## 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 Pro Forma.	Statement N, Page 22
9	Average Customers  @ Distribution	Customer	Factor 8 (Average Customers) less customers not served off the distribution system.	Statement N, Page 22
10	Total Weighted Customers	Customer	Factor 8 (Average Customers) multiplied by weighting factor (based on average installed meter costs as of 2022), weighted to represent relative costs, with the residential cost weight set equal to 1.0	Statement N, Page 22
11	Average Residential and Firm General Service Customers	Customer	Average Customers less Interruptible Customers.	Statement N, Page 22
12	Weighted Customers  @ Distribution	Customer	Factor 10 (Total Weighted Customers) excluding customers not served off the distribution system.	Statement N, Page 22
13	Distribution Mains	Demand	Distribution Mains plant balance as shown on Statement D, 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.	Statement N, Page 26

Factor	Title	Function	Description	Work Paper Reference
15	Distribution Plant	Demand and Customer	Distribution Plant balance as shown on Statement D, as allocated to each class. This factor is based on the results of the allocations and is used to allocate distribution plant related items.	CCOSS-Detail as allocated.
16	Meters & Regulators	Customer	Meters and Regulators plant balances as shown on Statement D are assigned to the customer component and allocated to each class based on Factor 2 or directly assigned. Factor 16 is based on the results of the allocations and is used to allocate meter & regulator related costs.	CCOSS-Detail as allocated.
17	Structures & Improvement	Demand and Customer	Structures and Improvements plant balances as shown on Statement D are assigned to the demand and customer component and allocated to each class based on Factor 45. Factor 17 is based on the results of the allocations and is used to allocate structure and improvement related costs	CCOSS-Detail as allocated.
18	Meas. & Reg. Equip. General	Demand	Measurement and Regulator Equipment-General as shown on Statement D is assigned to the demand component based on Factor 2. Factor 18 is based on the results of the allocations and is used to allocate measurement and regulator equipment-general related costs.	CCOSS-Detail as allocated.
19	Meas & Reg. Equip City Gate	Demand	Measurement and Regulator Equipment-City Gate as shown on Statement D is assigned to the demand component based on Factor 2 and direct assignment. Factor 19 is based on the results of the allocations and is used to allocate measurement and regulator equipment-general related costs.	CCOSS-Detail as allocated.
20	Service Regulators	Customer	Service Regulators as shown on Statement D is allocated on Factor 10 (Total Weighted Customers) and direct assignment. Factor 20 is based on the results of the allocation and is used to allocate service regulator related costs.	CCOSS-Details as allocated.
21	Ind. Meas. & Reg. Sta. Eqpt	Demand	Ind. Meas. & Reg Sta. Eqpt as shown on Statement D is allocated on Factor 44 (Peak Day Excl. Res. & Sm Comm). Factor 21 is based on the results of the allocation and is used to allocated service regulator related costs.	CCOSS-Details as allocated.

Factor Title		Function	Description	Work Paper Reference		
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	CCOSS-Details as allocated		
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 less the Accumulated Reserve for Depreciation shown on Statement E 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 allocate Net Gas Plant in Service related costs.	CCOSS-Detail as allocated.		
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, 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		

Factor	Title	Function	Description	Work Paper Reference
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.
37	Weighted Services @ Distribution	Customer	Average customers @ distribution multiplied by service weighting factor.	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.
42	Customer Advances	Demand & Customer	Factor is based on the direct assignment of customer advances as of December 31, 2022 and is used to allocate customer advance adjustments.	CCOSS-Detail as allocated.
43	All Other Dist OpEx Excl. Load Dispatch	Demand & Customer	Factor is based on the results of allocations and is used to allocate Distribution Operation Expenses	CCOSS-Detail as allocated.
44	Peak Day Excl. Res. & Sm. Firm Gen.	Demand	Peak Day Demand excluding Residential and Small Firm General	Statement N, page 15
45	Dist. Mains & Meas. & Reg Equip.	Demand & Customer	Factor is based on the results of allocations and is used to allocate Distribution Plant account land, rights of way and structures & improvement accounts and adjustments.	CCOSS-Detail as allocated.

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

				Total	Total		
	Allocation	Total	Total	Small Firm	Large Firm	Total Small	Total Large
	Factor	South Dakota	Residential	General	General	Interruptible	Interruptible
te Base							
Gas Plant in Service							
Distribution Plant							
Land	45	87,780	54,972	9,111	20,356	689	2,652
Rights of Way	45	129,244	80,940	13,415	29,970	1,014	3,905
Structures & Improvements	45	375,234	234,992	38,948	87,013	2,944	11,337
Mains							
Demand Related 72.2%	5	40,982,617	21,948,475	4,520,295	12,427,849	427,909	1,658,089
Customer Related 27.8%	9	15,741,539	13,900,509	1,324,066	508,958	6,065	1,941
Meas. & Reg. Equip General	2	1,430,912	760,268	156,577	430,485	16,217	67,365
Direct to Small Firm	Direct	28,227	0	28,227	0	0	0
Meas. & Reg. Equip City Gate	2	1,810,870	962,145	198,154	544,794	20,524	85,253
Services	37	29,365,191	24,710,334	3,083,401	1,520,138	36,656	14,662
Meters	10	20,134,131	15,247,888	1,655,713	2,892,043	188,935	149,552
Service Regulators	10	2,925,624	2,215,620	240,586	420,233	27,454	21,731
Direct to Small Firm	Direct	4,951	0	4,951	0	0	0
Direct to Small IT	Direct	8,653	0	0	0	8,653	0
Direct to Large IT	Direct	9,125	0	0	0	0	9,125
Ind. Meas. & Reg. Station Equipment	44	110,213	0	0	92,293	3,477	14,443
Cathodic Protection & Other Equipment	2	103,576	55,032	11,334	31,160	1,174	4,876
Distribution Plant		113,247,887	80,171,175	11,284,778	19,005,292	741,711	2,044,931
General Plant	15	16,527,297	11,700,111	1,646,891	2,773,615	108,245	298,435
Intangible Plant - General	15	689,966	488,446	68,753	115,790	4,519	12,458
Common Plant	15	3,778,945	2,675,215	376,559	634,184	24,750	68,237
Intangible Plant - excluding CC&B & PCAD	15	2,926,616	2,071,829	291,627	491,146	19,167	52,847
Intangible Plant - Common CC&B & PCAD	8	5,195,819	4,587,795	437,002	167,979	2,082	961
Гotal Gas Plant in Service		142,366,530	101,694,571	14,105,610	23,188,006	900,474	2,477,869

