

**Otter Tail Power Company
 Base and Peak Demand Split Data
 December 2017 Actual and January 2018 & 2019 Budget**

	(A)	(B)	(C)	(D)	(E)	(F)
Line No.		Plant Capacity - KW			Estimated Cost of New Capacity	
		Steam/Hydro	Other	Total	Base Load	Peaking
1						
2						
3	2017 Actual	550,400	109,900	660,300	\$3,880	\$617
4						
5	2018 Forecast	550,400	109,900	660,300	\$3,958	\$636
6						
7	2019 Forecast	550,400	109,900	660,300	\$4,037	\$655
8						
9						
10	Calculation of Base Demand and Peaking Demand Factors					
11						
12	Total Current Cost (TCC) = (A X D) + (B X E)					
13						
14	Peaking Demand Factor (PDF) = (C X E) / TCC					
15						
16	Base Demand Factor (BDF) = 1 - PDF					
17						
18	2017 Actual					
19		TCC =	\$2,203,360,300		Actual Average Investment for 2017	
20		PDF =	18.49%		Forecast January 2018 Expenses	
21		BDF =	81.51%			
22	2018 Forecast					
23		TCC =	\$2,248,105,589		Forecasted Average Investment for 2018	
24		PDF =	18.67%		Forecast January 2019 Expenses	
25		BDF =	81.33%			
26	2019 Forecast					
27		TCC =	\$2,293,766,126		Forecasted Average Investment for 2019	
28		PDF =	18.84%		Forecast January 2020 Expenses	
29		BDF =	81.16%			

Otter Tail Power Company
Base Energy and Peak Demand Split Data
2017 Actual Year
(OTP Total)

UCAP Values:	Percentage	MW	
Ashtabula	19.83%	48	
Langdon	20.41%	40.5	
Luverne	23.02%	49.5	
	63.26%	138	
Weighted Average:			
Ashtabula	31.35%	34.78%	6.90%
Langdon	32.26%	29.35%	5.99%
Luverne	36.39%	35.87%	8.26%
	100.00%	100.00%	21.14%
Wind			
Base Energy	78.86%		
Peak Demand	21.14%		

**Otter Tail Power Company
Labor Ratios
2017 Actual Year
(OTP Total)**

(A)

(B)

(C)

Line No.	Function Labor	2017 Actual Year	
		Amount	Portion of Total
1	Production	\$15,953,326	35.63%
2			
3	Transmission	\$6,631,980	14.81%
4			
5	Distribution	\$12,339,082	27.56%
6			
7	Customer Accounts	\$8,255,724	18.44%
8			
9	Customer Service & Information, & Sales	\$1,595,053	3.56%
10			
11			
12			
13	Subtotal	44,775,167	100.00%
14			
15	Administrative & General	\$27,803,328	
16			
17	Total Labor Expense	72,578,495	
18			

Allocation Factors
 Minnesota Classes
 2017 Test Year
 (OTP Total)

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
Line No.	Allocators	Total	Minnesota	North Dakota	South Dakota	FERC	Class Total	Residential	Farms	General Service	Large General Service
1	D1	726,384	364,535	293,829	67,131	889	364,535	93,648	5,807	59,100	195,341
2	D2	730,683	364,535	293,829	67,131	5,188	364,535	93,648	5,807	59,100	195,341
3	D3	865,827	369,715	405,850	85,082	5,180	369,715	77,119	10,878	77,406	121,093
4	D4	1,126,868	472,030	540,270	114,568	0	472,030	107,478	16,880	113,492	92,331
5	E1	4,700,055	2,588,754	1,667,479	440,126	3,696	2,588,754	461,023	40,317	341,984	1,683,039
6	E2	5,270,535	2,813,511	1,976,612	476,716	3,696	2,813,511	493,270	40,317	365,995	1,683,039
7	C1	132,888	62,116	58,975	11,597	0	62,116	48,166	1,203	10,119	450
8	C2	139,438	65,039	62,245	12,150	4	65,039	50,813	1,384	11,211	347
9	C3	139,367	64,995	62,231	12,141	0	64,995	50,813	1,384	11,194	321
10	C4	5,697,611	2,571,972	2,497,436	628,203	0	2,571,972	0	0	0	0
11	C5	5,010,334	2,019,081	2,661,839	329,414	0	2,019,081	0	0	0	0
12	C6	52,720,954	24,365,669	23,524,762	4,830,523	0	24,345,669	6,893,326	667,242	7,664,256	1,398,581
13	C7	181,527	87,762	77,349	16,416	0	87,762	51,209	1,217	25,105	1,078
14	C8	139,463	65,061	62,248	12,150	4	65,061	50,813	1,384	11,211	369
15	C9	43,171	19,835	18,434	4,902	0	19,835	3,951	38	111	1

