

MONTANA-DAKOTA UTILITIES CO.
ELECTRIC UTILITY -
SOUTH DAKOTA
Embedded Class Cost of Service Study
Cost of Service by Component
Pro Forma 2015

	Total South Dakota	Residential Rate 10				Total Residential Rate 10
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	7,935,226	718,567	116,620	2,487,387	11,257,800
Adjustments to Rate Base	18,861,743	9,120,708	11,061	2,041	67,398	9,201,208
Pro Forma Rate Base	41,160,226	17,055,934	729,628	118,661	2,554,785	20,459,008
Operating Income for Proposed Return	3,123,238	1,294,206	55,364	9,004	193,857	1,552,431
Current Operating Income	1,862,289	(1,317,689)	(126,222)	2,882,923	(550,896)	888,116
Adjustment to Operating Income	(462,802)	(302,750)	(3,912)	109,379	(37,619)	(234,902)
Increase in Operating Income	1,723,751	2,914,645	185,498	(2,983,298)	782,372	899,217
Related Taxes for Increase						
Federal Income	928,174	1,569,426	99,884	(1,606,390)	421,278	484,198
Revenue Tax	3,718	6,285	400	(6,435)	1,687	1,937
Total Increase in Revenue	2,655,643	4,490,356	285,782	(4,596,123)	1,205,337	1,385,352
Retail Sales Revenue Before Increase						
Per Books	13,501,927	113,549	0	6,325,316	493,083	6,931,948
Pro Forma Adjustments	334,215	(97,488)	0	258,958	8,308	169,778
Total Retail Sales Revenue Before Increase	13,836,142	16,061	0	6,584,274	501,391	7,101,726
Total Cost of Service Required from Rates	16,491,785	4,506,417	285,782	1,988,151	1,706,728	8,487,078
Pro Forma Rate of Return Before Increase	3.400%					3.193%
Billing Units at Customer						
Kwh	153,921,399	73,989,166	73,989,166	73,989,166		
Kw Demand	249,432					
Bills	118,284				83,460	
Unit Cost of Service						
\$ per Kwh		0.061	0.004	0.027		
\$ per Kw Demand						
\$ per Customer Per Month					20.45	

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	Total South Dakota	Small General Demand Prod. & Trans.	Primary Demand Distribution	Rate 20 Energy	Customer	Total SG Primary Rate 20
Rate Base	22,298,483	648	17	8	1,184	1,857
Adjustments to Rate Base	18,861,743	716	1	0	24	741
Pro Forma Rate Base	41,160,226	1,364	18	8	1,208	2,598
Operating Income for Proposed Return	3,123,238	104	1	1	92	198
Current Operating Income	1,862,289	(112)	(6)	188	(81)	(11)
Adjustment to Operating Income	(462,802)	(25)	0	27	(141)	(139)
Increase in Operating Income	1,723,751	241	7	(214)	314	348
Related Taxes for Increase						
Federal Income	928,174	129	4	(116)	169	186
Revenue Tax	3,718	1	0	0	1	2
Total Increase in Revenue	2,655,643	371	11	(330)	484	536
Retail Sales Revenue Before Increase						
Per Books	13,501,927	10	0	424	329	763
Pro Forma Adjustments	334,215	(8)	0	47	(192)	(153)
Total Retail Sales Revenue Before Increase	13,836,142	2	0	471	137	610
Total Cost of Service Required from Rates	16,491,785	373	11	141	621	1,146
Pro Forma Rate of Return Before Increase	3.400%					-5.774%
Billing Units at Customer						
Kwh	153,921,399	5,333	5,333	5,333		
Kw Demand	249,432	0	0.0			
Bills	118,284				12	
Unit Cost of Service						
\$ per Kwh		0.070	0.002	0.026		
\$ per Kw Demand						
\$ per Customer Per Month					51.75	

