

Montana-Dakota Utilities Co.
Gas Utility – South Dakota
Description of Allocation Factors & Embedded Class Cost of Service Study - Details

Factor	Title	Function	Description	Work Paper Reference
1	Dk Throughput	Energy	Pro Forma Dk throughput by class as recorded at the meter.	Statement N, Page 16
2	Peak Design Day	Demand	Design Day peak is allocated to customers based on the ratio of the calculated Design Day peak use by class for the firm customers. The Small and Large Interruptible customer's demand is based on the results of regressions and daily firm contract deliveries.	Statement N, Page 17
3	Dk Sales	Energy	Pro Forma Dk sales by class as recorded at the meter excluding transportation volumes.	Statement N, Page 16
5	Peak Design Day at Distribution	Demand	Factor 2 (Peak Design Day) less customers not served off the distribution system.	Statement N, Page 17
8	Average Customers	Customer	Average customers as of December 31, 2014.	Statement N, Page 20
9	Average Customers @ Distribution	Customer	Factor 8 (Average Customers) less customers not served off the distribution system.	Statement N, Page 20
10	Total Weighted Customers	Customer	Factor 8 (Average Customers) multiplied by weighting factor (based on average installed meter costs as of 2014), weighted to represent relative costs, with the residential cost weight set equal to 1.0	Statement N, Page 20
11	Average Residential and Firm General Service Customers	Customer	Average Customers less Interruptible Customers.	Statement N, Page 20
12	Weighted Customers @ Distribution	Customer	Factor 10 (Total Weighted Customers) excluding customers not served off the distribution system.	Statement N, Page 20
13	Distribution Mains	Demand	Average Distribution Mains plant balance as shown on Statement D, Page 7 are assigned to the demand component of the rate and allocated to each class based on Factor 5. Factor 13 is based on the result of the allocations and is used to allocate distribution mains related costs. Factor 13 is used to allocate Structure &	Statement N, Page 24

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Factor	Title	Function	Description	Work Paper Reference
			Improvements, Meas. & Reg, Equip. City Gate, Service Regulators and Ind. Meas. & Regulator Station Equipment.	
15	Distribution Plant	Demand and Customer	Average Distribution Plant balance as shown on Statement D, Page 7, as allocated to each class. This factor is based on the results of the allocations and is used to allocate distribution plant related items.	Statement N, Page 24
16	Meters & Regulators	Customer	Average Meters and Regulators plant balances as shown on Statement D, Page 7 are assigned to the customer component and allocated to each class based on Factor 10 or directly assigned. Factor 16 is based on the results of the allocations and is used to allocate meter & regulator related costs.	Statement N, Page 24
17	Weighted Services	Customer	Factor 8 (Average Customers) multiplied by weighting factor (based on average installed service costs) weighted to represent relative costs, with the residential cost weight set equal to 1.0	Statement N, Page 24
18	Meas. & Reg. Equip. General	Demand	Measurement and Regulator Equipment-General as shown on Statement D, Page 7 is assigned to the demand component based on Factor 13. Factor 18 is based on the results of the allocations and is used to allocate measurement and regulator equipment-general related costs.	Statement N, Page 24
22	Main & Services	Demand & Customer	Factor 22 is based on the results of the allocation of the mains and services accounts and is used to allocate Mains & Services related costs	Statement N, Page 24
23	Pro Forma Distribution Plant	Demand & Customer	Factor 23 is based on the results of the allocations and is used to allocate Pro Forma Distribution plant related costs.	CCOSS-Detail as allocated.
24	Net Gas Plant in Service	Demand Energy & Customer	Total gas plant in service Statement D, Page 3 less the Accumulated Reserve for Depreciation shown on Statement E, Page 1 as allocated to each class based on the factors identified in the CCOS-Detail report. This factor is based on the results of the allocations and is used to	CCOSS-Detail as allocated.

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Factor	Title	Function	Description	Work Paper Reference
			allocate Net Gas Plant in Service related costs.	
25	Total Gas Plant in Service	Demand, Energy & Customer	Factor 25 is based on the results of the allocations and is used to allocate Total Gas Plant in Service related costs.	CCOSS-Detail as allocated.
26	Pro Forma Operating Revenue	Demand, Energy & Customer	Pro Forma Operating Revenue as shown on Statement I, Page 1 assigned and allocated to Demand, Energy and customer costs as applicable.	CCOSS-Detail as allocated and Statement I work papers.
27	All Other Distribution Operation Expense	Demand, Energy & Customer	Factor 27 is based on the results of the allocations and is used to allocate All Other Distribution Operation Expense related costs.	CCOSS-Detail as allocated.
28	All Other Distribution Maintenance Expense	Demand & Customer	Factor 28 is based on the results of the allocations and is used to allocate All Other Distribution Maintenance Expense related costs.	CCOSS-Detail as allocated.
29	Distribution O&M	Demand, Energy & Customer	Factor 29 is based on the results of the allocations and is used to allocate Distribution O&M related costs.	CCOSS-Detail as allocated.
30	O&M Excluding Cost of Gas and A&G	Demand, Energy & Customer	Factor 30 is based on the results of the allocations and is used to allocate O&M Excluding Cost of Gas and A&G related costs.	CCOSS-Detail as allocated.
31	O&M Excluding Cost of Gas	Demand, Energy & Customer	Factor 31 is based on the results of the allocations and is used to allocate O&M Excluding Cost of Gas related costs.	CCOSS-Detail as allocated.
33	Cost of Gas	Demand & Energy	Factor 33 is based on the results of the allocations and is used to allocate the Cost of Gas related costs.	Statement N, Pages
35	Taxable Income	Demand, Energy & Customer	Factor 35 is based on the results of the allocations and is used to allocate Taxable Income related costs.	CCOSS-Detail as allocated.
40	Total Tax Deductions & Adjustments	Demand, Energy & Customer	Factor 40 is based on the results of the allocations and is used to allocate income tax related costs.	CCOSS-Detail as allocated.
41	Total Pro Forma Plant	Demand, Energy & Customer	Factor is based on the results of the allocations and is used to allocate the Plant related adjustments.	CCOSS-Detail as allocated.

