686	1,659	626
13	SALES EXPENSES		11,402	8,654	332	2,149	53	15	34	113	12	29	11
14	ADMINISTRATIVE AND GENERAL EXPENSES		3,739,913	1,383,613	89,035	748,201	1,151,691	5,188	130,147	36,218	70,914	90,936	33,969
15	CHARITABLE CONTRIBUTIONS		0	0	0	0	0	0	0	0	0	0	0
16	DEPRECIATION EXPENSE		4,719,228	1,381,732	105,624	883,442	1,916,417	5,561	97,250	44,384	77,287	142,153	53,478
17	AMORTIZATION OF BIG STONE PLANT CAPITALIZED COSTS		0	0	0	0	0	0	0	0	0	0	0
18	PROPERTY AMORTIZATION		0	0	0	0	0	0	0	0	0	0	0
19	GENERAL TAXES		965,772	286,027	21,853	183,773	384,415	1,254	21,364	9,085	16,648	30,251	11,052
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21	TOTAL OPERATING EXPENSES		30,068,391	9,103,751	639,298	5,604,812	12,037,927	26,418	615,015	285,822	421,863	981,866	352,240
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23	NET OPERATING INCOME BEFORE INCOME TAXES		5,306,648	1,205,075	128,378	1,652,119	2,136,516	(3,983)	50,652	26,471	(6,214)	207,751	(82,119)
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25	INCOME TAX EXPENSE		(753,931)	(224,735)	(17,227)	(143,803)	(298,049)	(1,000)	(16,942)	(7,955)	(13,174)	(23,381)	(8,566)
26	INVESTMENT TAX CREDIT		779,249	230,785	17,713	148,280	310,171	1,012	17,238	7,290	13,433	24,409	8,917
27	DEFERRED INCOME TAXES		0	0	0	0	0	0	0	0	0	0	0
28	INCOME TAXES		0	0	0	0	0	0	0	0	0	0	0
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30	TOTAL INCOME TAX EXPENSE		25,318	6,051	487	4,477	12,123	13	296	235	259	1,027	351
31													
32	NET OPERATING INCOME		5,281,330	1,199,024	127,891	1,647,642	2,124,394	(3,996)	50,357	26,236	(6,473)	200,724	(82,469)
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34	ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION		0	0	0	0	0	0	0	0	0	0	0
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36	TOTAL AVAILABLE FOR RETURN		5,281,330	1,199,024	127,891	1,647,642	2,124,394	(3,996)	50,357	26,236	(6,473)	200,724	(82,469)
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Otter Tail Power Company
STATEMENT N
CLASS COST OF SERVICE STUDIES
2017 ACTUAL YEAR

Line No.	Description
1	The remaining detail for the 2017 Actual Year Class Cost of Service Study can be found
2	in Volume 4A, Tab - 2017 Actual Year.

OTTER TAIL POWER COMPANY
CLASS COST OF SERVICE STUDY
2017 TEST YEAR - 10 CLASSES

LINE NO	ITEM	ALLOC	SOUTH DAKOTA	RESIDENTIAL	FARMS	GENERAL SERVICE	LARGE GENERAL SERVICE	IRRIGATION	OUTDOOR LIGHTING	OPA	CONTROLLED WATER HEATING	CONTROLLED SERVICE INTERRUPT	CONTROLLED SERVICE DEFERRED
1	RATE BASE		84,804,903	25,404,562	1,898,658	16,465,198	33,990,343	134,374	1,780,976	775,274	1,433,739	2,860,432	941,346
2	TOTAL AVAILABLE FOR RETURN		2,042,807	486,652	65,262	808,675	670,038	(5,747)	45,461	2,445	(32,424)	(20,005)	22,461
3			2.41%	1.92%	3.44%	4.91%	2.01%	-4.28%	2.55%	0.32%	-2.26%	-0.75%	2.39%
4	RATE OF RETURN EARNED												
5	RATE OF RETURN REQUESTED												
6			7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%
7	OPERATING INCOME REQUIRED		6,756,430	2,022,203	151,133	1,310,630	2,857,871	10,696	141,766	61,712	114,126	213,362	74,931
8			7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%	7.96%
9	OPERATING INCOME REQUIRED		2,042,807	486,652	65,262	808,675	670,038	(5,747)	45,461	2,445	(32,424)	(20,005)	22,461
10	TOTAL AVAILABLE FOR RETURN		4,715,623	1,535,552	85,881	501,955	1,987,833	16,443	96,305	59,267	146,550	233,367	52,470
11	OPERATING INCOME DEFICIENCY		1,267,274										
12			GRFC =										
13	INCREMENTAL TAXES		1,267,274	411,105	22,993	134,386	532,191	4,402	25,783	15,867	39,235	62,478	14,048
14			5,978,110	1,948,656	109,874	636,341	2,520,024	20,845	122,088	75,134	185,785	295,845	66,518
15	REVENUE INCREASE REQUIRED		19.50%	21.21%	16.26%	9.98%	21.06%	102.84%	20.59%	26.51%	54.35%	32.94%	19.52%
16	PERCENTAGE INCREASE												