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	Total South Dakota	Small General Secondary Rate 20				Total SG Secondary Rate 20
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	3,290,877	257,941	50,902	1,234,550	4,834,270
Adjustments to Rate Base	18,861,743	3,844,327	4,108	736	24,190	3,873,361
Pro Forma Rate Base	41,160,226	7,135,204	262,049	51,638	1,258,740	8,707,631
Operating Income for Proposed Return	3,123,238	541,419	19,884	3,918	95,513	660,734
Current Operating Income	1,862,289	(541,373)	103,923	1,088,596	(123,533)	527,613
Adjustment to Operating Income	(462,802)	(123,499)	1,921	54,800	(9,805)	(76,583)
Increase in Operating Income	1,723,751	1,206,291	(85,960)	(1,139,478)	228,851	209,704
Related Taxes for Increase						
Federal Income	928,174	649,541	(46,287)	(613,565)	123,227	112,916
Revenue Tax	3,718	2,602	(185)	(2,458)	494	453
Total Increase in Revenue	2,655,643	1,858,434	(132,432)	(1,755,501)	352,572	323,073
Retail Sales Revenue Before Increase						
Per Books	13,501,927	46,512	229,604	2,499,741	277,313	3,053,170
Pro Forma Adjustments	334,215	(39,934)	5,118	123,887	5,089	94,160
Total Retail Sales Revenue Before Increase	13,836,142	6,578	234,722	2,623,628	282,402	3,147,330
Total Cost of Service Required from Rates	16,491,785	1,865,012	102,290	868,127	634,974	3,470,403
Pro Forma Rate of Return Before Increase	3.400%					5.180%
Billing Units at Customer						
Kwh	153,921,399	32,295,172	32,295,172	32,295,172		
Kw Demand	249,432	99,502	99,502			
Bills	118,284				23,628	
Unit Cost of Service						
\$ per Kwh				0.027		
\$ per Kw Demand		18.743	1.028			
\$ per Customer Per Month					26.87	

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	Total South Dakota	Irrigation Power Rate 25				Total Irrigation Rate 25
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	23,713	3,932	245	10,676	38,566
Adjustments to Rate Base	18,861,743	24,737	66	0	90	24,893
Pro Forma Rate Base	41,160,226	48,450	3,998	245	10,766	63,459
Operating Income for Proposed Return	3,123,238	3,676	303	19	817	4,815
Current Operating Income	1,862,289	(4,146)	5,380	1,295	(1,044)	1,485
Adjustment to Operating Income	(462,802)	(988)	(5,064)	(165)	0	(6,217)
Increase in Operating Income	1,723,751	8,810	(13)	(1,111)	1,861	9,547
Related Taxes for Increase						
Federal Income	928,174	4,744	(7)	(599)	1,002	5,140
Revenue Tax	3,718	19	0	(2)	4	21
Total Increase in Revenue	2,655,643	13,573	(20)	(1,712)	2,867	14,708
Retail Sales Revenue Before Increase						
Per Books	13,501,927	362	9,333	5,963	0	15,658
Pro Forma Adjustments	334,215	(311)	(7,758)	(64)	0	(8,133)
Total Retail Sales Revenue Before Increase	13,836,142	51	1,575	5,899	0	7,525
Total Cost of Service Required from Rates	16,491,785	13,624	1,555	4,187	2,867	22,233
Pro Forma Rate of Return Before Increase	3.400%					-7.457%
Billing Units at Customer						
Kwh	153,921,399	155,439	155,439	155,439		
Kw Demand	249,432	420	420.0			
Bills	118,284				60	
Unit Cost of Service						
\$ per Kwh				0.027		
\$ per Kw Demand		32.438	3.702			
\$ per Customer Per Month					47.78	

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	Total South Dakota	Large General Secondary Rate 30				Total LG Secondary Rate 30
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	3,890,932	277,132	59,303	202,175	4,429,542
Adjustments to Rate Base	18,861,743	4,523,858	4,911	316	2,909	4,531,994
Pro Forma Rate Base	41,160,226	8,414,790	282,043	59,619	205,084	8,961,536
Operating Income for Proposed Return	3,123,238	638,514	21,401	4,524	15,562	680,001
Current Operating Income	1,862,289	(641,852)	405,694	679,011	(24,284)	418,569
Adjustment to Operating Income	(462,802)	(146,733)	4,865	60,810	(1,127)	(82,185)
Increase in Operating Income	1,723,751	1,427,099	(389,158)	(735,297)	40,973	343,617
Related Taxes for Increase						
Federal Income	928,174	768,438	(209,547)	(395,929)	22,063	185,025
Revenue Tax	3,718	3,078	(839)	(1,586)	88	741
Total Increase in Revenue	2,655,643	2,198,615	(599,544)	(1,132,812)	63,124	529,383
Retail Sales Revenue Before Increase						
Per Books	13,501,927	55,194	710,377	2,005,766	19,848	2,791,185
Pro Forma Adjustments	334,215	(47,388)	10,157	139,667	312	102,748
Total Retail Sales Revenue Before Increase	13,836,142	7,806	720,534	2,145,433	20,160	2,893,933
Total Cost of Service Required from Rates	16,491,785	2,206,421	120,990	1,012,621	83,284	3,423,316
Pro Forma Rate of Return Before Increase	3.400%					3.754%
Billing Units at Customer						
Kwh	153,921,399	37,625,195	37,625,195	37,625,195		
Kw Demand	249,432	144,107	144,107			
Bills	118,284				1,344	
Unit Cost of Service						
\$ per Kwh				0.027		
\$ per Kw Demand		15.311	0.840			
\$ per Customer Per Month					61.97	