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
SOUTH DAKOTA
Embedded Class Cost of Service Study
Summary Report
Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Rate Base							
Gas Plant in Service							
Distribution Plant							
Land	13	76,905	48,204	8,117	17,324	686	2,574
Rights of Way	13	125,715	78,799	13,268	28,319	1,122	4,207
Structures & Improvements	13	180,926	113,405	19,095	40,756	1,615	6,055
Mains \$41,732,078							
Demand Related 75%	2	31,299,059	17,001,528	3,466,347	9,067,029	368,582	1,395,573
Customer Related 25%	9	10,433,019	9,156,307	938,038	333,732	3,844	1,098
Meas. & Reg. Equip. - General	13	772,181	484,006	81,496	173,945	6,891	25,843
Direct to Small Firm	Direct	41,732	0	41,732	0	0	0
Meas. & Reg. Equip. - City Gate	13	1,284,217	804,952	135,536	289,289	11,460	42,980
Services	37	15,927,242	13,644,439	1,537,509	726,198	12,003	7,093
Meters	10	14,506,614	9,841,475	1,240,220	3,127,998	178,664	118,257
Service Regulators	10	1,780,406	1,207,850	152,213	383,901	21,928	14,514
Direct to Small Firm	Direct	4,951	0	4,951	0	0	0
Direct to Large Firm	Direct	4,736	0	0	4,736	0	0
Direct to Small IT	Direct	3,917	0	0	0	3,917	0
Direct to Large IT	Direct	9,125	0	0	0	0	9,125
Ind. Meas. & Reg. Station Equipment	13	64,195	40,238	6,775	14,460	573	2,149
Property on Customer Premise	13	0	0	0	0	0	0
Cathodic Protection & Other Equipment	13	356,762	223,620	37,652	80,366	3,184	11,940
Distribution Plant		76,871,702	52,644,823	7,682,949	14,288,053	614,469	1,641,408
General Plant	15	13,144,278	9,001,728	1,313,706	2,443,112	105,068	280,664
Intangible Plant - General	15	146,801	100,535	14,672	27,286	1,173	3,135
Common Plant	15	2,996,789	2,052,321	299,514	557,010	23,955	63,989
Intangible Plant - excluding CC&B	15	2,794,447	1,913,750	279,291	519,400	22,337	59,669
Intangible Plant - Common (CC&B)	8	3,857,450	3,384,929	346,777	123,375	1,692	677
Gas Plant Leased to Others	15	0	0	0	0	0	0
Total Gas Plant in Service		99,811,467	69,098,086	9,936,909	17,958,236	768,694	2,049,542

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
SOUTH DAKOTA
Embedded Class Cost of Service Study
Summary Report
Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Less: Accumulated Depreciation							
Distribution Plant							
Rights of Way	13	22,110	13,859	2,333	4,981	197	740
Structures & Improvements	17	99,481	62,354	10,499	22,410	888	3,330
Mains	13	22,230,326	13,934,058	2,346,179	5,007,706	198,388	743,995
Meas. & Reg. Equip. - General	18	261,988	155,796	39,665	55,991	2,218	8,318
Meas. & Reg. Equip. - City Gate	19	421,577	264,247	44,493	94,966	3,762	14,109
Services	37	12,993,163	11,130,893	1,254,273	592,419	9,792	5,786
Meters	10	4,638,572	3,146,868	396,567	1,000,195	57,129	37,813
Service Regulators	20	688,040	460,891	59,971	148,296	9,862	9,020
Ind. Meas. & Reg. Station Equipment	21	41,109	25,768	4,338	9,260	367	1,376
Property on Customer Premise	13	(4,483)	(2,810)	(473)	(1,010)	(40)	(150)
Cathodic Protection & Other Equipment	13	170,766	107,037	18,022	38,468	1,524	5,715
Distribution Plant		41,562,649	29,298,961	4,175,867	6,973,682	284,087	830,052
General Plant	15	4,215,716	2,887,092	421,340	783,570	33,698	90,016
Intangible Plant - General	15	146,800	100,535	14,672	27,285	1,173	3,135
Common Plant	15	1,294,275	886,371	129,357	240,565	10,346	27,636
Intangible Plant - Excluding CC&B	8	1,863,899	1,635,579	167,561	59,614	818	327
Intangible Plant - Common (CC&B)	15	326,978	223,928	32,680	60,775	2,613	6,982
Less: Total Accumulated Reserve for Depreciation		49,410,317	35,032,466	4,941,477	8,145,491	332,735	958,148
Total Gas Plant in Service		50,401,150	34,065,620	4,995,432	9,812,745	435,959	1,091,394
Additions							
Materials & Supplies	15	513,376	351,581	51,309	95,421	4,103	10,962
Prepaid Insurance	24	31,221	21,102	3,094	6,079	270	676
Unamortized Rate Case Expense	30	156,179	114,331	15,022	23,251	1,033	2,542
Unamortized Loss on Debt	24	416,648	281,608	41,295	81,119	3,604	9,022
Total Additions		1,117,424	768,622	110,720	205,870	9,010	23,202
Total Before Deductions		51,518,574	34,834,242	5,106,152	10,018,615	444,969	1,114,596
Deductions							
Accumulated Deferred Income Tax	24	(11,768,954)	(7,954,515)	(1,166,462)	(2,291,331)	(101,799)	(254,847)
Customer Guarantee	2	0	0	0	0	0	0
Customer Advances For Construction	Direct	(923,816)	(162,894)	(590,525)	(169,163)	(340)	(894)
Total Deductions		(12,692,770)	(8,117,409)	(1,756,987)	(2,460,494)	(102,139)	(255,741)
Total Rate Base		38,825,804	26,716,833	3,349,165	7,558,121	342,830	858,855

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MONTANA-DAKOTA UTILITIES CO.
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Summary Report
Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Income Statement							
Gas Operating Revenues							
Retail Sales & Transportation							
Residential	Direct	33,885,715	33,885,715	0	0	0	0
Firm General	Direct	24,967,136	0	5,824,712	19,142,424	0	0
Small Interruptible	Direct	387,941	0	0	0	387,941	0
Large Interruptible	Direct	2,150,172	0	0	0	0	2,150,172
Total Sales & Transportation Revenues		61,390,964	33,885,715	5,824,712	19,142,424	387,941	2,150,172
Other Operating Revenue							
Miscellaneous							
Reconnect Fees	11	16,957	14,889	1,525	543	0	0
NSF Check Fees	11	28,520	25,042	2,565	913	0	0
Miscellaneous	24	6,053	4,090	600	1,179	53	131
Rent From Gas Property	24	251,924	170,272	24,969	49,048	2,180	5,455
Other Gas Revenues							
Miscellaneous							
Miscellaneous	31	212,683	155,698	20,456	31,662	1,406	3,461
Transport and Penalty Revenue - Net	24	28,646	19,363	2,839	5,577	247	620
Total Other Operating Revenue		544,783	389,354	52,954	88,922	3,886	9,667
Unbilled Revenue	26	(591,533)	(340,062)	(56,061)	(173,107)	(3,215)	(19,088)
Margin Sharing Credit	26	(245,967)	(141,399)	(23,311)	(71,981)	(1,338)	(7,938)
Reserve for Refund	26	(6,088)	(3,502)	(576)	(1,781)	(33)	(196)
Total Operating Revenues		61,092,159	33,790,106	5,797,718	18,984,477	387,241	2,132,617
Operation & Maintenance Expenses							
Cost of Purchased Gas	Direct	43,342,839	22,559,119	4,404,406	14,314,099	210,705	1,854,510
Other Gas Supply Expenses	3	97,001	50,287	9,327	31,808	305	5,274
		43,439,840	22,609,406	4,413,733	14,345,907	211,010	1,859,784
Distribution Expenses							
Operation							
Load Dispatch	1	27,279	12,047	2,234	7,619	1,124	4,255
Mains and Services	22	760,851	525,217	78,407	133,631	5,073	18,523
Measuring Stations - General	18	18,300	10,883	2,770	3,911	155	581
Measuring Stations - Industrial	21	8,506	5,332	898	1,916	76	284
Measuring Stations - City Gate	19	48,117	30,160	5,079	10,839	429	1,610
Meters & House Regulators	16	172,701	116,998	14,797	37,237	2,166	1,503
Customer Installations	10	161,082	109,281	13,771	34,733	1,984	1,313