OTTER TAIL POWER COMPANY
CLASS COST OF SERVICE STUDY
2017 TEST YEAR - 10 CLASSES

LINE NO.	ITEM	ALLOC	SOUTH DAKOTA	RESIDENTIAL	FARMS	GENERAL SERVICE	LARGE GENERAL SERVICE	IRRIGATION	OUTDOOR LIGHTING	OPA	CONTROLLED WATER HEATING	CONTROLLED SERVICE INTERRUPT	CONTROLLED SERVICE DEFERRED
1	ELECTRIC PLANT IN SERVICE		162,656,425	48,951,508	3,667,538	31,652,996	63,631,037	266,926	3,489,446	1,486,276	2,806,128	5,104,726	1,799,640
2	ACCUMULATED DEPRECIATION		(69,187,810)	(20,930,683)	(1,567,995)	(13,481,049)	(26,839,906)	(116,251)	(1,516,125)	(631,635)	(1,210,124)	(2,135,798)	(758,245)
3													
4	NET PLANT EXCLUDING BIG STONE PLANT CAPITALIZED ITEMS		93,670,615	28,020,825	2,099,543	18,171,947	36,791,132	150,675	1,973,323	854,642	1,596,004	2,868,928	1,041,695
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6	NET CAPITALIZED ITEMS - BIG STONE PLANT		93,670,615	28,020,825	2,099,543	18,171,947	36,791,132	150,675	1,973,323	854,642	1,596,004	2,868,928	1,041,695
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8	NET ELECTRIC PLANT IN SERVICE		2,786	884	73	551	746	10	111	24	89	155	43
9	PLANT HELD FOR FUTURE USE		0	0	0	0	0	0	0	0	0	0	0
10	CONSTRUCTION WORK IN PROGRESS		1,833,976	575,808	43,104	360,179	662,101	3,828	47,041	16,452	36,508	67,567	21,386
11	MATERIALS AND SUPPLIES		848,126	212,103	16,790	164,034	429,950	0	7,056	8,233	3,880	1,777	5,302
12	FUEL STOCKS		(1,946,936)	(582,410)	(43,639)	(377,702)	(764,700)	(3,132)	(41,015)	(17,764)	(33,214)	(61,709)	(21,649)
13	PREPAYMENTS		(73,589)	(22,014)	(1,649)	(14,276)	(28,904)	(118)	(1,550)	(671)	(1,255)	(2,332)	(818)
14	CUSTOMER ADVANCES		2,474,563	780,281	51,384	470,364	976,115	2,301	46,942	22,976	33,048	83,288	27,865
15	CASH WORKING CAPITAL		(12,421,053)	(3,715,660)	(278,407)	(2,409,664)	(4,876,634)	(19,980)	(261,670)	(113,328)	(211,901)	(393,690)	(136,119)
16	ACCUMULATED DEFERRED INCOME TAXES		0	0	0	0	0	0	0	0	0	0	0
17	UNAMORTIZED HOLDING COMPANY FORMATION EXPENSE		458,334	137,107	10,273	88,916	180,020	737	9,656	4,182	7,819	14,527	5,097
18	UNAMORTIZED RATE CASE EXPENSE												
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32	TOTAL AVERAGE RATE BASE		84,847,822	25,387,024	1,897,473	16,454,348	33,367,826	134,321	1,779,894	774,744	1,432,977	2,678,511	940,703
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OTTER TAIL POWER COMPANY
CLASS COST OF SERVICE STUDY
2017 TEST YEAR - 10 CLASSES