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

				Total	Total		
	Allocation	Total	Total	Small Firm	Large Firm	Total Small	Total Large
	Factor	South Dakota	Residential	General	General	Interruptible	Interruptible
Less: Accumulated Depreciation							
Distribution Plant							
Rights of Way	45	37,390	23,416	3,881	8,670	294	1,129
Structures & Improvements	17	163,057	102,116	16,924	37,811	1,280	4,926
Mains	13	28,862,950	18,241,037	2,973,786	6,582,635	220,819	844,673
Meas. & Reg. Equip General	18	407,655	212,404	51,631	120,269	4,531	18,820
Meas. & Reg. Equip City Gate	19	888,026	471,822	97,172	267,160	10,065	41,807
Services	37	24,465,948	20,587,700	2,568,971	1,266,521	30,540	12,216
Meters	10	6,873,068	5,205,080	565,201	987,239	64,496	51,052
Service Regulators	20	828,681	622,735	69,012	118,113	10,148	8,673
Ind. Meas. & Reg. Station Equipment	21	62,744	0	0	52,543	1,979	8,222
Cathodic Protection & Other Equipment	2	80,534	42,790	8,812	24,228	913	3,791
Distribution Plant		62,670,053	45,509,100	6,355,390	9,465,189	345,065	995,309
General Plant	15	4,496,872	3,183,454	448,099	754,666	29,452	81,201
Intangible Plant - General	15	454,722	321,910	45,312	76,311	2,978	8,211
Common Plant	15	1,511,105	1,069,751	150,577	253,594	9,897	27,286
Intangible Plant - Excluding CC&B & PCAD	15	1,665,398	1,178,978	165,952	279,488	10,908	30,072
Intangible Plant - Common (CC&B & PCAD)	8	3,380,554	2,984,957	284,326	109,292	1,354	625
Total Accumulated Reserve for Depreciation		74,178,704	54,248,150	7,449,656	10,938,540	399,654	1,142,704
Net Gas Plant in Service		68,187,826	47,446,421	6,655,954	12,249,466	500,820	1,335,165
Additions:							
Materials & Supplies	15	1,048,913	742,553	104,521	176,029	6,870	18,940
Prepaid Insurance	24	41,836	29,110	4,084	7,516	307	819
Unamortized Loss on Debt	24	64,736	45,045	6,319	11,629	476	1,267
Unamortized Redemption of Preferred Stock	24	13,093	9,110	1,278	2,353	96	256
Total Additions		1,168,578	825,818	116,202	197,527	7,749	21,282
Total Before Deductions		69,356,404	48,272,239	6,772,156	12,446,993	508,569	1,356,447

#### MONTANA-DAKOTA UTILITIES CO.

#### **GAS UTILITY -**

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

#### Twelve Months Ended December 31, 2022

#### Pro Forma

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Deductions:							
Accumulated Deferred Income Tax							
Liberalized Depreciation	25	(7,332,136)	(5,237,457)	(726,464)	(1,194,225)	(46,376)	(127,614)
Excess Deferred Taxes	25	(3,126,041)	(2,232,979)	(309,726)	(509,155)	(19,773)	(54,408)
Contribution in Aid of Construction	42	882,493	776,450	27,183	945	77,915	0
Unamortized Loss on Debt	25	(13,595)	(9,711)	(1,347)	(2,214)	(86)	(237)
Customer Advances	42	606,772	533,860	18,690	650	53,572	0
Customer Advances For Construction	Direct	(2,889,392)	(2,542,192)	(89,001)	(3,094)	(255,105)	0
Total Deductions		(11,871,899)	(8,712,029)	(1,080,665)	(1,707,093)	(189,853)	(182,259)
Total Rate Base		57,484,505	39,560,210	5,691,491	10,739,900	318,716	1,174,188
Income Statement							
Gas Operating Revenues							
Retail Sales & Transportation							
Residential	Direct	41,524,906	41,524,906	0	0	0	0
Firm General	Direct	29,998,269	0	7,193,391	22,804,878	0	0
Small Interruptible	Direct	567,323	0	0	0	567,323	0
Large Interruptible	Direct	2,477,833	0	0	0	0	2,477,833
Total Sales & Transportation Revenues		74,568,331	41,524,906	7,193,391	22,804,878	567,323	2,477,833
Other Operating Revenue							
Miscellaneous							
Reconnect Fees	11	24,534	21,675	2,065	794	0	0
NSF Check Fees	11	72,680	64,213	6,116	2,351	0	0
Miscellaneous	24	342	237	33	62	3	7
Rent From Gas Property	24	261,536	181,982	25,529	46,983	1,921	5,121
Other Gas Revenues							
Miscellaneous	31	165,965	121,821	15,359	25,117	1,021	2,647
Late Payment & Penalty Revenue	24	224,145	155,964	21,879	40,266	1,647	4,389
Total Other Operating Revenue		749,202	545,892	70,981	115,573	4,592	12,164
Unbilled Revenue	26	2,687,380	1,522,455	255,276	815,819	12,094	81,736
Total Operating Revenues		78,004,913	43,593,253	7,519,648	23,736,270	584,009	2,571,733

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Operation & Maintenance Expenses							
Cost of Purchased Gas	Direct	56,883,532	29,976,427	5,971,146	18,488,605	273,609	2,173,745
Other Gas Supply Expenses	3	110,577	56,668	10,586	37,225	416	5,682
		56,994,109	30,033,095	5,981,732	18,525,830	274,025	2,179,427
Distribution Expenses							
Operation							
Load Dispatch	1	7,395	3,171	592	2,083	300	1,249
Mains and Services	22	1,192,617	838,942	123,679	200,276	6,520	23,200
Measuring Stations - General	18	51,466	26,816	6,518	15,184	572	2,376
Measuring Stations - Industrial	21	12,916	0	0	10,816	407	1,693
Measuring Stations - City Gate	19	83,192	44,201	9,103	25,028	943	3,917
Meters & House Regulators	16	371,143	280,796	30,570	53,258	3,618	2,901
Customer Installations	10	233,309	176,689	19,186	33,512	2,189	1,733
Other Gas Distribution	43	1,361,517	957,400	132,365	236,698	9,976	25,078
Rents	43	6,489	4,564	631	1,128	47	119
Supervision & Engineering	43	749,515	527,047	72,867	130,303	5,492	13,806
Total Operation Expense		4,069,559	2,859,626	395,511	708,286	30,064	76,072
Maintenance							
Structures & Improvements	17	6,517	4,081	677	1,511	51	197
Mains	13	209,521	132,414	21,588	47,785	1,603	6,131
Measuring Stations - General	18	56,228	29,297	7,121	16,589	625	2,596
Measuring Stations - Industrial	21	58,970	0	0	49,382	1,860	7,728
Measuring Stations - City Gate	19	44,754	23,779	4,897	13,464	507	2,107
Services	37	157,400	132,450	16,527	8,148	196	79
Meters & House Regulators	16	350,024	264,816	28,831	50,228	3,413	2,736
Other Equipment	28	312,075	207,307	28,134	66,097	2,916	7,621
Supervision & Engineering	28	344,080	228,565	31,020	72,876	3,216	8,403
Total Maintenance Expense		1,539,569	1,022,709	138,795	326,080	14,387	37,598
Total Distribution Expenses		5,609,128	3,882,335	534,306	1,034,366	44,451	113,670

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

				Total	Total		
	Allocation	Total	Total	Small Firm	Large Firm	Total Small	Total Large
	Factor	South Dakota	Residential	General	General	Interruptible	Interruptible
Supervision	8	13,397	11,830	1,127	433	5	2
Meter Reading	10	101,896	77,168	8,379	14,636	956	757
Customer Records & Collection	8	1,011,636	893,253	85,085	32,706	405	187
Uncollectible Accounts	11	304,346	268,889	25,612	9,845	0	0
Miscellaneous Customer Accounts	8	20,678	18,258	1,739	669	8	4
Customer Service & Information	8	280,680	247,835	23,607	9,074	112	52
Sales Expenses	8	93,725	82,757	7,883	3,030	38	17
Administration & General Expenses	30	5,046,112	3,703,968	466,975	763,654	31,022	80,493
Total Gas O&M Expenses		69,475,707	39,219,388	7,136,445	20,394,243	351,022	2,374,609
O&M Excl. Cost of Gas and A&G		7,546,063	5,538,993	698,324	1,141,984	46,391	120,371
O&M Excl. Cost of Gas		12,592,175	9,242,961	1,165,299	1,905,638	77,413	200,864
Depreciation Expense Distribution Plant							
Rights of Way	45	1,797	1,126	187	416	14	54
Structures & Improvements	17	10,411	6,520	1,081	2,414	82	314
Mains	13	1,231,890	778,540	126,923	280,951	9,425	36,051
Meas. & Reg. Equip General	18	38,771	20,202	4,910	11,438	431	1,790
Meas. & Reg. Equip City Gate	19	67,909	36,081	7,431	20,430	770	3,197
Services	37	2,017,838	1,697,977	211,877	104,457	2,519	1,008
Meters	10	602,503	456,285	49,546	86,543	5,654	4,475
Service Regulators	20	51,307	38,556	4,273	7,313	628	537
Ind. Meas. & Reg. Station Equipment	21	3,648	0	0	3,055	115	478
Cathodic Protection & Other Equipment	2	1,025	545	112	308	12	48
Total Distribution Plant	0	4,027,099	3,035,832	406,340	517,325	19,650	47,952
General Plant	15	351,641	248,935	35,040	59,013	2,303	6,350
Amort. of Intangible Plant - General	15	55,546	39,324	5,535	9,321	363	1,003
Common Plant	15	161,729	114,493	16,116	27,141	1,059	2,920
Amort. Of Intangible Plant (less CC&B & PCAD)	15	217,424	153,920	21,665	36,489	1,424	3,926
Amort. Of Intangible Plant - CC&B & PCAD)	8	381,916	337,223	32,122	12,347	153	71
Amort Preferred Stock Redemption	24	1,257	873	123	226	10	25
Total Depreciation Expense		5,196,612	3,930,600	516,941	661,862	24,962	62,247