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
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Embedded Class Cost of Service Study
Summary Report
Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Other Gas Distribution	27	1,400,444	947,701	138,023	268,995	12,880	32,845
Rents	27	37,229	25,194	3,668	7,151	343	873
Supervision & Engineering	27	706,456	478,069	69,626	135,695	6,497	16,569
Total Operation Expense		3,340,965	2,260,882	329,273	641,727	30,727	78,356
Maintenance							
Structures & Improvements	17	314	197	33	71	3	10
Mains	13	97,837	61,324	10,326	22,039	873	3,275
Measuring Stations - General	18	52,196	31,040	7,902	11,155	442	1,657
Measuring Stations - Industrial	21	23,521	14,742	2,483	5,298	210	788
Measuring Stations - City Gate	19	28,137	17,636	2,969	6,338	252	942
Services	37	68,193	58,420	6,583	3,109	51	30
Meters & House Regulators	16	186,664	126,458	15,993	40,248	2,341	1,624
Other Equipment	28	180,609	122,480	18,299	34,890	1,649	3,291
Supervision & Engineering	28	201,874	136,898	20,454	38,999	1,843	3,680
Total Maintenance Expense		839,345	569,195	85,042	162,147	7,664	15,297
Total Distribution Expenses		4,180,310	2,830,077	414,315	803,874	38,391	93,653
Supervision	8	30,453	26,723	2,738	974	13	5
Meter Reading	10	109,075	73,999	9,325	23,519	1,343	889
Customer Records & Collection	8	1,102,932	967,828	99,151	35,276	484	193
Uncollectible Accounts	11	284,373	249,692	25,580	9,101	0	0
Miscellaneous Customer Accounts	8	122,688	107,659	11,029	3,924	54	22
Customer Service & Information	8	170,925	149,987	15,366	5,467	75	30
Sales Expenses	8	52,744	46,283	4,742	1,687	23	9
Administration & General Expenses	30	3,623,171	2,652,379	348,487	539,384	23,969	58,952
Total Gas O&M Expenses		53,116,511	29,714,033	5,344,466	15,769,113	275,362	2,013,537
O&M Excl. Cost of Gas and A&G		6,150,501	4,502,535	591,573	915,630	40,688	100,075
O&M Excl. Cost of Gas		9,773,672	7,154,914	940,060	1,455,014	64,657	159,027
Depreciation Expense							
Distribution Plant							
Rights of Way	13	1,728	1,083	183	389	15	58
Structures & Improvements	17	5,007	3,139	529	1,128	44	167
Mains	13	932,471	584,475	98,413	210,053	8,322	31,208
Meas. & Reg. Equip. - General	18	25,331	15,064	3,835	5,413	214	805
Meas. & Reg. Equip. - City Gate	19	48,112	30,158	5,077	10,838	429	1,610

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
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Embedded Class Cost of Service Study
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Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Services	37	1,133,502	971,040	109,421	51,682	854	505
Meters	10	445,947	302,536	38,126	96,158	5,492	3,635
Service Regulators	20	31,731	21,255	2,766	6,839	455	416
Ind. Meas. & Reg. Station Equipment	21	2,116	1,325	224	477	19	71
Cathodic Protection & Other Equipment	13	9,402	5,894	992	2,118	84	314
Total Distribution Plant		2,635,347	1,935,969	259,566	385,095	15,928	38,789
General Plant	15	309,156	211,723	30,898	57,463	2,471	6,601
Common Plant	15	127,509	87,323	12,744	23,700	1,019	2,723
Amort. of Intangible Plant - Common	15	373,163	255,557	37,296	69,359	2,983	7,968
Total Depreciation Expense		3,445,175	2,490,572	340,504	535,617	22,401	56,081
Taxes Other Than Income							
Ad Valorem Taxes	15	666,940	456,746	66,658	123,964	5,331	14,241
Other Taxes - Payroll, Franchise, Other	31	389,804	285,360	37,492	58,031	2,578	6,343
Other Taxes - Revenue	26	71,442	41,071	6,770	20,907	388	2,306
Total Taxes Other Than Income Taxes		1,128,186	783,177	110,920	202,902	8,297	22,890
Total Operating Expense		57,689,872	32,987,782	5,795,890	16,507,632	306,060	2,092,508
Interest Expense	24	1,113,252	752,435	110,338	216,743	9,629	24,107
Taxable Income Before Adjustments		2,289,035	49,889	(108,510)	2,260,102	71,552	16,002
Deductions							
Unrecovered Purchased Gas Cost	33	(15,342)	(8,077)	(1,498)	(5,108)	(36)	(623)
Other Income Tax Charges	24	7,550,982	5,103,631	748,404	1,470,122	65,315	163,510
Preferred Dividend Paid Deduction	24	10,951	7,402	1,085	2,132	95	237
Total Deductions		7,546,591	5,102,956	747,991	1,467,146	65,374	163,124
Taxable Income (Before State Income Tax)		(5,257,556)	(5,053,067)	(856,501)	792,956	6,178	(147,122)
Less: State Income Tax	35	0	0	0	0	0	0
Federal Taxable Income		(5,257,556)	(5,053,067)	(856,501)	792,956	6,178	(147,122)
Federal Income Tax							
@ Current Rate of 35%		(1,840,145)	(1,768,574)	(299,775)	277,535	2,162	(51,493)
State Income Taxes	35	0	0	0	0	0	0
Credits and Adjustments	40	(2,092)	(1,416)	(207)	(406)	(18)	(45)
Rounding & Prior Year's Adjustments - Federal	24	413,244	279,308	40,958	80,456	3,574	8,948
Federal and State Income Taxes		(1,428,993)	(1,490,682)	(259,024)	357,585	5,718	(42,590)
Rounding & Prior Year's Adjustment - State	24	0	0	0	0	0	0
Federal & State Income Taxes		(1,428,993)	(1,490,682)	(259,024)	357,585	5,718	(42,590)

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
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Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Deferred Income Taxes							
Unrecovered Purchased Gas Cost	33	(5,370)	(2,827)	(524)	(1,788)	(13)	(218)
Other Deferred Income Tax Chgs	24	2,602,862	1,759,248	257,979	506,759	22,514	56,362
Closing/Filing & Out of Period	24	(409,938)	(277,073)	(40,630)	(79,812)	(3,546)	(8,877)
Total Deferred Income Taxes		2,187,554	1,479,348	216,825	425,159	18,955	47,267
Total Operating Expenses		58,448,433	32,976,448	5,753,691	17,290,376	330,733	2,097,185
Total Operating Income		2,643,726	813,658	44,027	1,694,101	56,508	35,432
Summary of Pro Forma Rate Base Adj. Plant							
Plant Additions - Adj. A							
Distribution							
Rights of Way	13	1,424	893	150	320	13	48
Structures and Improvements	13	(923)	(578)	(98)	(208)	(8)	(31)
Mains-Demand Related 75%	2	751,193	408,046	83,194	217,613	8,846	33,494
Mains-Customer Related 25%	9	250,398	219,757	22,513	8,010	92	26
Meas. & Reg. Equip. City Gate	13	67,613	42,380	7,136	15,231	603	2,263
Meas. & Reg. Equip. General Services	13	(2,651)	(1,662)	(280)	(597)	(23)	(89)
Positive Meters	37	921,655	789,557	88,970	42,023	695	410
Service Regulators	10	351,072	238,172	30,014	75,700	4,324	2,862
Ind. Meas. & Reg. Station Equipment	10	132,269	89,733	11,308	28,521	1,629	1,078
Cathodic Protection Equip	13	699	438	74	158	6	23
Total Distribution Plant Additions		19,610	12,290	2,070	4,418	175	657
General	15	2,492,359	1,799,026	245,051	391,189	16,352	40,741
General Intangible	15	1,061,160	726,724	106,058	197,236	8,483	22,659
Common	15	148,646	101,798	14,856	27,629	1,189	3,174
Intangible Plant - excluding CC&B	15	86,015	58,905	8,597	15,988	688	1,837
Intangible Plant - Common (CC&B)	15	(346,118)	(237,037)	(34,593)	(64,332)	(2,766)	(7,390)
Total Plant Additions - Adj. A	8	318,313	279,320	28,616	10,181	140	56
Accumulated Reserve for Depreciation		3,760,375	2,728,736	368,585	577,891	24,086	61,077
Plant Additions - Adj. B							
Distribution							
General	23	2,459,451	1,687,186	245,685	454,902	19,549	52,129
General Intangible	15	(137,612)	(94,242)	(13,753)	(25,578)	(1,100)	(2,939)
Common	15	13,266	9,086	1,325	2,466	106	283
	15	31,786	21,768	3,177	5,908	254	679