Line No.	Allocators	Irrigation	Outdoor Lighting	OPA	Controlled Water Heating	Controlled Service Interrupt	Controlled Service Deferred				
16	D1	0	2,070	2,886	272	4,826	585				
17	D2	0	2,070	2,886	272	4,826	585				
18	D3	8,020	4,791	2,838	9,418	51,669	6,483				
19	D4	11,842	4,532	4,635	28,917	80,736	11,187				
20	E1	0	20,367	20,915	8,757	0	12,352				
21	E2	4,971	20,367	20,915	21,016	133,979	29,642				
22	C1	217	182	482	57	202	38				
23	C2	515	206	499	19	36	9				
24	C3	515	205	499	19	36	9				
25	C4	0	2,571,972	0	0	0	0				
26	C5	0	2,019,081	0	0	0	0				
27	C6	271,609	93,378	216,793	3,352,980	3,057,942	729,562				
28	C7	325	389	771	3,985	3,029	644				
29	C8	515	206	499	19	36	9				
30	C9	138	0	0	8,148	6,632	816				

Allocation Factors
North Dakota Classes
2017 Test Year
(OTP Total)

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
Line No.	Allocators	Total	Minnesota	North Dakota	South Dakota	FERC	Class Total	Residential	Farms	General Service	Large General Service
1	D1	726,384	364,535	293,829	67,131	889	293,829	106,773	4,209	80,037	88,284
2	D2	730,683	364,535	293,829	67,131	5,188	293,829	106,773	4,209	80,037	88,284
3	D3	865,827	369,715	405,850	85,082	5,180	405,850	91,010	12,756	88,199	104,435
4	D4	1,126,868	472,030	540,270	114,568	0	540,270	135,589	19,848	129,683	80,715
5	E1	4,700,055	2,588,754	1,667,479	440,126	3,696	1,667,479	474,863	33,249	433,747	662,232
6	E2	5,270,535	2,813,511	1,976,612	476,716	3,696	1,976,612	528,185	33,249	433,841	662,232
7	C1	132,688	62,116	58,975	11,597	0	58,975	45,755	924	11,075	249
8	C2	139,438	65,039	62,245	12,150	4	62,245	47,832	1,121	12,312	177
9	C3	139,367	64,995	62,231	12,141	0	62,231	47,832	1,121	12,307	168
10	C4	5,697,611	2,571,972	2,497,436	628,203	0	2,497,436	0	0	0	0
11	C5	5,010,334	2,019,081	2,661,839	329,414	0	2,661,839	0	0	0	0
12	C6	52,720,954	24,365,669	23,524,762	4,830,523	0	23,524,762	6,958,918	548,216	8,431,500	567,290
13	C7	181,527	87,762	77,349	16,416	0	77,349	47,224	944	20,163	575
14	C8	139,463	65,061	62,248	12,150	4	62,248	47,832	1,121	12,312	180
15	C9	43,171	19,835	18,434	4,902	0	18,434	4,016	5	21	0

Line No.	Allocators	Irrigation	Outdoor Lighting	OPA	Controlled Water Heating	Controlled Service Interrupt	Controlled Service Deferred				
16	D1	0	2,422	2,982	208	8,131	783				
17	D2	0	2,422	2,982	208	8,131	783				
18	D3	1,411	5,620	2,821	6,812	84,279	8,507				
19	D4	1,944	5,316	5,549	20,810	126,874	13,942				
20	E1	0	24,494	18,804	6,240	0	13,850				
21	E2	1,017	24,494	18,804	14,978	226,572	33,240				
22	C1	34	78	552	38	234	36				
23	C2	80	93	575	11	38	6				
24	C3	80	93	575	11	38	6				
25	C4	0	2,497,436	0	0	0	0				
26	C5	0	2,661,839	0	0	0	0				
27	C6	41,786	44,082	246,963	2,406,700	3,689,135	590,172				
28	C7	48	104	763	2,973	3,992	563				
29	C8	80	93	575	11	38	6				
30	C9	23	0	0	5,912	7,741	716				

Allocation Factors
South Dakota Classes
2017 Test Year
(OTP Total)