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

#### Twelve Months Ended December 31, 2022

#### Pro Forma

				Total	Total		
	Allocation	Total	Total	Small Firm	Large Firm	Total Small	Total Large
	Factor	South Dakota	Residential	General	General	Interruptible	Interruptible
Taxes Other Than Income							
Ad Valorem Taxes	15	665.534	471.149	66.318	111.690	4,359	12.018
Other Taxes - Payroll, Franchise, Other	31	430,646	316,103	39,853	65,172	2,648	6,870
Other Taxes - Revenue	26	84,525	47,887	8,029	25,659	380	2,570
Total Taxes Other Than Income Taxes		1,180,705	835,139	114,200	202,521	7,387	21,458
Total Operating Expense		75,853,024	43,985,127	7,767,586	21,258,626	383,371	2,458,314
Interest Expense	24	1,485,824	1,033,866	145,034	266,918	10,913	29,093
Taxable Income Before Adjustments		666,065	(1,425,740)	(392,972)	2,210,726	189,725	84,326
Deductions							
Unrecovered Purchased Gas Cost	33	(1,291,357)	(673,179)	(125,751)	(442,204)	(3,427)	(46,796)
Other Income Tax Charges	24	(58,028)	(40,378)	(5,664)	(10,424)	(426)	(1,136)
Total Deductions	0	(1,349,385)	(713,557)	(131,415)	(452,628)	(3,853)	(47,932)
Taxable Income (Before State Income Tax)	0	2,015,450	(712,183)	(261,557)	2,663,354	193,578	132,258
Less: State Income Tax	35	0	0	0	0	0	0
Federal Taxable Income		2,015,450	(712,183)	(261,557)	2,663,354	193,578	132,258
Federal Income Tax							
@ Current Rate of 21%		423,245	(149,558)	(54,927)	559,305	40,651	27,774
Credits and Adjustments	40	(75,039)	(39,681)	(7,308)	(25,170)	(214)	(2,666)
Rounding & Prior Year's Adjustments - Federal	24	7,713	5,367	753	1,386	56	151
Federal and State Income Taxes		355,919	(183,872)	(61,482)	535,521	40,493	25,259
Rounding & Prior Year's Adjustment - State	24	0	0	0	0	0	0
Federal & State Income Taxes		355,919	(183,872)	(61,482)	535,521	40,493	25,259

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### Summary Report

	Allocation Factor	Total South Dakota	Total Residential	Total Small Firm General	Total Large Firm General	Total Small Interruptible	Total Large Interruptible
Deferred Income Taxes		(074 404)	(444.000)	(00.10=)	(00.000)	(=00)	(0.00=)
Unrecovered Purchased Gas Cost	33	(271,184)	(141,368)	(26,407)	(92,862)	(720)	(9,827)
Other Deferred Income Tax Chgs	24	(165,359)	(115,061)	(16,141)	(29,706)	(1,214)	(3,237)
Closing/Filing & Out of Period	24	14,708	10,234	1,436	2,642	108	288
Total Deferred Income Taxes		(421,835)	(246,195)	(41,112)	(119,926)	(1,826)	(12,776)
Total Operating Expenses		75,787,108	43,555,060	7,664,992	21,674,221	422,038	2,470,797
Total Operating Income		2,217,805	38,193	(145,344)	2,062,049	161,971	100,936
Summary of Pro Forma Rate Base Adj.							
Plant							
Plant Additions - Adj. A Distribution							
Mains-Demand Related 75%	5	1,908,024	1,021,853	210,451	578,602	19,922	77,196
Mains-Customer Related 25%	9	732,877	647,166	61,644	23,695	282	90
Meas. & Reg. Equip. City Gate	18	1,432,790	746,539	181,467	422,711	15,924	66,149
Meas. & Reg. Equip. General	19	1,340,068	712,000	146,637	403,155	15,188	63,088
Services	37	1,887,026	1,587,902	198,141	97,685	2,356	942
Meters	10	1,135,371	859,835	93,366	163,083	10,654	8,433
Service Regulators	20	314,017	235,977	26,151	44,757	3,846	3,286
Total Distribution Plant Additions		8,750,173	5,811,272	917,857	1,733,688	68,172	219,184
General	15	1,076,284	761,930	107,248	180,622	7,049	19,435
General Intangible	15	182,037	128,867	18,140	30,550	1,193	3,287
Common	15	156,819	111,017	15,626	26,317	1,027	2,832
Intangible Plant	15	137,554	97,378	13,707	23,084	901	2,484
Total Plant Additions - Adj. A		10,302,867	6,910,464	1,072,578	1,994,261	78,342	247,222
Accumulated Reserve for Depreciation Plant Additions - Adj. B							
Distribution	23	(30,153)	(21,251)	(3,016)	(5,126)	(200)	(560)
General	25 15	(44,050)	(31,184)	(4,389)	(7,393)	, ,	(796)
General Intangible	15	19,861	14,060	1,979	3,333	(288) 130	359
Common	15	28,937	20,487	2,883	4,856	189	522
Intangible Plant	15	13,782	20,467 9,756	2,003 1,373	2,313	91	249
Total Accumulated Reserve - Adj. B	15	(11,623)	(8,132)	(1,170)	(2,017)	(78)	(226)
Net Adjustment to Plant		10,314,490	6,918,596	1,073,748	1,996,278	78,420	247,448