b-N

MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
SOUTH DAKOTA
Embedded Class Cost of Service Study
Summary Report
Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Intangible Plant - excluding CC&B	15	(180,378)	(123,530)	(18,028)	(33,527)	(1,442)	(3,851)
Intangible Plant - Common (CC&B)	8	166,176	145,820	14,939	5,315	73	29
Total Accumulated Reserve - Adj. B		2,352,689	1,646,088	233,345	409,486	17,440	46,330
Net Adjustment to Plant		1,407,686	1,082,648	135,240	168,405	6,646	14,747
Additions							
Materials and Supplies - Adj. C	15	46,796	32,048	4,677	8,698	374	999
Prepaid Insurance - Adj. D	24	72,601	49,071	7,195	14,135	628	1,572
Unamortized Loss on Debt - Adj. E	41	(111,667)	(77,440)	(11,111)	(19,985)	(855)	(2,276)
Unamortized Rate Case Expense - Adj. F	41	151,068	104,764	15,032	27,037	1,156	3,079
Total		158,798	108,443	15,793	29,885	1,303	3,374
Deductions							
Accumulated Def. Inc. Tax							
Plant Additions - Adj. I	41	468,280	324,751	46,594	83,808	3,584	9,543
Normalization - Adj. J	41	(57,030)	(39,550)	(5,675)	(10,206)	(437)	(1,162)
Unamortized Loss on Debt - Adj. E	41	(39,084)	(27,105)	(3,889)	(6,995)	(299)	(796)
Unamortized Rate Case Expense - Adj. F	41	53,517	37,115	5,324	9,578	410	1,090
Customer Advances for Construction - Adj. N	Direct	73,637	13,098	47,067	13,378	25	69
Total		499,320	308,309	89,421	89,563	3,283	8,744
Total Pro Forma Adjustments - Rate Base		1,067,164	882,782	61,612	108,727	4,666	9,377
Pro Forma Adjustments - Operating Income							
Pro Forma Revenue Adjustments							
Revenue Adjustments - Adj. No. 1-2 to Proforma							
Residential	Direct	(5,298,032)	(5,298,032)	0	0	0	0
Firm General	Direct	(5,701,814)	0	(1,111,888)	(4,589,926)	0	0
Small Interruptible	Direct	(117,598)	0	0	0	(117,598)	0
Large Interruptible	Direct	(545,485)	0	0	0	0	(545,485)
Total Retail Sales Adjustment		(11,662,929)	(5,298,032)	(1,111,888)	(4,589,926)	(117,598)	(545,485)
Unbilled Revenue	26	591,533	340,062	56,061	173,107	3,215	19,088
Margin Sharing Credit	26	245,967	141,399	23,311	71,981	1,338	7,938
Reserve for Refund	26	6,088	3,502	576	1,781	33	196
Total		(10,819,341)	(4,813,069)	(1,031,940)	(4,343,057)	(113,012)	(518,263)

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
SOUTH DAKOTA
Embedded Class Cost of Service Study
Summary Report
Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Other Revenue - Adj. No. 3	26	(24,333)	(13,991)	(2,305)	(7,120)	(132)	(785)
Total Pro Forma Revenue Adjustments		(10,843,674)	(4,827,060)	(1,034,245)	(4,350,177)	(113,144)	(519,048)
OPERATION & MAINTENANCE EXPENSES							
Cost of Gas - Adj. No. 5	Direct	(10,701,894)	(5,375,444)	(1,217,470)	(3,445,120)	(134,150)	(529,710)
Labor Expense - Adj. No. 5							
Other Gas Supply	30	3,607	2,641	347	537	24	58
Distribution	29	140,791	95,317	13,953	27,073	1,294	3,154
Customer Accounting	8	41,654	36,552	3,745	1,332	18	7
Customer Service	8	5,132	4,504	461	164	2	1
Sales	8	698	613	63	22	0	0
A&G	30	44,404	32,506	4,271	6,611	294	722
Total -Labor Expense - Adj. No. 5		236,286	172,133	22,840	35,739	1,632	3,942
Benefits Expense - Adj. No. 6	30	181,799	133,088	17,486	27,064	1,203	2,958
Vehicles and Work Equip. - Adj. No. 7	30	6,079	4,452	585	904	39	99
Subcontract Labor - Adj. No. 8	30	116,688	85,423	11,223	17,371	772	1,899
Materials - Adj. No. 9	30	15,048	11,015	1,447	2,241	100	245
Software Maintenance- Adj. No. 10	30	8,158	5,971	785	1,214	55	133
Office Expense-Adj. No. 11	30	3,589	2,627	345	535	24	58
Communications-Adj. No. 12	30	(1,481)	(1,085)	(143)	(220)	(9)	(24)
Rent-Adj. No. 13	30	(19,536)	(14,302)	(1,879)	(2,909)	(129)	(317)
Company Consumption - Adj. No. 14	30	(13,338)	(9,766)	(1,283)	(1,985)	(87)	(217)
Uncollectible Accounts - Adj. No. 15	11	(97,134)	(85,287)	(8,738)	(3,109)	0	0
Postage - Adj. No. 16	8	402	353	36	13	0	0
Advertising - Adj. No. 17	8	(29,555)	(25,935)	(2,657)	(945)	(13)	(5)
Insurance Expense - Adj. No. 18	30	43,234	31,650	4,158	6,436	286	704
Industry Dues - Adj. No. 19	30	(4,980)	(3,646)	(479)	(741)	(33)	(81)
Regulatory Commission Expense - Adj. No. 20	30	44,178	32,340	4,249	6,577	293	719
Total		489,437	339,031	47,975	88,185	4,133	10,113
Total Adjustments to O&M		(10,212,457)	(5,036,413)	(1,169,495)	(3,356,935)	(130,017)	(519,597)
DEPRECIATION EXPENSE							
Average Annual Depreciation - Adj. No. 17							
Distribution Plant	23	123,743	84,887	12,361	22,888	984	2,623
General Plant	41	45,830	31,783	4,560	8,202	351	934