	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
Line No.	Allocators	Total	Minnesota	North Dakota	South Dakota	FERC	Class Total	Residential	Farms	General Service	Large General Service
1	D1	726,384	364,535	293,829	67,131	889	67,131	20,987	1,429	14,035	28,559
2	D2	730,683	364,535	293,829	67,131	5,188	67,131	20,987	1,429	14,035	28,559
3	D3	865,827	369,715	405,850	85,082	5,180	85,082	17,909	2,408	16,721	31,843
4	D4	1,126,868	472,030	540,270	114,568	0	114,568	28,996	3,471	23,013	31,492
5	E1	4,700,055	2,588,754	1,667,479	440,126	3,696	440,126	103,755	8,554	83,460	230,819
6	E2	5,270,535	2,813,511	1,976,612	476,716	3,696	476,716	109,479	8,548	83,409	230,677
7	C1	132,688	62,116	58,975	11,597	0	11,597	8,802	338	2,186	54
8	C2	139,438	65,039	62,245	12,150	4	12,150	9,129	381	2,406	37
9	C3	139,367	64,995	62,231	12,141	0	12,141	9,129	381	2,401	34
10	C4	5,697,611	2,571,972	2,497,436	628,203	0	628,203	0	0	0	0
11	C5	5,010,334	2,019,081	2,661,839	329,414	0	329,414	0	0	0	0
12	C6	52,720,954	24,365,669	23,524,762	4,830,523	0	4,830,523	1,233,868	189,805	1,665,528	144,714
13	C7	181,527	87,762	77,349	16,416	0	16,416	9,110	341	4,745	200
14	C8	139,463	65,061	62,248	12,150	4	12,150	9,129	381	2,406	37
15	C9	43,171	19,835	18,434	4,902	0	4,092	719	21	11	1

Line No.	Allocators	Irrigation	Outdoor Lighting	OPA	Controlled Water Heating	Controlled Service Interrupt	Controlled Service Deferred				
16	D1	0	453	641	72	769	186				
17	D2	0	453	641	72	769	186				
18	D3	610	1,116	648	2,397	8,961	2,469				
19	D4	850	1,056	958	7,692	13,204	3,836				
20	E1	0	3,811	4,282	2,355	0	3,090				
21	E2	259	3,809	4,279	5,648	23,196	7,412				
22	C1	15	35	115	12	29	11				
23	C2	27	41	119	4	3	3				
24	C3	27	40	119	4	3	3				
25	C4	0	628,203	0	0	0	0				
26	C5	0	329,414	0	0	0	0				
27	C6	22,122	18,960	52,151	871,250	477,481	154,644				
28	C7	15	46	233	1,071	514	141				
29	C8	27	41	119	4	3	3				
30	C9	5	0	0	2,120	1,023	192				

Otter Tail Power Company
 Effective Tax Rates
 Actual Year 2017
 (OTP Total)

(A) (B) (C) (D) (E) (F)

Line No.					
1					
2	Tax Rates:			SD Special Hearing Fund Assessment Rate:	0.0015
3	Federal	35.00%			
4	Minnesota	9.80%			
5	North Dakota	4.31%			
6					
7					
8					
9					
10	==> Minnesota				
11	Income		1,000	1,000	
12	MN Income Tax		98	9.80%	
13					
14			902	98.0	
15	Federal Tax Rate		35.00%		
16					
17	Total Tax		315.70		
18					
19	Effective Tax Rates - MN	41.370%	31.570%	9.80%	
20					
21					
22	Gross Revenue Conversion Factor:		1 / (1 - Total ETR)		1.705611
23					
24					
25					
26	==> North Dakota				
27	Income		1,000		1,000
28	ND / Federal Income Tax		43.1		
29					
30			956.9		1,000
31	Federal Tax Rate		35.00%		4.31%
32					
33	Total Tax		334.9		43.1
34					
35	Effective Tax Rates - ND	37.802%	33.492%		4.31%
36					
37					
38	Gross Revenue Conversion Factor:		1 / (1 - Total ETR)		1.607756
39					
40					
41					
42	==> South Dakota				
43	Effective Tax Rates - SD	35.00%	35.00%	(No State Income Tax in South Dakota)	
44					
45					
46					
47	SD Gross Revenue Conversion Factor: (Including Recognition of SD Special Hearing Fund Assessment)				
48	Where "X" = Gross Revenue Deficiency				
49	"Y" = Conversion Factor				
50	0.0015 = SDPUC Special Hearing Fund Assessment				
51	35.00% = Federal Tax Rate				
52					
53					
54	$X = [X - .0015X - [(X - .0015X) * .34]] * Y$				
55	$X = [.9985X - (.9985X * .34)] * Y$				
56	$X = (.9985X - .33949X) * Y$				
57	$X = .65901XY$				
58	$1 = .65901Y$				
59	$Y =$				1.540773
60					
61	==> Total Company				
62	Effective Tax Rates - System	(3)	39.3%	Federal 32.7% Minnesota 5.0% North Dakota 1.6%	(4)
63					
64					
65	Gross Revenue Conversion Factor:		1 / (1 - Total ETR)		1.647446