#### MONTANA-DAKOTA UTILITIES CO.

#### **GAS UTILITY -**

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

#### Twelve Months Ended December 31, 2022

#### Pro Forma

				Total	Total		
	Allocation	Total	Total	Small Firm	Large Firm	Total Small	Total Large
	Factor	South Dakota	Residential	General	General	Interruptible	Interruptible
Additions							
Materials and Supplies - Adj. C	15	47,973	33,962	4.780	8,051	314	866
Prepaid Insurance - Adj. D	24	135,521	94,298	13,228	24,345	996	2,654
Unamortized Loss on Debt - Adj. E	24	(12,908)	(8,982)	(1,260)	(2,319)		(253)
Unamortized Redemption of Pref. Stock - Adj. F	24	(12,908)	(873)	(1,200)	(226)	(10)	(25)
Unamortized Rate Case Expense - Adj. G	30	612,533	(673) 449,614	56,684	92,698	3,765	9,772
	30 31	8,786,099	6,449,209		1,329,646	54,014	9,772 140,151
Provision for Pension and Beneifts - Adj. H	31	, ,	, ,	813,079			,
Provision for Post Retirement - Adj. I		2,058,855	1,511,249	190,529	311,578	12,657	32,842
Cash Working Capital - Adj. J	25	(395,424)	(282,456)	(39,179)	(64,405)	(2,501)	(6,883)
Total Additions		11,231,392	8,246,021	1,037,738	1,699,368	69,141	179,124
Deductions							
Accumulated Def. Inc. Tax							
Liberalized Depreciation - Adj. L	41	166,683	118,575	16,571	27,494	1,068	2,975
Excess Deferred Taxes - Adj. L	41	250,856	178,451	24,940	41,378	1,609	4,478
Unamortized Loss on Debt - Adj. L	41	2,711	1,928	270	447	17	49
Unamortized Rate Case Expense - Adj. L	41	(128,632)	(91,505)	(12,788)	(21,218)	(825)	(2,296)
Provision for Pension and Benefits - Adj. L	31	(1,748,794)	(1,283,657)	(161,837)	(264,654)	(10,751)	(27,895)
Provision for Post Retirement - Adj. L	41	(411,455)	(292,699)	(40,906)	(67,868)	(2,638)	(7,344)
Customer Advances - Adj. L	42	34,768	30,591	1,071	37	3,069	0
Customer Advances for Construction - Adj. K	Direct	(85,521)	(75,241)	(2,634)	(94)	(7,552)	0
Total Deductions		(1,919,384)	(1,413,557)	(175,313)	(284,478)	(16,003)	(30,033)
Total Pro Forma Adjustments - Rate Base		19,626,498	13,751,060	1,936,173	3,411,168	131,558	396,539
Pro Forma Adjustments - Operating Income							
Pro Forma Revenue Adjustments							
Revenue Adjustments - Adj. No. 1-2 to Pro Forma							
Residential	Direct	(3,876,731)	(3,876,731)	0	0	0	0
Firm General	Direct	(3,511,613)	0	(880,773)	(2,630,840)	0	0
Small Interruptible	Direct	(268,257)	0	(000,773)	(2,030,040)	(268,257)	0
Large Interruptible	Direct	(456,618)	0	0	0	(200,237)	(456,618)
Total Retail Sales Adjustment	Direct	(8,113,219)	(3,876,731)	(880,773)	(2,630,840)	(268,257)	(456,618)
Unbilled Revenue	26	(2,687,380)	, ,	(255,276)	,	,	, ,
Margin Sharing Credit	26 26	(2,007,300)	(1,522,455) 0	(255,276)	(815,819) 0	(12,094) 0	(81,736) 0
Reserve for Refund	26 26	0	0	0	0	0	0
	20	(10,800,599)	(5,399,186)	(1,136,049)	(3,446,659)	(280,351)	(520 254)
Total		(10,000,599)	(5,399,186)	(1,130,049)	(3,440,059)	(200,331)	(538,354)

#### SOUTH DAKOTA

#### **Embedded Class Cost of Service Study**

#### **Summary Report**

	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	(241,038)	(136,552)	(22,896)	(73,173)	(1,085)	(7,332)
Total Pro Forma Revenue Adjustments		(11,041,637)	(5,535,738)	(1,158,945)	(3,519,832)	(281,436)	(545,686)
Operation & Maintenance Expenses							
Cost of Gas - Adj. No. 4	Direct	(10,096,201)	(5,586,397)	(1,415,042)	(2,467,049)	(149,438)	(478,275)
Labor Expense - Adj. No. 5							
Other Gas Supply	30	10,468	7,684	969	1,584	64	167
Distribution	29	447,234	309,552	42,602	82,473	3,544	9,063
Customer Accounting	8	102,660	90,647	8,634	3,319	41	19
Customer Service	8	6,994	6,176	588	226	3	1
Sales	8	8,710	7,690	733	282	3	2
A&G	30	84,979	62,376	7,865	12,861	522	1,355
Total -Labor Expense - Adj. No. 5		661,045	484,125	61,391	100,745	4,177	10,607
Benefits Expense - Adj. No. 6	30	176,252	129,372	16,311	26,673	1,084	2,812
Vehicles and Work Equip Adj. No. 7	30	752,155	552,101	69,605	113,827	4,624	11,998
Subcontract Labor - Adj. No. 8	30	212,361	155,879	19,653	32,137	1,305	3,387
Materials - Adj. No. 9	30	41,345	30,350	3,826	6,256	254	659
Software Maintenance- Adj. No. 10	30	50,196	36,845	4,645	7,596	309	801
Company Consumption - Adj. No. 11	30	(9,317)	(6,838)	(863)	(1,410)	(57)	(149)
Uncollectible Accounts - Adj. No. 12	11	(40,503)	(35,784)	(3,409)	(1,310)	) O	° 0
Postage - Adj. No. 13	8	24,368	21,515	2,050	788	10	5
Advertising - Adj. No. 14	8	(38,916)	(34,362)	(3,273)	(1,258)	(16)	(7)
Insurance Expense - Adj. No. 15	30	69,720	51,176	6,452	10,551	429	1,112
Industry Dues - Adj. No. 16	30	(146)	(109)	(13)	(22)	0	(2)
Regulatory Commission Expense - Adj. No. 17	30	125,132	91,849	11,579	18,938	770	1,996
COVID-19 - Adj. No. 18	30	2,146	1,576	198	324	13	35
Easements - Adj No. 19	30	5,036	3,698	465	762	30	81
All Other - Adj No. 20	30	(100,425)	(73,717)	(9,293)	(15,197)	(617)	(1,601)
Total Other O&M Adjustments		1,930,449	1,407,676	179,324	299,400	12,315	31,734
Total Adjustments to O&M		(8,165,752)	(4,178,721)	(1,235,718)	(2,167,649)	(137,123)	(446,541)

#### SOUTH DAKOTA

#### Embedded Class Cost of Service Study

#### **Summary Report**

				Total	Total		
	Allocation	Total	Total	Small Firm	Large Firm	Total Small	Total Large
	Factor	South Dakota	Residential	General	General	Interruptible	Interruptible
Depreciation Expense							
Annual Depreciation - Adj. No. 21							
Distribution Plant	23	(60,306)	(42,503)	(6,032)	(10,252)	(400)	(1,119)
General Plant	41	(48,379)	(34,415)	(4,810)	(7,980)	(310)	(864)
Common	8	85,436	75,438	7,186	2,762	34	` 16 <sup>°</sup>
Total Annual Depreciation Adj. 21		(23,249)	(1,480)	(3,656)	(15,470)	(676)	(1,967)
Taxes Other Than Income							
Ad Valorem Taxes - Adj. No. 22							
Distribution Plant	23	44,473	31,344	4,449	7,560	295	825
General Plant	41	4,146	2,950	412	684	26	74
Common Plant	41	1,055	751	105	174	6	19
Total Ad Valorem Taxes Adj. No. 22	0	49,674	35,045	4,966	8,418	327	918
Payroll Taxes - Adj. No. 23	31	44,654	32,776	4,132	6,759	275	712
Gross Revenue Tax- Adj. 24	26	21,151	11,982	2,010	6,420	95	644
Total Adjustments to Taxes Other than Income		115,479	79,803	11,108	21,597	697	2,274
Current Income Taxes							
Interest Annualization - Adj. No. 25	41	294,669	209,622	29,295	48,604	1,889	5,259
Book/Tax Depreciation on Plant - Adj. No. 26	41	(793,731)	(564,639)	(78,912)	(130,923)	(5,089)	(14,168)
		(499,062)	(355,017)	(49,617)	(82,319)	(3,200)	(8,909)
Net Adjustments to Operating Income		(2,469,053)	(1,080,323)	118,938	(1,275,991)	(141,134)	(90,543)
Income Taxes on Pro Forma Adj Adj. No. 27	(Calculated)	(518,501)	(226,867)	24,977	(267,958)	(29,639)	(19,014)
Elimination of Closing/Filing&Res Adj. No. 28	41	(7,713)	(5,487)	(766)	(1,272)	(50)	(138)
Total Adjustments to Current Income Taxes	71	(526,214)	(232,354)	24,211	(269,230)	(29,689)	(19,152)
Deferred Income Taxes							
Deferred Taxes on Plant - Adj. No. 26	41	(166,683)	(118,575)	(16,571)	(27,494)	(1,068)	(2,975)
Plant Excess Deferred Taxes - ARAM - Adj. No. 29	41	(51,210)	(36,429)	(5,091)	(8,447)	(328)	(2,975) (915)
Elimination of Closing/Filing - Adj. No. 28	24	(14,708)	(10,234)	(1,436)	(2,642)	(108)	(288)
Total Adjustments to Deferred Income Taxes	<b>4</b> 7	(232,601)	(165,238)	(23,098)	(38,583)	(1,504)	(4,178)
Total Adjustments:		(2,209,300)	(1,037,748)	68,208	(1,050,497)	(113,141)	(76,122)