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY -
SOUTH DAKOTA
Embedded Class Cost of Service Study
Summary Report
Twelve Months Ended December 31, 2014 Pro Forma
Average Plant

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Common	8	53,677	47,102	4,825	1,717	24	9
Total Average Annual Depreciation Adj. 21		223,250	163,772	21,746	32,807	1,359	3,566
TAXES OTHER THAN INCOME							
Ad Valorem Taxes - Adj. No. 22							
Distribution Plant	23	17,589	12,066	1,757	3,254	139	373
General Plant	41	6,659	4,620	662	1,191	51	135
Common Plant	41	1,192	828	118	213	9	24
Total Ad Valorem Taxes Adj. No. 22		25,440	17,514	2,537	4,658	199	532
Payroll Taxes - Adj. No. 23	31	16,878	12,355	1,624	2,513	111	275
Gross Revenue Tax- Adj. 24	26	(1,380)	(794)	(130)	(404)	(7)	(45)
Total Adjustments to Taxes Other than Income		40,938	29,075	4,031	6,767	303	762
CURRENT INCOME TAXES							
Interest Annualization - Adj. No. 19	41	(94,269)	(65,375)	(9,380)	(16,871)	(722)	(1,921)
Tax Depreciation on Plant Additions - Adj. No. 20	41	633,468	439,309	63,031	113,371	4,848	12,909
		539,199	373,934	53,651	96,500	4,126	10,988
Net Adjustments to Operating Income		(1,434,604)	(357,428)	55,822	(1,129,316)	11,085	(14,767)
Income Taxes on Pro Forma Adj. - Adj. No. 27 0.35	(Calculated)	(502,111)	(125,099)	19,538	(395,261)	3,880	(5,169)
Elimination of Closing/Filing&Res. - Adj. No. 28	41	(413,244)	(286,583)	(41,118)	(73,958)	(3,163)	(8,422)
Total Adjustments to Current Income Taxes		(915,355)	(411,682)	(21,580)	(469,219)	717	(13,591)
DEFERRED INCOME TAXES							
Plant Additions - Adj. No. 26	41	221,714	153,758	22,061	39,680	1,697	4,518
Elimination of Closing/Filing - Adj. No. 28	24	409,938	277,073	40,630	79,812	3,546	8,877
Total Adjustments to Deferred Income Taxes		631,652	430,831	62,691	119,492	5,243	13,395
Total Adjustments:		(611,702)	(2,643)	68,362	(683,089)	9,251	(3,583)

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MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY - SOUTH DAKOTA
EMBEDDED COST OF SERVICE STUDY
NORMALIZED
DK THROUGHPUT - FACTOR NOS. 1 & 3

	South Dakota Normalized Dk	Total DK less Transport	South Dakota Transmission Level Customer DK
Residential	3,607,260	3,607,260	0
Firm General-Small	669,013	669,013	0
Firm General-Large	2,281,656	2,281,656	0
Small Interruptible Sales	21,860	21,860	0
Small Interruptible Transport	314,711		80,495
Large Interruptible Sales	378,296	378,296	378,296
Large Interruptible Transport	895,914		106,462
Total Throughput	<u>8,168,710</u>	<u>6,958,085</u>	<u>565,253</u>

Transmission Level Customers		
		DK
SI Transport=	81-07	15,744
	81-14	25,760
	81-15	9,945
	81-17	29,046
		<u>80,495</u>
LI-Sales=	85-10	68,115
	641-1	310,181
LI Transport=	82-3	88,955
	82-9	17,507
		<u>106,462</u>

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MONTANA-DAKOTA UTILITIES CO.
 GAS UTILITY - SOUTH DAKOTA
 EMBEDDED COST OF SERVICE STUDY
 PRO FORMA 2015
 PEAK DAY DELIVERIES - FACTOR NOS. 2 & 5

	Small Firm		Large Firm	Total Firm	Small IT		Large IT		Total
	Residential	General	General		Sales	Transport	Sales	Transport	
Use per Degree Day per customer 1/	0.00991	0.02028	0.13666						
Multiplied by: Peak Day Degree Days	82	82	82						
Heating use per day per customer	0.8126	1.66296	11.20612						
Daily Baseload per customer 1/	0.03768	0.02928	1.23522						
Total Peak Day Use/Customer	0.8503	1.69224	12.44134						
Customers 2/	50,016	5,124	1,823						
Total Peak Day Use (Calculated)	<u>42,529</u>	<u>8,671</u>	<u>22,681</u>	<u>73,881</u>					
Class Ratio	57.56%	11.74%	30.70%						
Allocated Actual Peak Day Use	<u>42,529</u>	<u>8,671</u>	<u>22,681</u>	<u>73,881</u>					
Interruptible assigned on 100% load factor					60	862	1,036	2,455	4,413
Total Peak Day Use	<u>42,529</u>	<u>8,671</u>	<u>22,681</u>	<u>73,881</u>	<u>60</u>	<u>862</u>	<u>1,036</u>	<u>2,455</u>	<u>78,294</u> Factor #2
Less: Peak Transmission Dk 100% load factor	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>0</u>	<u>221</u>	<u>1,036</u>	<u>292</u>	<u>1,549</u>
Distribution Level Peak Dk	<u>42,529</u>	<u>8,671</u>	<u>22,681</u>	<u>73,881</u>	<u>60</u>	<u>641</u>	<u>0</u>	<u>2,163</u>	<u>76,745</u> Factor #5

1/ Regression Analysis supporting weather normalized volumes.

2/ Residential and Firm billing units reflect average days billed for the twelve months ending December 31, 2014.

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MONTANA DAKOTA UTILITIES COMPANY
Design Degree Days (HD60)

LOCATION	Design	* Customers	Weight of HD
BILLINGS, MONT.	84	61,140	5,135,760
BISMARCK, N.D.	87	39,487	3,435,369
DEVILS LAKE, N.D.	93	7,717	717,681
DICKINSON, N.D.	88	13,310	1,171,280
GLASGOW, MONT.	91	6,959	633,269
GLENDIVE, MONT.	88	9,586	843,568
JAMESTOWN, N.D.	88	10,558	929,104
MILES CITY, MONT.	92	21,064	1,937,888
MINOT, N.D.	89	21,064	1,874,696
MOBRIDGE, S.D.	84	3,923	329,532
PIERRE, S.D.	82	3,923	321,686
POWELL, WY.	92	6,638	610,696
RAPID CITY, S.D.	82	50,011	4,100,902
SHERIDAN, WY.	86	11,724	1,008,264
WILLISTON, N.D.	93	12,200	1,134,600
SYSTEM WEIGHTED DEGREE DAYS	87	279,304	24,184,295
WEIGHTED BY STATE			
NORTH DAKOTA	89	104,336	9,262,730
SOUTH DAKOTA	82	57,857	4,752,120
MONTANA	87	98,749	8,550,485
WYOMING	88	18,362	1,618,960