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	Total South Dakota	General Electric Space Heating Service Rate 32				Total Space Heating Rate 32
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	548,737	53,742	7,819	90,175	700,473
Adjustments to Rate Base	18,861,743	624,746	826	57	1,630	627,259
Pro Forma Rate Base	41,160,226	1,173,483	54,568	7,876	91,805	1,327,732
Operating Income for Proposed Return	3,123,238	89,044	4,141	598	6,966	100,749
Current Operating Income	1,862,289	(91,614)	(9,415)	106,496	(13,102)	(7,635)
Adjustment to Operating Income	(462,802)	(21,136)	(293)	(21,822)	(795)	(44,046)
Increase in Operating Income	1,723,751	201,794	13,849	(84,076)	20,863	152,430
Related Taxes for Increase						
Federal Income	928,174	108,659	7,457	(45,272)	11,234	82,078
Revenue Tax	3,718	435	30	(181)	45	329
Total Increase in Revenue	2,655,643	310,888	21,336	(129,529)	32,142	234,837
Retail Sales Revenue Before Increase						
Per Books	13,501,927	7,908	0	290,566	11,530	310,004
Pro Forma Adjustments	334,215	(6,789)	0	(27,493)	168	(34,114)
Total Retail Sales Revenue Before Increase	13,836,142	1,119	0	263,073	11,698	275,890
Total Cost of Service Required from Rates	16,491,785	312,007	21,336	133,544	43,840	510,727
Pro Forma Rate of Return Before Increase	3.400%					-3.892%
Billing Units at Customer						
Kwh	153,921,399	4,960,901	4,960,901	4,960,901		
Kw Demand	249,432	0	0.0			
Bills	118,284				1,620	
Unit Cost of Service						
\$ per Kwh				0.027		
\$ per Kw Demand		0.000	0.000			
\$ per Customer Per Month					27.06	

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	Total South Dakota	Municipal Pumping Rate 48				Total Municipal Pumping Rate 48
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	148,115	12,220	2,257	49,415	212,007
Adjustments to Rate Base	18,861,743	172,197	210	(1)	772	173,178
Pro Forma Rate Base	41,160,226	320,312	12,430	2,256	50,187	385,185
Operating Income for Proposed Return	3,123,238	24,305	943	171	3,808	29,227
Current Operating Income	1,862,289	(24,435)	22,990	11,953	(4,381)	6,127
Adjustment to Operating Income	(462,802)	(5,586)	(7,632)	6,191	(755)	(7,782)
Increase in Operating Income	1,723,751	54,326	(14,415)	(17,973)	8,944	30,882
Related Taxes for Increase						
Federal Income	928,174	29,253	(7,762)	(9,678)	4,816	16,629
Revenue Tax	3,718	117	(31)	(39)	19	66
Total Increase in Revenue	2,655,643	83,696	(22,208)	(27,690)	13,779	47,577
Retail Sales Revenue Before Increase						
Per Books	13,501,927	2,101	38,665	54,968	7,849	103,583
Pro Forma Adjustments	334,215	(1,804)	(11,639)	11,279	(617)	(2,781)
Total Retail Sales Revenue Before Increase	13,836,142	297	27,026	66,247	7,232	100,802
Total Cost of Service Required from Rates	16,491,785	83,993	4,818	38,557	21,011	148,379
Pro Forma Rate of Return Before Increase	3.400%					-0.430%
Billing Units at Customer						
Kwh	153,921,399	1,431,970	1,431,970	1,431,970		
Kw Demand	249,432	5,403	5,403.0			
Bills	118,284				600	
Unit Cost of Service						
\$ per Kwh				0.027		
\$ per Kw Demand		15.546	0.892			
\$ per Customer Per Month					35.02	