## MONTANA-DAKOTA UTILITIES CO. GAS UTILITY - SOUTH DAKOTA CLASS COST OF SERVICE STUDY 12 MONTHS ENDING DECEMBER 31, 2022 ALLOCATION FACTORS - PRO FORMA

	_	Factor No. 1	Factor No. 2	Factor No. 3	Factor No. 5	Factor No. 8	Factor No. 9	Factor No. 10	Factor No. 11	Factor No. 12	Factor No. 37	Factor No. 44
Rate	Customer Class	DK <u>Throughput</u>	Peak Day <u>Design</u>	DK Sales	Peak Day @ <u>Distribution</u>	Average Customers	Average Customers @ <u>Distribution</u>	Total Weighted Customers	Average Res & Firm Gen Customers	Weighted Customers @ <u>Distribution</u>	Weighted Services <u>Distribution</u>	Peak Day Excl. Res. & Sm. Firm Gen
60	Residential Gas Service	3,803,810	46,317	3,803,810	46,317	57,300	57,300	57,300	57,300	57,300	57,300	
70	Firm General-Small Firm General-Large Subtotal Firm	710,559 2,498,683 3,209,242	9,539 26,226 35,765	710,559 2,498,683 3,209,242	9,539 26,226 35,765	5,458 2,098 7,556	5,458 2,098 7,556	6,222 10,868 17,090	5,458 2,098 7,556	6,222 10,868 17,090	7,150 3,525 10,675	26,226
71 81		27,935 332,427 360,362	77 911 988	27,935 27,935	77 826 903	6 20 26	6 19 25	164 546 710	0	164 519 683	20 62 82	77 911 988
	Large Interruptible Large Interruptible Transport Subtotal Large IT	381,433 1,116,707 1,498,140	1,045 3,059 4,104	381,433 381,433	843 2,656 3,499	2 10 12	1 7 8	94 468 562	0	47 328 375	3 19 22	1,045 3,059 4,104
	TOTAL SOUTH DAKOTA GAS	8,871,554	87,174	7,422,420	86,484	64,894	64,889	75,662	64,856	75,448	68,079	31,318

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

	South Dakota Pro Forma Dk	Total DK less Transport	South Dakota Transmission Level Customer DK
Residential	3,803,810	3,803,810	0
Firm General-Small	710,559	710,559	0
Firm General-Large	2,498,683	2,498,683	0
Small Interruptible Sales	27,935	27,935	0
Small Interruptible Transport	332,427		31,036
Large Interruptible Sales	381,433	381,433	73,732
Large Interruptible Transport	1,116,707		147,232
Total Throughput	8,871,554	7,422,420	252,000

#### **Transmission Level Customers**

		DK
SI Transport=	81-11	31,036
LI-Sales=	85-1	73,732
LI Transport=	82-2	119,449
	82-3	24,783
	82-6	3,000
		147,232

## MONTANA-DAKOTA UTILITIES CO. GAS UTILITY - SOUTH DAKOTA EMBEDDED COST OF SERVICE STUDY PRO FORMA 2023 PEAK DAY DELIVERIES - FACTOR NOS. 2 & 5

		Small Firm	Large Firm	Total	Sm	nall IT	Larg	ge IT	
	Residential	General	General	Firm	Sales	Transport	Sales	Transport	Total
Use per Degree Day per customer 1/	0.00995	0.02209	0.14677						
Multipled by: Peak Day Degree Days	78	78	78						
Heating use per day per customer	0.7761	1.72302	11.44806						
Daily Baseload per customer 1/	0.03222	0.02463	1.05233						
Total Peak Day Use/Customer	0.80832	1.74765	12.50039						
Customers 2/	57,300	5,458	2,098						
Total Peak Day Use (Calculated)	46,317	9,539	26,226	82,082					
Class Ratio	56.43%	11.62%	31.95%						
Allocated Actual Peak Day Use	46,317	9,539	26,226	82,082					
•	40,317	9,559	20,220	02,002	77	044	4.045	0.050	5.000
Interruptible assigned on 100% load factor					77	911	1,045	3,059	5,092
Total Peak Day Use	46,317	9,539	26,226	82,082	77	911	1,045	3,059	87,174 Factor #2
Total Total Buy 600	10,017	0,000	20,220				1,010	0,000	
Less: Peak Transmission Dk 100% load factor	0	0	0	0	0	85	202	403	690
Less. Fear Hallsillission Dr 100 / load lactor								403	090
Distribution Level Peak Dk	46,317	9,539	26,226	82,082	77	826	843	2,656	86,484 Factor #5

<sup>1/</sup> Regression Analysis supporting weather normalized volumes.

<sup>2/</sup> Pro Forma customers.

### MONTANA DAKOTA UTILITIES COMPANY Design Degree Days (HD60)

LOCATION	Design 1/	* Customers 2/	Weight of HD
LOGATION	Design I/	Cusioniers Zi	Weight Of FID
BILLINGS, MONT.	81	66,503	5,386,743
BISMARCK, N.D.	87	46,186	4,018,182
DEVILS LAKE, N.D.	93	8,149	757,857
DICKINSON, N.D.	88	14,011	1,232,968
GLASGOW, MONT.	90	6,709	603,810
GLENDIVE, MONT.	88	9,265	815,320
JAMESTOWN, N.D.	88	10,376	913,088
MILES CITY, MONT.	86	5,815	500,090
MINOT,N.D.	87	20,889	1,817,343
MOBRIDGE, S.D.	82	4,449	364,818
PIERRE, S.D.	82	4,449	364,818
POWELL, WY.	81	6,463	523,503
RAPID CITY, S.D.	77	55,380	4,264,260
SHERIDAN, WY.	85	13,439	1,142,315
WILLISTON,N.D.	87	13,070	1,137,090
SYSTEM WEIGHTED			
DEGREE DAYS	84	285,153	23,842,205
WEIGHTED BY STATE			
NORTH DAKOTA	88	110 601	0 076 500
NORTH DAKOTA SOUTH DAKOTA	88 78	112,681 64,278	9,876,528 4,993,896
MONTANA	78 83		
WYOMING	83 84	88,292	7,305,963
VV TOIVIING	ŏ4	19,902	1,665,818
1/ Base on 60 heating degrees effective	Jun-22		
2/ Customer count effective	Nov-22		