600 - Residential

Month-Year	Customers	Dth 1/	BPDD60 2/	Days	Dth/cust	DD/Day	Dth/Day/Cus
Jan-12	50,722	509,447.1	934	31	10.0	30.12903	0.32400
Feb-12	45,180	495,034.5	945	29	11.0	32.58621	0.37783
Mar-12	50,642	526,621.2	749	31	10.4	24.16129	0.33545
Apr-12	47,508	182,967.3	296	30	3.9	9.86667	0.12838
May-12	47,218	169,663.6	214	31	3.6	6.90323	0.11591
Jun-12	50,357	102,645.2	107	30	2.0	3.56667	0.06795
Jul-12	47,299	61,124.7	1	31	1.3	0.03226	0.04169
Aug-12	50,499	60,403.7	0	31	1.2	-	0.03859
Sep-12	45,614	54,497.8	8	30	1.2	0.26667	0.03983
Oct-12	48,651	118,201.1	152	31	2.4	4.90323	0.07837
Nov-12	44,776	236,669.1	564	30	5.3	18.80000	0.17619
Dec-12	49,364	412,245.2	777	31	8.4	25.06452	0.26939
Jan-13	50,520	615,312.8	1163	31	12.2	37.51613	0.39289
Feb-13	47,972	524,477.6	1037	28	10.9	37.03571	0.39046
Mar-13	47,720	514,523.3	815	31	10.8	26.29032	0.34781
Apr-13	51,152	428,868.6	772	30	8.4	25.73333	0.27947
May-13	48,701	331,321.8	511	31	6.8	16.48387	0.21946
Jun-13	47,211	110,205.9	98	30	2.3	3.26667	0.07781
Jul-13	51,675	68,470.1	5	31	1.3	0.16129	0.04274
Aug-13	48,467	58,780.4	0	31	1.2	-	0.03912
Sep-13	47,856	55,644.1	6	30	1.2	0.20000	0.03876
Oct-13	50,870	133,721.2	206	31	2.6	6.64516	0.08480
Nov-13	44,212	296,533.0	680	30	6.7	22.66667	0.22357
Dec-13	50,770	543,929.2	1043	31	10.7	33.64516	0.34560
Jan-14	54,050	730,195.4	1219	31	13.5	39.32258	0.43579
Feb-14	48,166	578,934.8	1205	28	12.0	43.03571	0.42927
Mar-14	49,098	654,717.9	981	31	13.3	31.64516	0.43016
Apr-14	51,136	436,225.8	660	30	8.5	22.00000	0.28436
May-14	47,199	253,097.9	386	31	5.4	12.45161	0.17298
Jun-14	51,832	143,675.8	118	30	2.8	3.93333	0.09240
Jul-14	51,287	76,731.5	16	31	1.5	0.51613	0.04826
Aug-14	47,453	58,134.7	1	31	1.2	0.03226	0.03952
Sep-14	51,017	66,025.9	56	30	1.3	1.86667	0.04314
Oct-14	51,644	144,767.1	153	31	2.8	4.93548	0.09042
Nov-14	44,056	180,827.6	594	30	4.1	19.80000	0.13682
Dec-14	53,250	593,478.9	860	31	11.1	27.74194	0.35952

Slope	Intercept	R ²
0.00991	0.03768	0.9535

	Above Totals	Rev Report	Difference
12/31/12	2,929,520.5		
12/31/13	3,681,788.0	3,681,788.0	0.0
12/31/14	3,916,813.3	3,916,813.3	0.0

1/ Reflects billed dk per month.

2/ Reflects billing period degree days.

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700 - Small Firm General

Month-Year	Customers	Dth 1/	BPDD60 2/	Days	Dth/cust	DD/Day	Dth/Day/Cus
Jan-12	5,173	95,514.3	934	31	18.5	30.12903	0.59561
Feb-12	4,625	95,374.1	945	29	20.6	32.58621	0.71108
Mar-12	5,171	99,949.9	749	31	19.3	24.16129	0.62351
Apr-12	4,849	27,411.7	296	30	5.7	9.86667	0.18844
May-12	4,826	23,347.4	214	31	4.8	6.90323	0.15606
Jun-12	5,144	13,546.7	107	30	2.6	3.56667	0.08778
Jul-12	4,855	8,263.6	1	31	1.7	0.03226	0.05491
Aug-12	5,170	8,411.6	0	31	1.6	-	0.05248
Sep-12	4,647	7,531.9	8	30	1.6	0.26667	0.05403
Oct-12	5,003	15,429.4	152	31	3.1	4.90323	0.09948
Nov-12	4,557	37,763.1	564	30	8.3	18.80000	0.27623
Dec-12	5,049	73,390.0	777	31	14.5	25.06452	0.46889
Jan-13	5,200	121,627.0	1163	31	23.4	37.51613	0.75451
Feb-13	4,936	104,558.5	1037	28	21.2	37.03571	0.75653
Mar-13	4,864	100,079.9	815	31	20.6	26.29032	0.66373
Apr-13	5,240	81,048.7	772	30	15.5	25.73333	0.51558
May-13	5,035	61,439.9	511	31	12.2	16.48387	0.39363
Jun-13	4,846	15,575.7	98	30	3.2	3.26667	0.10714
Jul-13	5,345	10,484.1	5	31	2.0	0.16129	0.06327
Aug-13	4,973	9,897.6	0	31	2.0	-	0.06420
Sep-13	4,940	8,724.8	6	30	1.8	0.20000	0.05887
Oct-13	5,247	19,536.8	206	31	3.7	6.64516	0.12011
Nov-13	4,521	50,860.7	680	30	11.2	22.66667	0.37500
Dec-13	5,187	106,810.5	1043	31	20.6	33.64516	0.66426
Jan-14	5,557	156,653.7	1219	31	28.2	39.32258	0.90937
Feb-14	5,048	121,655.8	1205	28	24.1	43.03571	0.86071
Mar-14	5,055	137,266.6	981	31	27.2	31.64516	0.87596
Apr-14	5,284	84,760.0	660	30	16.0	22.00000	0.53470
May-14	4,823	40,924.8	386	31	8.5	12.45161	0.27372
Jun-14	5,302	21,478.4	118	30	4.1	3.93333	0.13503
Jul-14	5,273	10,233.2	16	31	1.9	0.51613	0.06260
Aug-14	4,801	7,962.0	1	31	1.7	0.03226	0.05350
Sep-14	5,245	9,140.0	56	30	1.7	1.86667	0.05809
Oct-14	5,223	18,393.3	153	31	3.5	4.93548	0.11360
Nov-14	4,474	27,302.6	594	30	6.1	19.80000	0.20342
Dec-14	5,403	116,273.4	860	31	21.5	27.74194	0.69420

Slope	Intercept	R ²
0.02028	0.02928	0.9366

	Above Totals	Rev Report	Difference
12/31/12	505,933.7		
12/31/13	690,644.2	690,644.2	0.0
12/31/14	752,043.8	752,043.8	0.0

1/ Reflects billed dk per month.
 2/ Reflects billing period degree days.