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	Total South Dakota	Outdoor Lighting Rate 24				Total Private Lighting Rate 24
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	82,084	6,230	1,289	212,510	302,113
Adjustments to Rate Base	18,861,743	96,372	94	20	5,357	101,843
Pro Forma Rate Base	41,160,226	178,456	6,324	1,309	217,867	403,956
Operating Income for Proposed Return	3,123,238	13,541	480	99	16,532	30,652
Current Operating Income	1,862,289	(13,465)	(1,092)	28,665	(50,784)	(36,676)
Adjustment to Operating Income	(462,802)	(3,064)	(34)	1,378	(3,427)	(5,147)
Increase in Operating Income	1,723,751	30,070	1,606	(29,944)	70,743	72,475
Related Taxes for Increase						
Federal Income	928,174	16,191	865	(16,123)	38,092	39,025
Revenue Tax	3,718	65	3	(65)	153	156
Total Increase in Revenue	2,655,643	46,326	2,474	(46,132)	108,988	111,656
Retail Sales Revenue Before Increase						
Per Books	13,501,927	1,156	0	64,999	0	66,155
Pro Forma Adjustments	334,215	(992)	0	3,122	0	2,130
Total Retail Sales Revenue Before Increase	13,836,142	164	0	68,121	0	68,285
Total Cost of Service Required from Rates	16,491,785	46,490	2,474	21,989	108,988	179,941
Pro Forma Rate of Return Before Increase	3.400%					-10.353%
Billing Units at Customer						
Kwh	153,921,399	818,111	818,111	818,111	818,111	
Kw Demand	249,432					
Bills	118,284				6,912	
Unit Cost of Service						
\$ per Kwh		0.057	0.003	0.027	0.133	
\$ per Kw Demand						
\$ per Customer Per Month						

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	Total South Dakota	Street Lighting Company Owned Rate 41				Total SL Co. Own Rate 41
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	243,802	21,329	3,637	200,842	469,610
Adjustments to Rate Base	18,861,743	281,527	328	65	4,664	286,584
Pro Forma Rate Base	41,160,226	525,329	21,657	3,702	205,506	756,194
Operating Income for Proposed Return	3,123,238	39,862	1,643	281	15,594	57,380
Current Operating Income	1,862,289	(40,377)	(3,738)	91,052	15,259	62,196
Adjustment to Operating Income	(462,802)	(9,259)	(117)	6,132	(1,982)	(5,226)
Increase in Operating Income	1,723,751	89,498	5,498	(96,903)	2,317	410
Related Taxes for Increase						
Federal Income	928,174	48,191	2,960	(52,179)	1,248	220
Revenue Tax	3,718	193	12	(209)	5	1
Total Increase in Revenue	2,655,643	137,882	8,470	(149,291)	3,570	631
Retail Sales Revenue Before Increase						
Per Books	13,501,927	3,477	0	199,017	0	202,494
Pro Forma Adjustments	334,215	(2,985)	0	12,262	0	9,277
Total Retail Sales Revenue Before Increase	13,836,142	492	0	211,279	0	211,771
Total Cost of Service Required from Rates	16,491,785	138,374	8,470	61,988	3,570	212,402
Pro Forma Rate of Return Before Increase	3.400%					7.534%
Billing Units at Customer						
Kwh	153,921,399	2,307,221	2,307,221	2,307,221		
Kw Demand	249,432					
Bills	118,284				396	
Unit Cost of Service						
\$ per Kwh		0.060	0.004	0.027		
\$ per Kw Demand						
\$ per Customer Per Month					9.02	

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	Total South Dakota	Street Lighting Municipal Owned Rate 41				Total SL Muni Own Rate 41
		Demand Prod. & Trans.	Demand Distribution	Energy	Customer	
Rate Base	22,298,483	34,896	3,062	525	13,762	52,245
Adjustments to Rate Base	18,861,743	40,398	48	8	228	40,682
Pro Forma Rate Base	41,160,226	75,294	3,110	533	13,990	92,927
Operating Income for Proposed Return	3,123,238	5,713	236	40	1,062	7,051
Current Operating Income	1,862,289	(5,768)	(536)	11,678	(2,869)	2,505
Adjustment to Operating Income	(462,802)	(1,322)	(16)	859	(96)	(575)
Increase in Operating Income	1,723,751	12,803	788	(12,497)	4,027	5,121
Related Taxes for Increase						
Federal Income	928,174	6,894	424	(6,729)	2,168	2,757
Revenue Tax	3,718	28	2	(27)	9	12
Total Increase in Revenue	2,655,643	19,725	1,214	(19,253)	6,204	7,890
Retail Sales Revenue Before Increase						
Per Books	13,501,927	497	0	26,470	0	26,967
Pro Forma Adjustments	334,215	(427)	0	1,730	0	1,303
Total Retail Sales Revenue Before Increase	13,836,142	70	0	28,200	0	28,270
Total Cost of Service Required from Rates	16,491,785	19,795	1,214	8,947	6,204	36,160
Pro Forma Rate of Return Before Increase	3.400%					2.077%
Billing Units at Customer						
Kwh	153,921,399	332,891	332,891	332,891		
Kw Demand	249,432					
Bills	118,284				252	
Unit Cost of Service						
\$ per Kwh		0.059	0.004	0.027		
\$ per Kw Demand						
\$ per Customer Per Month					24.62	