### 60 - Residential

o							
Month	Customers	Dth 1/	BPDD60 2/	Days	Dth/cust	DD/Day	Dth/Day/Cust
Jan-20	54,805	650,882.2	1,054	31	11.9	34.00000	0.38311
Feb-20	54,816	588,602.3	1,050	29	10.7	36.20690	0.37027
Mar-20	54,944	566,007.5	792	31	10.3	25.54839	0.33231
Apr-20	54,984	439,631.4	704	30	8	23.46667	0.26652
May-20	54,996	269,803.2	395	31	4.9	12.74194	0.15825
Jun-20	55,115	160,333.5	101	30	2.9	3.36667	0.09697
Jul-20	55,208	72,748.6	3	31	1.3	0.09677	0.04251
Aug-20	55,122	55,656.6	0	31	1	0.00000	0.03257
Sep-20	55,150	77,104.0	56	30	1.4	1.86667	0.0466
Oct-20	55,397	117,253.7	187	31	2.1	6.03226	0.06828
Nov-20	55,515	337,309.5	669	30	6.1	22.30000	0.20253
Dec-20	55,780	464,624.1	708	31	8.3	22.83871	0.2687
Jan-21	55,752	583,533.8	955	31	10.5	30.80645	0.33763
Feb-21	55,797	602,862.7	1,126	28	10.8	40.21429	0.38588
Mar-21	55,912	684,236.0	928	31	12.2	29.93548	0.39477
Apr-21	55,958	385,531.1	600	30	6.9	20.00000	0.22966
May-21	55,919	292,120.9	419	31	5.2	13.51613	0.16852
Jun-21	56,102	156,007.3	115	30	2.8	3.83333	0.09269
Jul-21	56,021	62,281.4	1	31	1.1	0.03226	0.03586
Aug-21	55,993	57,753.2	0	31	1	0.00000	0.03327
Sep-21	55,943	58,973.3	9	30	1.1	0.30000	0.03514
Oct-21	56,036	79,572.3	118	31	1.4	3.80645	0.04581
Nov-21	56,320	259,565.9	485	30	4.6	16.16667	0.15363
Dec-21	56,497	434,945.6	717	31	7.7	23.12903	0.24834
Jan-22	56,618	752,318.4	1,204	31	13.3	38.83871	0.42863
Feb-22	56,610	576,844.1	847	28	10.2	30.25000	0.36392
Mar-22	56,739	675,247.8	1,024	31	11.9	33.03226	0.3839
Apr-22	56,722	417,137.6	598	30	7.4	19.93333	0.24514
May-22	56,841	341,944.6	384	31	6	12.38710	0.19406
Jun-22	56,886	146,769.1	125	30	2.6	4.16667	0.086
Jul-22	56,667	63,667.6	4	31	1.1	0.12903	0.03624
Aug-22	56,754	60,010.8	0	31	1.1	0.00000	0.03411
Sep-22	56,683	58,199.1	16	30	1	0.53333	0.03422
Oct-22	56,786	90,073.4	132	31	1.6	4.25806	0.05117
Nov-22	57,159	254,632.9	549	30	4.5	18.30000	0.14849
Dec-22	57,401	646,395.5	1,067	31	11.3	34.41935	0.36326

Slope	Intercept	R2
0.00995	0.03222	0.96279

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

### 70 - Small Firm General

Month	Customers	Dth 1/	BPDD60 2/	Days	Dth/cust	DD/Day	Dth/Day/Cust
Jan-20	5,582	131,561.9	1,054	31	23.6	34.00000	0.76029
Feb-20	5,288	119,750.0	1,050	29	22.6	36.20690	0.78088
Mar-20	5,292	113,391.9	792	31	21.4	25.54839	0.69119
Apr-20	5,293	83,009.9	704	30	15.7	23.46667	0.52277
May-20	5,287	45,784.4	395	31	8.7	12.74194	0.27935
Jun-20	5,285	23,512.4	101	30	4.4	3.36667	0.1483
Jul-20	5,291	8,231.7	3	31	1.6	0.09677	0.05019
Aug-20	5,277	6,975.7	0	31	1.3	0.00000	0.04264
Sep-20	5,274	9,491.9	56	30	1.8	1.86667	0.05999
Oct-20	5,284	15,253.2	187	31	2.9	6.03226	0.09312
Nov-20	5,302	60,602.2	669	30	11.4	22.30000	0.381
Dec-20	5,327	87,374.4	708	31	16.4	22.83871	0.5291
Jan-21	5,361	115,144.6	955	31	21.5	30.80645	0.69284
Feb-21	5,364	125,280.9	1,126	28	23.4	40.21429	0.83414
Mar-21	5,373	138,249.6	928	31	25.7	29.93548	0.83001
Apr-21	5,352	71,132.8	600	30	13.3	20.00000	0.44303
May-21	5,358	51,531.3	419	31	9.6	13.51613	0.31025
Jun-21	5,358	22,318.0	115	30	4.2	3.83333	0.13885
Jul-21	5,350	8,206.8	1	31	1.5	0.03226	0.04948
Aug-21	5,345	8,058.8	0	31	1.5	0.00000	0.04864
Sep-21	5,334	7,673.3	9	30	1.4	0.30000	0.04795
Oct-21	5,342	10,222.2	118	31	1.9	3.80645	0.06173
Nov-21	5,386	42,910.9	485	30	8	16.16667	0.26557
Dec-21	5,396	82,988.8	717	31	15.4	23.12903	0.49612
Jan-22	5,437	158,174.9	1,204	31	29.1	38.83871	0.93846
Feb-22	5,436	120,928.7	847	28	22.2	30.25000	0.7945
Mar-22	5,443	140,811.8	1,024	31	25.9	33.03226	0.83452
Apr-22	5,450	81,900.5	598	30	15	19.93333	0.50092
May-22	5,438	64,623.0	384	31	11.9	12.38710	0.38334
Jun-22	5,416	21,746.2	125	30	4	4.16667	0.13384
Jul-22	5,396	8,161.2	4	31	1.5	0.12903	0.04879
Aug-22	5,397	7,836.3	0	31	1.5	0.00000	0.04684
Sep-22	5,395	7,487.1	16	30	1.4	0.53333	0.04626
Oct-22	5,407	11,990.4	132	31	2.2	4.25806	0.07153
Nov-22	5,445	43,402.3	549	30	8	18.30000	0.2657
Dec-22	5,461	131,768.3	1,067	31	24.1	34.41935	0.77835