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701 - Large Firm General

Month-Year	Customers	Dth 1/	BPDD60 2/	Days	Dth/cust	DD/Day	Dth/Day/Cus
Jan-12	1,841	290,493.8	934	31	157.8	30.12903	5.09004
Feb-12	1,644	283,725.9	945	29	172.6	32.58621	5.95113
Mar-12	1,834	292,807.5	749	31	159.7	24.16129	5.15017
Apr-12	1,731	125,212.8	296	30	72.3	9.86667	2.41118
May-12	1,720	117,388.4	214	31	68.2	6.90323	2.20158
Jun-12	1,844	87,859.2	107	30	47.6	3.56667	1.58820
Jul-12	1,727	64,447.1	1	31	37.3	0.03226	1.20379
Aug-12	1,847	65,344.6	0	31	35.4	-	1.14125
Sep-12	1,665	61,989.0	8	30	37.2	0.26667	1.24102
Oct-12	1,789	104,614.4	152	31	58.5	4.90323	1.88634
Nov-12	1,630	153,047.0	564	30	93.9	18.80000	3.12980
Dec-12	1,802	237,941.4	777	31	132.0	25.06452	4.25945
Jan-13	1,841	339,461.7	1163	31	184.4	37.51613	5.94806
Feb-13	1,759	292,485.3	1037	28	166.3	37.03571	5.93855
Mar-13	1,726	290,083.7	815	31	168.1	26.29032	5.42152
Apr-13	1,861	253,354.0	772	30	136.1	25.73333	4.53795
May-13	1,756	204,100.4	511	31	116.2	16.48387	3.74936
Jun-13	1,692	92,350.0	98	30	54.6	3.26667	1.81935
Jul-13	1,863	75,704.8	5	31	40.6	0.16129	1.31084
Aug-13	1,732	68,688.5	0	31	39.7	-	1.27931
Sep-13	1,762	61,669.1	6	30	35.0	0.20000	1.16665
Oct-13	1,879	104,544.2	206	31	55.6	6.64516	1.79478
Nov-13	1,596	231,517.8	680	30	145.1	22.66667	4.83538
Dec-13	1,832	312,256.1	1043	31	170.4	33.64516	5.49824
Jan-14	1,928	401,669.9	1219	31	208.3	39.32258	6.72048
Feb-14	1,767	326,399.7	1205	28	184.7	43.03571	6.59713
Mar-14	1,754	361,384.7	981	31	206.0	31.64516	6.64628
Apr-14	1,838	260,641.1	660	30	141.8	22.00000	4.72690
May-14	1,724	167,324.8	386	31	97.1	12.45161	3.13084
Jun-14	1,890	114,289.1	118	30	60.5	3.93333	2.01568
Jul-14	1,884	82,979.7	16	31	44.0	0.51613	1.42079
Aug-14	1,738	68,254.7	1	31	39.3	0.03226	1.26684
Sep-14	1,893	76,325.2	56	30	40.3	1.86667	1.34399
Oct-14	1,878	112,511.9	153	31	59.9	4.93548	1.93260
Nov-14	1,624	132,888.8	594	30	81.8	19.80000	2.72760
Dec-14	1,957	347,024.7	860	31	177.3	27.74194	5.72016

Slope	Intercept	R ²
0.13666	1.23522	0.95393

1/ Reflects billed dk per month.

2/ Reflects billing period degree days.

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MONTANA-DAKOTA UTILITIES CO.
 GAS UTILITY - SOUTH DAKOTA
 EMBEDDED COST OF SERVICE STUDY
 PRO FORMA 2014
 CUSTOMERS - FACTORS NO. 8, 9, 10, 11 & 12

	Total	Residential	Small Firm	Large Firm	Small IT		Large IT	
			General	General	Sales	Transport	Sales	Transport
Total Customers 1/	56,998	50,016	5,124	1,823	5	20	2	8
Less: Transmission Customers 2/	8	0	0	0	0	4	2	2
Average Customers at Distribution	<u>56,990</u>	<u>50,016</u>	<u>5,124</u>	<u>1,823</u>	<u>5</u>	<u>16</u>	<u>0</u>	<u>6</u>
Multiplied by: Weighting Factor 3/		1.0	1.23	8.72	36.31	36.31	60.22	60.22
Weighted Customers at Distribution	<u>73,340</u>	<u>50,016</u>	<u>6,303</u>	<u>15,897</u>	<u>182</u>	<u>581</u>	<u>0</u>	<u>361</u>
Weighted Transmission Customers	385	0	0	0	0	145	120	120
Total Weighted Customers	<u><u>73,725</u></u>	<u><u>50,016</u></u>	<u><u>6,303</u></u>	<u><u>15,897</u></u>	<u><u>182</u></u>	<u><u>726</u></u>	<u><u>120</u></u>	<u><u>481</u></u>
Services:								
Multiplied by: Weighting Factor		1.00	1.10	1.46	1.73	1.73	2.63	2.63
	<u><u>58,384</u></u>	<u><u>50,016</u></u>	<u><u>5,636</u></u>	<u><u>2,662</u></u>	<u><u>9</u></u>	<u><u>35</u></u>	<u><u>5</u></u>	<u><u>21</u></u>

1/ Residential & Firm = billing units reflect average days billed for the twelve months ending December 31, 2014.

Interruptible and Transportation = billing units reflect average active customer twelve months ending December 31, 2014.

2/ Transmission level customers

Small Interruptible = Customers 81-07,81-14,81-15,81-17

Large Interruptible = 82-3 and 82-9, 85-10, and AFB

3/ Based on average installed meter costs as of 2014.

61-11

South Dakota Service Weights

Updated: 12/8/2012

RATE AND DESCRIPTION	Modeled Service Value	Modelled Service Average	Count of Customers	Cost per Service per Customer	Weights
RATE 600 - Residential Gas Service	\$29,107,718	\$747	41,585	\$700	1.00
RATE 601 Residential Gas Service	\$55,223	\$767	74	\$746	1.00
RATE 602 Residential Gas Service	\$1,459	\$729	2	\$729	1.00
RATE 660 Residential Gas Service - East River	\$4,187,020	\$714	5,964	\$702	1.00
RATE 661 Residential Gas Service - East River	\$1,459	\$729	2	\$729	1.00
RATE 662 Residential Gas Service - East River	\$6,277	\$785	8	\$785	1.00
RATE 663 Residential Gas Service - East River	\$1,680	\$840	2	\$840	1.00
RATE 600: 600, 601, 602, 660 ,661, 662, 663(Residential)	\$33,366,147	Weighted Average	47,637	\$700	1.00
RATE 700 - Small Firm General Gas Service	\$2,905,357	\$985	3,848	\$755	1.08
RATE 760 - Small Firm General Service - East River	\$626,841	\$905	746	\$840	1.20
RATE 762 - Firm Industrial Gas Service - East River	\$4,555	\$2,277	2	\$2,277	3.25
Rates 700,760,762	\$3,536,752	Weighted Average	4,596	\$770	1.10
RATE 701 - Large Firm General Gas Service	\$1,503,496	\$1,157	1,480	\$1,016	1.45
RATE 703 - Large Firm General Gas Service - Dakota Panel	\$896	\$896	1	\$896	1.28
RATE 761 - Large Firm General Service - East River	\$208,244	\$1,151	192	\$1,085	1.55
Rates 701, 703, 761	\$1,712,636	Weighted Average	1,673	\$1,024	1.46
RATE 710 - Small Interruptable General Gas Service	\$18,334	\$1,410	16	\$1,146	1.64
RATE 810 - Small Interruptable General Transportation Service	\$2,302	\$2,302	1	\$2,302	3.29
Rates 710 & 810	\$20,636	Weighted Average	17	1,214	1.73
RATE 820 - Large Interruptable General Transportation Service	\$2,302	\$767	1	\$2,302	3.29
RATE 850 - Large Interruptable General Gas Service	\$6,917	\$1,383	4	\$1,729	2.47
Rates 820 &850	\$9,219	Weighted Average	5	1844	2.63

Notes:

1) Weighting for gas service lines is based on a ~90% model representation of the actual service lines. Service lines are not fully represented in the company's GIS because not all premise ID's are present and additionally.