Otter Tail Corporation
(Stand Alone)
Effective Tax Rate
YE Accrual 2017
(OTP Total)

(A) (B) (C) (D) (E)

Line No.		Federal	Minnesota	North Dakota	Total
1	Income	1,000	1,000	1,000	
2	Tax Expense Deductions				
3	Federal				
4	Minnesota	50.17			
5	North Dakota	16.08			
6	Subtotal	933.75	1,000.00	1,000.00	
7					
8	Apportionment Factor (OTP Separate)	100%	51.1944%	37.3100%	
9					
10	Taxable Income	933.75	511.94	373.10	
11					
12	Tax Rate	35.00%	9.80%	4.31%	
13					
14					
15	Tax	326.81	50.17	16.08	
16					
17	Effective Tax Rate	32.681%	5.017%	1.608%	39.3%
18					
19	Rate to Use: (Insert for Rounding)	32.7%	5.0%	1.6%	39.3%

Otter Tail Power Company
 Effective Tax Rates
 2017 Test Year
 (OTP Total)

(A) (B) (C) (D) (E) (F)

Line No.					
1		Tax Rates:		SD Special Hearing Fund Assessment Rate:	0.0015
2		Federal	21.00%		
3		Minnesota	9.80%		
4		North Dakota	4.31%		
5					
6					
7					
8					
9					
10		==> Minnesota			
11		Income		1,000	1,000
12		MN Income Tax		98	9.80%
13					
14				902	98.0
15		Federal Tax Rate		21.00%	
16					
17		Total Tax		189.42	
18					
19		Effective Tax Rates - MN	28.742%	18.942%	9.80%
20					
21					
22		Gross Revenue Conversion Factor:		1 / (1 - Total ETR)	1.403351
23					
24					
25					
26		==> North Dakota			
27		Income		1,000	1,000
28		ND / Federal Income Tax		43.1	
29					
30				956.9	1,000
31		Federal Tax Rate		21.00%	4.31%
32					
33		Total Tax		200.9	43.1
34					
35		Effective Tax Rates - ND	24.405%	20.095%	4.31%
36					
37					
38		Gross Revenue Conversion Factor:		1 / (1 - Total ETR)	1.322837
39					
40					
41					
42		==> South Dakota			
43		Effective Tax Rates - SD	21.00%	21.00%	(No State Income Tax in South Dakota)
44					
45					
46					
47		SD Gross Revenue Conversion Factor: (Including Recognition of SD Special Hearing Fund Assessment)			
48		Where "X" = Gross Revenue Deficiency			
49		"Y" = Conversion Factor			
50		0.0015 = SDPUC Special Hearing Fund Assessment			
51		21.00% = Federal Tax Rate			
52					
53					
54		$X = [X - .0015X - [(X - .0015X) * .34]] * Y$			
55		$X = [.9985X - (.9985X * .34)] * Y$			
56		$X = (.9985X - .33949X) * Y$			
57		$X = .65901XY$			
58		$1 = .65901Y$			
59		$Y =$			
60					1.267724
61		==> Total Company (3)			
62		Effective Tax Rates - System	26.2%	19.6%	5.0%
63					1.6%
64					
65		Gross Revenue Conversion Factor:		1 / (1 - Total ETR)	1.355014

Otter Tail Corporation
(Stand Alone)
Effective Tax Rate
YE Accrual 2017
2017 Test Year
(OTP Total)

(A) (B) (C) (D) (E)

Line No.		Federal	Minnesota	North Dakota	Total
1	Income	1,000	1,000	1,000	
2	Tax Expense Deductions				
3	Federal				
4	Minnesota	50.17			
5	North Dakota	16.08			
6	Subtotal	933.75	1,000.00	1,000.00	
7					
8	Apportionment Factor (OTP Separate)	100%	51.1944%	37.3100%	
9					
10	Taxable Income	933.75	511.94	373.10	
11					
12	Tax Rate	21.00%	9.80%	4.31%	
13					
14					
15	Tax	196.09	50.17	16.08	
16					
17	Effective Tax Rate	19.609%	5.017%	1.608%	26.2%
18					
19	Rate to Use: (Insert for Rounding)	19.6%	5.0%	1.6%	26.2%