Slope	Intercept	R2
0.02209	0.02463	0.95592

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

70 - Large Firm General

Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1.0856           Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076								
Feb-20	Month	Customers	Dth 1/	BPDD60 2/	Days	Dth/cust	DD/Day	Dth/Day/Cust
Mar-20	Jan-20	2,039	439,429.4	1,054	31	215.5	34.00000	6.95201
Apr-20         2,045         277,401.4         704         30         135.6         23.46667         4.52162           May-20         2,041         169,939.8         395         31         83.3         12,74194         2.6859           Jul-20         2,049         123,252.0         101         30         60.2         3.6667         2.00508           Jul-20         2,050         77,368.1         3         31         37.7         0.09677         1.21744           Aug-20         2,039         61,977.5         0         31         30.4         0.00000         0.98052           Sep-20         2,045         76,856.9         56         30         37.6         1.86667         1.25276           Oct-20         2,043         102,306.5         187         31         50.1         6.03226         1.61537           Nov-20         2,049         212,745.7         669         30         103.8         22,30000         3.46097           Dec-20         2,049         276,256.1         708         31         163.3         30.80645         526687           Feb-21         2,047         354,375.1         1,126         28         175.1         40.21429         6.2562<	Feb-20	2,039	374,108.0	1,050	29	183.5	36.20690	6.32677
May-20         2,041         169,939.8         395         31         83.3         12,74194         2,6859           Jun-20         2,049         123,252.0         101         30         60.2         3,36667         2,00508           Jul-20         2,050         77,368.1         3         31         37.7         0.09677         1,21744           Aug-20         2,039         61,977.5         0         31         30.4         0.00000         0.98052           Sep-20         2,045         76,856.9         56         30         37.6         1.86667         1.25276           Oct-20         2,043         102,306.5         187         31         50.1         6.03226         1.61537           Nov-20         2,049         212,745.7         669         30         103.8         22,30000         3,46097           Dec-20         2,049         2276,256.1         708         31         134.8         22,83871         4,34919           Jan-21         2,047         334,219.8         955         31         163.3         30.80645         5,26687           Feb-21         2,047         358,375.1         1,126         28         175.1         40.21429         6,25	Mar-20	2,043	367,547.9	792	31	179.9	25.54839	5.80342
Jun-20         2,049         123,252.0         101         30         60.2         3.36667         2.00508           Jul-20         2,050         77,368.1         3         31         37.7         0.09677         1.21744           Aug-20         2,039         61,977.5         0         31         30.4         0.00000         0.98052           Sep-20         2,045         76,856.9         56         30         37.6         1.86667         1.25276           Oct-20         2,043         102,306.5         187         31         50.1         6.03226         1.61537           Nov-20         2,049         212,745.7         669         30         103.8         22.30000         3.46997           Dec-20         2,049         212,745.7         669         30         103.8         22.30000         3.46997           Jan-21         2,047         334,219.8         955         31         163.3         30.80645         5.26687           Feb-21         2,047         358,375.1         1,126         28         175.1         40.21429         6.25262           Mar-21         2,046         392,935.9         928         31         192.1         29.93548         6.1	Apr-20	2,045	277,401.4	704	30	135.6		4.52162
Jul-20	May-20	2,041	169,939.8	395			12.74194	
Aug-20         2,039         61,977.5         0         31         30.4         0.00000         0.98052           Sep-20         2,045         76,856.9         56         30         37.6         1.86667         1.25276           Oct-20         2,043         102,306.5         187         31         50.1         6.03226         1.61537           Nov-20         2,049         212,745.7         669         30         103.8         22.30000         3.46097           Dec-20         2,049         276,256.1         708         31         134.8         22.83871         4.34919           Jan-21         2,047         334,219.8         955         31         163.3         30.80645         5.26687           Feb-21         2,047         358,375.1         1,126         28         175.1         40.21429         6.25262           Mar-21         2,046         392,935.9         928         31         192.1         29.93548         6.19519           Apr-21         2,045         242,647.8         600         30         118.7         20.00000         3.95514           May-21         2,045         189,842.9         419         31         92.8         13.51613         <		2,049	123,252.0	101				2.00508
Sep-20         2,045         76,856.9         56         30         37.6         1.86667         1.25276           Oct-20         2,043         102,306.5         187         31         50.1         6.03226         1.61537           Nov-20         2,049         212,745.7         669         30         103.8         22.30000         3.46097           Dec-20         2,049         276,256.1         708         31         134.8         22.83871         4.34919           Jan-21         2,047         334,219.8         955         31         163.3         30.80645         5.26687           Feb-21         2,047         358,375.1         1,126         28         175.1         40.21429         6.25262           Mar-21         2,046         392,935.9         928         31         192.1         29.93548         6.19519           Apr-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,045         70,908.6         1         31         34.7         0.03226	Jul-20			3				1.21744
Oct-20         2,043         102,306.5         187         31         50.1         6.03226         1.61537           Nov-20         2,049         212,745.7         669         30         103.8         22,30000         3.46097           Dec-20         2,049         276,256.1         708         31         134.8         22.83871         4.34919           Jan-21         2,047         334,219.8         955         31         163.3         30.80645         5.26687           Feb-21         2,047         356,375.1         1,126         28         175.1         40.21429         6.25262           Mar-21         2,046         392,935.9         928         31         192.1         29.93548         6.19519           Apr-21         2,045         242,647.8         600         30         118.7         20.00000         3.95514           May-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,044         50,289.7         9         30         33.9         0.30000 <th< td=""><td>Aug-20</td><td>2,039</td><td></td><td></td><td></td><td></td><td>0.00000</td><td></td></th<>	Aug-20	2,039					0.00000	
Nov-20	Sep-20	2,045	76,856.9	56	30	37.6		1.25276
Dec-20         2,049         276,256.1         708         31         134.8         22.83871         4.34919           Jan-21         2,047         334,219.8         955         31         163.3         30.80645         5.26687           Feb-21         2,047         358,375.1         1,126         28         175.1         40.21429         6.25262           Mar-21         2,046         392,935.9         928         31         192.1         29.93548         6.19519           Apr-21         2,045         242,647.8         600         30         118.7         20.00000         3.95514           May-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,045         70,908.6         1         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12	Oct-20			187				1.61537
Jan-21         2,047         334,219.8         955         31         163.3         30.80645         5.26687           Feb-21         2,047         358,375.1         1,126         28         175.1         40.21429         6.25262           Mar-21         2,046         392,935.9         928         31         192.1         29.93548         6.19519           Apr-21         2,045         242,647.8         600         30         118.7         20.00000         3.95514           May-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,049         125,827.4         115         30         61.4         3.83333         2.04697           Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,039         70,871.8         0         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12997           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194	Nov-20	2,049	212,745.7	669		103.8	22.30000	3.46097
Feb-21         2,047         358,375.1         1,126         28         175.1         40.21429         6.25262           Mar-21         2,046         392,935.9         928         31         192.1         29.93548         6.19519           Apr-21         2,045         242,647.8         600         30         118.7         20.00000         3.95514           May-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,049         125,827.4         115         30         61.4         3.83333         2.04697           Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,039         70,871.8         0         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12997           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194	Dec-20	2,049	276,256.1	708	31	134.8	22.83871	4.34919
Mar-21         2,046         392,935.9         928         31         192.1         29,93548         6.19519           Apr-21         2,045         242,647.8         600         30         118.7         20.00000         3.95514           May-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,049         125,827.4         115         30         61.4         3.83333         2.04697           Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,045         70,908.6         1         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.1293           Nov-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837	Jan-21	2,047	334,219.8	955	31	163.3	30.80645	5.26687
Apr-21         2,045         242,647.8         600         30         118.7         20.00000         3.95514           May-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,049         125,827.4         115         30         61.4         3.83333         2.04697           Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,039         70,871.8         0         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12193           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463 <td>Feb-21</td> <td>2,047</td> <td></td> <td>1,126</td> <td>28</td> <td>175.1</td> <td>40.21429</td> <td>6.25262</td>	Feb-21	2,047		1,126	28	175.1	40.21429	6.25262
May-21         2,045         189,842.9         419         31         92.8         13.51613         2.9946           Jun-21         2,049         125,827.4         115         30         61.4         3.83333         2.04697           Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,039         70,871.8         0         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12997           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863 <td>Mar-21</td> <td>2,046</td> <td>392,935.9</td> <td>928</td> <td>31</td> <td>192.1</td> <td>29.93548</td> <td>6.19519</td>	Mar-21	2,046	392,935.9	928	31	192.1	29.93548	6.19519
Jun-21         2,049         125,827.4         115         30         61.4         3.83333         2.04697           Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,039         70,871.8         0         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12997           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554 </td <td>Apr-21</td> <td>2,045</td> <td>242,647.8</td> <td>600</td> <td>30</td> <td>118.7</td> <td>20.00000</td> <td>3.95514</td>	Apr-21	2,045	242,647.8	600	30	118.7	20.00000	3.95514
Jul-21         2,045         70,908.6         1         31         34.7         0.03226         1.11852           Aug-21         2,039         70,871.8         0         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12997           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554	May-21	2,045	189,842.9	419	31	92.8	13.51613	2.9946
Aug-21         2,039         70,871.8         0         31         34.8         0.00000         1.12123           Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12997           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.	Jun-21	2,049	125,827.4	115	30	61.4	3.83333	2.04697
Sep-21         2,044         69,289.7         9         30         33.9         0.30000         1.12997           Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.	Jul-21	2,045	70,908.6	1	31	34.7	0.03226	1.11852
Oct-21         2,047         81,347.9         118         31         39.7         3.80645         1.28194           Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903 <td< td=""><td>Aug-21</td><td>2,039</td><td>70,871.8</td><td>0</td><td>31</td><td>34.8</td><td>0.00000</td><td>1.12123</td></td<>	Aug-21	2,039	70,871.8	0	31	34.8	0.00000	1.12123
Nov-21         2,050         172,282.1         485         30         84         16.16667         2.80133           Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1	Sep-21	2,044	69,289.7	9	30	33.9	0.30000	1.12997
Dec-21         2,060         262,998.9         717         31         127.7         23.12903         4.11837           Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1.0856           Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.1	Oct-21	2,047	81,347.9	118	31	39.7	3.80645	1.28194
Jan-22         2,070         432,803.1         1,204         31         209.1         38.83871         6.74463           Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1.0856           Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.3992	Nov-21	2,050	172,282.1	485	30	84	16.16667	2.80133
Feb-22         2,064         334,536.4         847         28         162.1         30.25000         5.78863           Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1.0856           Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076 </td <td>Dec-21</td> <td>2,060</td> <td>262,998.9</td> <td>717</td> <td>31</td> <td>127.7</td> <td>23.12903</td> <td>4.11837</td>	Dec-21	2,060	262,998.9	717	31	127.7	23.12903	4.11837
Mar-22         2,067         396,939.8         1,024         31         192         33.03226         6.19473           Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1.0856           Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076	Jan-22	2,070	432,803.1	1,204	31	209.1	38.83871	6.74463
Apr-22         2,066         257,551.6         598         30         124.7         19.93333         4.1554           May-22         2,063         215,785.7         384         31         104.6         12.38710         3.37413           Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1.0856           Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076	Feb-22	2,064	334,536.4	847	28	162.1	30.25000	5.78863
May-22       2,063       215,785.7       384       31       104.6       12.38710       3.37413         Jun-22       2,068       122,458.7       125       30       59.2       4.16667       1.97387         Jul-22       2,068       70,866.2       4       31       34.3       0.12903       1.10542         Aug-22       2,068       69,595.6       0       31       33.7       0.00000       1.0856         Sep-22       2,070       69,275.6       16       30       33.5       0.53333       1.11555         Oct-22       2,072       89,874.4       132       31       43.4       4.25806       1.39922         Nov-22       2,087       173,477.2       549       30       83.1       18.30000       2.77076	Mar-22	2,067	396,939.8	1,024	31	192	33.03226	6.19473
Jun-22         2,068         122,458.7         125         30         59.2         4.16667         1.97387           Jul-22         2,068         70,866.2         4         31         34.3         0.12903         1.10542           Aug-22         2,068         69,595.6         0         31         33.7         0.00000         1.0856           Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076	Apr-22	2,066	257,551.6	598	30	124.7	19.93333	4.1554
Jul-22     2,068     70,866.2     4     31     34.3     0.12903     1.10542       Aug-22     2,068     69,595.6     0     31     33.7     0.00000     1.0856       Sep-22     2,070     69,275.6     16     30     33.5     0.53333     1.11555       Oct-22     2,072     89,874.4     132     31     43.4     4.25806     1.39922       Nov-22     2,087     173,477.2     549     30     83.1     18.30000     2.77076	May-22	2,063	215,785.7	384	31	104.6	12.38710	3.37413
Aug-22     2,068     69,595.6     0     31     33.7     0.00000     1.0856       Sep-22     2,070     69,275.6     16     30     33.5     0.53333     1.11555       Oct-22     2,072     89,874.4     132     31     43.4     4.25806     1.39922       Nov-22     2,087     173,477.2     549     30     83.1     18.30000     2.77076	Jun-22	2,068	122,458.7	125	30	59.2	4.16667	1.97387
Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076	Jul-22	2,068	70,866.2	4	31	34.3	0.12903	1.10542
Sep-22         2,070         69,275.6         16         30         33.5         0.53333         1.11555           Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076	Aug-22	2,068		0	31	33.7		1.0856
Oct-22         2,072         89,874.4         132         31         43.4         4.25806         1.39922           Nov-22         2,087         173,477.2         549         30         83.1         18.30000         2.77076		2,070	69,275.6	16	30	33.5	0.53333	1.11555
Nov-22 2,087 173,477.2 549 30 83.1 18.30000 2.77076	Oct-22	2,072	89,874.4	132	31	43.4		1.39922
Dec-22 2,097 380,814.6 1,067 31 181.6 34.41935 5.85806	Nov-22	2,087		549	30	83.1		2.77076
	Dec-22	2,097	380,814.6	1,067	31	181.6	34.41935	5.85806