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Operating Income and Rate of Return	Total South Dakota	Total Residential	Total Small General	Total Large General	Total Municipal Pumping	Total Lighting
Sales Revenues	13,501,927	6,931,948	16,421	6,154,359	103,583	295,616
Adjustments to Sales Revenues	334,215	169,778	(8,286)	162,794	(2,781)	12,710
Total Sales Revenues	13,836,142	7,101,726	8,135	6,317,153	100,802	308,326
Other Revenues	736,890	299,028	901	260,284	5,176	171,501
Adjustments to Other Revenues	(180,908)	(95,668)	(245)	(76,242)	(1,544)	(7,209)
Total Other Revenues	555,982	203,360	656	184,042	3,632	164,292
Total Operating Revenues	14,392,124	7,305,086	8,791	6,501,195	104,434	472,618
Operating Expense						
Cost of Fuel and Purchased Power	4,199,342	2,021,241	4,516	2,040,271	39,021	94,293
Adj. to Cost of Fuel and Purchased Pwr	54,045	24,850	0	27,435	521	1,239
Total Cost of Fuel and Purchased Pwr	4,253,387	2,046,091	4,516	2,067,706	39,542	95,532
Other O&M Expense	5,342,211	2,886,867	7,643	2,167,903	44,581	235,217
Adjustments to Other O&M	445,379	232,107	673	193,240	3,866	15,493
Total Other O&M Expense	5,787,590	3,118,974	8,316	2,361,143	48,447	250,710
Total Operation & Maintenance Expense	10,040,977	5,165,065	12,832	4,428,849	87,989	346,242
Depreciation Expense	1,844,338	950,161	2,962	785,735	16,130	89,350
Adjustment to Depreciation Expense	1,234,024	601,395	1,661	591,167	11,349	28,452
Total Depreciation Expense	3,078,362	1,551,556	4,623	1,376,902	27,479	117,802
Taxes Other Than Income Taxes	630,066	333,136	1,064	260,170	5,488	30,208
Adjustment to Taxes Other Than Income	105,203	52,380	165	48,859	951	2,848
Total Taxes Other Than Income	735,269	385,516	1,229	309,029	6,439	33,056
Current Income Taxes - Fed. & State	(1,076,876)	(584,285)	(2,819)	(406,417)	(15,491)	(67,864)
Adjustment to Current Income Taxes	(2,790,223)	(1,371,118)	(6,943)	(1,314,724)	(27,578)	(69,860)
Total Current Income Taxes	(3,867,099)	(1,955,403)	(9,762)	(1,721,141)	(43,069)	(137,724)
Deferred Income Taxes	1,437,447	735,740	2,482	628,434	12,903	57,888

**MONTANA-DAKOTA UTILITIES CO.
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Summary Sheet
Pro Forma 2013**

Operating Income and Rate of Return	Total South Dakota	Total Residential	Total Small General	Total Large General	Total Municipal Pumping	Total Lighting
Adjustment to Deferred Income Tax	1,567,681	769,398	2,269	743,389	14,348	38,277
Total Deferred Income Taxes	3,005,128	1,505,138	4,751	1,371,823	27,251	96,165
Total Operating Expenses	12,992,637	6,651,872	13,673	5,765,462	106,089	455,541
Pro Forma Operating Income	1,399,487	653,214	(4,882)	735,733	(1,655)	17,077
Rate Base	22,298,483	11,257,800	40,423	9,964,285	212,007	823,968
Adjustment to Rate Base	18,861,743	9,201,208	25,634	9,032,614	173,178	429,109
Total Pro Forma Rate Base	41,160,226	20,459,008	66,057	18,996,899	385,185	1,253,077
Pro Forma Rate of Return	3.400%	3.193%	-7.391%	3.873%	-0.430%	1.363%