N-2C

South Dakota Meter Weights - Year 2015

Rate Class Description	Count of Meters	Sum of Meter Cost	Cost per Meter	Class Weight
Residential - Rate 60	44137	\$ 8,392,829.00	\$ 190.15	1.00
Residential - Rate 66 (East River)	6731	\$ 1,267,775.00	\$ 188.35	0.99
	50868	\$ 9,660,604.00	\$ 189.92	1.00
Small Firm, <500 cfh, Rate 70	4185	\$ 988,074.00	\$ 236.10	1.24
Small Firm, <500 cfh, Rate 76 (East River)	963	\$ 210,798.00	\$ 218.90	1.15
	5148	\$ 1,198,872.00	\$ 232.88	1.23
Large Firm, >500 cfh, Rate 70	1603	\$ 2,498,167.00	\$ 1,558.43	8.20
Large Firm, >500 cfh, Rate 76 (East River)	260	\$ 586,209.00	\$ 2,254.65	11.86
	1863	\$ 3,084,376.00	\$ 1,655.60	8.72
Small IT Sales and Transport -Rate 71	31	\$ 214,010.00	\$ 6,903.55	36.31
Large IT Sales and Transport -Rate 85	12	\$ 128,910.00	\$ 10,742.50	56.49
Rate 64 - Ellsworth	1	\$ 19,776.00	\$ 19,776.00	104.00
	13	\$ 148,686.00	11437.38	60.22

12-N

MONTANA-DAKOTA UTILITIES CO.
GAS UTILITY - SOUTH DAKOTA
CLASS COST OF SERVICE STUDY
FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2014
PLANT ALLOCATION

	Total	Allocation
374.1 Land	76,905	Factor No. 13 - Distribution Mains
374.2 Rights of Way	125,715	Factor No. 13 - Distribution Mains
375 Structures & Improvements	180,926	Factor No. 13 - Distribution Mains
376 Mains	41,732,078	
75% Demand Related	31,299,059	Factor No. 5 - 1-Day Peak @ Distribution
25% Customer Related	10,433,019	Factor 8 - Avg. Distribution Customers
378 Meas. & Reg. Equip. - General	772,181	Factor No. 13 - Distribution Mains
	41,732	Direct to Small Firm General
379 Meas. & Reg. Equip. - City Gate	1,284,217	Factor No. 13 - Distribution Mains
380 Services	15,927,242	Factor No. 10 - Total Weighted Customers
381 Meters	14,506,614	Factor No. 10 - Total Weighted Customers
383 Service Regulators	1,803,135	Total
	1,780,406	Factor No. 10 - Total Weighted Customers
	4,951	Direct to Small Firm General
	4,736	Direct to Small Interruptible Sales
	3,917	Direct to Small Transportation
	9,125	Direct to Large Transportation
385 Ind. Meas. & Reg. Station Equipment	64,195	Factor No. 13 - Distribution Mains
387 Cathodic Protection & Other Equipment	356,762	Factor No. 13 - Distribution Mains
Distribution Plant	<u>76,871,702</u>	

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**MONTANA-DAKOTA UTILITIES CO.
EMBEDDED COST OF SERVICE STUDY
ALLOCATION OF COST OF GAS TO THE CLASSES
GAS UTILITY - SOUTH DAKOTA
TWELVE MONTHS ENDING DECEMBER 31, 2014**

	<u>Per Books 1/</u>	<u>Pro Forma Per Unit Cost</u>	<u>Pro Forma 2014 4/</u>
Residential			
Energy	\$16,416,900	\$2.447	\$12,558,047
Demand	6,142,219	2.317	4,625,628
Total Residential	<u>\$22,559,119</u>	<u>\$4.764</u>	<u>\$17,183,675</u>
Firm General Small			
Energy	\$3,152,103	\$2.447	2,243,843
Demand	1,252,303	2.317	943,093
Total Small Firm General	<u>\$4,404,406</u>	<u>\$4.764</u>	<u>\$3,186,936</u>
Firm General Large			
Energy	\$11,038,413	\$2.447	8,402,101
Demand	3,275,686	2.317	2,466,878
Total Large Firm General	<u>\$14,314,099</u>	<u>\$4.764</u>	<u>\$10,868,979</u>
Small Interruptible			
Energy	\$165,933	\$2.399	42,838
Demand	44,772	1.204	33,717
Total Small Inter.	<u>\$210,705</u>	<u>\$3.603</u>	<u>\$76,555</u>
Large Interruptible			
Energy	\$1,652,460	\$2.399	1,172,639
Demand	202,050	1.204	152,161
Total Large Inter.	<u>\$1,854,510</u>	<u>\$3.603</u>	<u>\$1,324,800</u>
Total Cost of Gas	<u><u>\$43,342,839</u></u>		<u><u>\$32,640,945</u></u>

Customer Class	Dk		Peak Day Design - Firm	
	Per Books	2014 Sales	Interruptible - 100% LF	
Residential	3,916,824	50.629118%	42,529	56.262733%
Firm General Small	752,044	9.720969%	8,671	11.471094%
Firm General Large	2,633,598	34.042057%	22,681	30.005292%
Small Interruptible - Sales 5/	39,589	0.511730%	310	0.410107%
Small Interruptible - Transport	0	0.000000%	0	0.000000%
Large Interruptible - Sales	394,252	5.096126%	1,399	1.850774%
Large Interruptible - Transport	0	0.000000%	0	0.000000%
Total	<u>7,736,307</u>	<u>100.000000%</u>	<u>75,590</u>	<u>100.000000%</u>

Customer Class	Dk		Peak Day Design - Firm	
	ProForma	Sales	Interruptible - 100% LF	
Residential	3,607,260	51.842712%	42,529	56.262733%
Firm General Small	669,013	9.614901%	8,671	11.471094%
Firm General Large	2,281,656	32.791436%	22,681	30.005292%
Small Interruptible - Sales	21,860	0.314167%	310	0.410107%
Small Interruptible - Transport	0	0.000000%	0	0.000000%
Large Interruptible - Sales	378,296	5.436784%	1,399	1.850774%
Large Interruptible - Transport	0	0.000000%	0	0.000000%
Total	<u>6,958,085</u>	<u>100.000000%</u>	<u>75,590</u>	<u>100.000000%</u>

1/ Allocation of Per Books Cost of Gas based on Normalized 2014 volumes and June 2015 Gas Cost

<u>Total Cost of Gas</u>	<u>Energy 2/</u>	<u>Demand 3/</u>	<u>Reallocated Demand Costs</u>
\$43,342,839	\$32,425,810	\$10,917,029	8,221,477

2/ Allocated on Pro Forma Dk Sales.

3/ Allocated on Factor 2 excluding transportation. Demand costs from June 2015 Purchased Gas Adjustment Residential & General Service, reflecting weighted seasonal demand.

4/ Statement G, Page 3 Pro Forma 2015 Cost of Gas \$32,640,945

5/ Design Day Peak

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