LINE NO.	ITEM	ALLOC	SOUTH DAKOTA	RESIDENTIAL	FARMS	GENERAL SERVICE	LARGE GENERAL SERVICE	IRRIGATION	OUTDOOR LIGHTING	OPA	CONTROLLED WATER HEATING	CONTROLLED SERVICE INTERRUPT	CONTROLLED SERVICE DEFERRED
1	OPERATING REVENUES												
2	OPERATING REVENUES		30,850,015	9,175,091	689,522	6,378,987	11,967,079	20,270	593,933	293,510	941,830	888,967	340,716
3	OTHER OPERATING REVENUE		2,453,522	759,910	53,918	468,754	956,334	3,429	43,576	22,418	37,526	81,750	28,006
4													
5	TOTAL OPERATING REVENUE		33,303,537	9,935,001	723,340	6,845,741	12,923,413	23,699	636,609	285,928	379,356	980,017	368,722
6													
7	OPERATING EXPENSES												
8	PRODUCTION EXPENSES		14,543,258	3,396,854	285,702	2,593,339	7,990,066	6,479	116,834	132,416	153,009	586,338	201,522
9	TRANSMISSION EXPENSES		2,850,983	822,527	62,815	616,938	1,236,370	7,765	19,913	28,176	3,195	33,803	8,176
10	DEPRECIATION EXPENSES		1,155,253	303,847	19,368	1,155,253	2,310,747	1,846	19,578	13,707	63	17,312	5,487
11	CUSTOMER ACCOUNTING EXPENSES		684,545	758,847	30,361	278,264	6,521	1,846	3,578	13,707	35,960	17,312	4,857
12	CUSTOMER SERVICE AND INFORMATION EXPENSES		20,751	504,383	19,368	125,265	3,094	860	2,006	6,590	688	1,662	630
13	SALES EXPENSES		20,751	15,750	605	3,912	97	27	63	206	21	52	20
14	ADMINISTRATIVE AND GENERAL EXPENSES		4,003,827	1,470,361	93,909	812,078	1,241,268	6,313	133,126	37,869	73,683	98,811	36,409
15	CHARITABLE CONTRIBUTIONS		4,888,064	0	0	0	0	0	0	0	0	0	0
16	DEPRECIATION EXPENSE		0	0	0	0	0	0	0	0	0	0	0
17	AMORTIZATION OF BIG STONE PLANT CAPITALIZED COSTS		0	0	0	0	0	0	0	0	0	0	0
18	AMORTIZATION		0	0	0	0	0	0	0	0	0	0	0
19	GENERAL TAXES		869,389	289,986	21,728	188,062	380,752	1,559	20,422	8,845	16,538	30,725	10,779
20													
21	TOTAL OPERATING EXPENSES		30,893,109	9,430,351	649,308	5,892,687	12,218,737	31,806	589,109	286,200	429,107	1,020,124	345,680
22													
23	NET OPERATING INCOME BEFORE INCOME TAXES		2,410,428	505,460	74,032	953,055	705,576	(8,107)	47,501	(272)	(49,751)	(40,108)	23,042
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27	INCOME TAX EXPENSE		(123,560)	(37,139)	(2,783)	(24,015)	(48,277)	(203)	(2,647)	(1,128)	(2,131)	(3,873)	(1,968)
28	INVESTMENT TAX CREDIT		441,070	131,943	9,886	85,567	173,240	709	9,282	4,024	7,525	13,980	4,905
29	DEFERRED INCOME TAXES		(638,041)	(283,439)	(13,615)	(52,453)	(363,566)	(3,784)	(17,412)	(11,942)	(32,575)	(48,631)	(9,625)
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31	TOTAL INCOME TAX EXPENSE		(520,532)	(188,636)	(6,511)	(9,099)	(238,603)	(3,277)	(10,769)	(9,046)	(27,180)	(38,524)	(6,686)
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36													
37													
38													
39													
40	NET OPERATING INCOME		2,730,960	694,096	80,544	943,955	944,179	(4,830)	58,268	8,774	(22,570)	(583)	29,127
41													
42	ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION		0	0	0	0	0	0	0	0	0	0	0
43													
44	TOTAL AVAILABLE FOR RETURN		2,730,960	694,096	80,544	943,955	944,179	(4,830)	58,268	8,774	(22,570)	(583)	29,127
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Otter Tail Power Company
STATEMENT N
CLASS COST OF SERVICE STUDIES
2017 TEST YEAR

Line No.	Description
1	The remaining detail of the 2017 Test Year Class Cost of Service Study can be found
2	in Volume 4A, Tab - 2017 Test Year Work Papers.