Slope	Intercept	R2
0.14677	1.05233	0.95505

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

## MONTANA-DAKOTA UTILITIES CO. GAS UTILITY - SOUTH DAKOTA EMBEDDED COST OF SERVICE STUDY PRO FORMA 2023

**CUSTOMERS - FACTORS NO. 8, 9, 10, 11 & 12** 

			Small	Large				
			Firm	Firm	Sma	all IT	Larg	e IT
	Total	Residential	General	General	Sales	Transport	Sales	Transport
Total Customers 1/	64,894	57,300	5,458	2,098	6	20	2	10
Less: Transmission Customers 2/	5		0	0	0	1	1	3
Average Customers at Distribution	64,889	57,300	5,458	2,098	6	19	1	7
Multiplied by: Weighting Factor 3/		1.0	1.14	5.18	27.34	27.34	46.80	46.80
Weighted Customers at Distribution	75,448	57,300	6,222	10,868	164	519	47	328
Weighted Transmission Customers	214	0	0	0	0	27	47	140
Total Weighted Customers	75,662	57,300	6,222	10,868	164	546	94	468
Total Weighted Customers less Large IT Trans.	75,448	57,300	6222	10,868	164.00	519	47	328
Services:								
Multiplied by: Weighting Factor		1.00	1.31	1.68	3.25	3.25	2.75	2.75
	68,094	57,300	7,150	3,525	20	65	6	28
Total Customers 1/	64,894	57,300	5,458	2,098	6	20	2	10
Less: Transmission Customers	5	0	0	0	0	1_	1_	3
Average Customers at Distribution	64,889	57,300	5,458	2,098	6	19	1	7
Multiplied by: Service Weighting Factor		1.00	1.31	1.68	3.25	3.25	2.75	2.75
Distribution Service Weighted Customers	68,079	57,300	7,150	3,525	20	62	3	19

<sup>1/</sup> Pro Forma Customer

<sup>2/</sup> Transmission level customers Small Interruptible = Customer 81-11 Large Interruptible = 82-2, 82-3 and 82-6; 85-1.

<sup>3/</sup> Based on average installed meter costs as of 2022.

#### **South Dakota Service Weights**

South Dakota Service	Updated:	6/1/2023			
RATE AND DESCRIPTION	Modeled Service Value	Modelled Service Average	Count of Customers	Cost per Service per Customer	Weights
RATE 600 - Residential Gas Service	\$58,091,175	\$1,189	48,856	\$1,189	1.00
RATE 601 Residential Gas Service	\$0	\$0	0	\$0	1.00
RATE 602 Residential Gas Service	\$0	\$0	0	\$0	1.00
RATE 660 Residential Gas Service - East River	\$4,316,641	\$1,146	3,767	\$1,146	1.00
RATE 661 Residential Gas Service - East River	\$0	\$0	0	\$0	1.00
RATE 662 Residential Gas Service - East River	\$0	\$0	0	\$0	1.00
RATE 663 Residential Gas Service - East River	\$0	\$0	0	\$0	1.00
RATE 600: 600, 601, 602, 660 ,661, 662, 663(Residential)	\$62,410,151	Weighted Average	52,623	\$1,186	1.00
RATE 700 - Small Firm General Gas Service	\$5,571,390	\$1,570	3,549	\$1,570	1.32
RATE 760 - Small Firm General Service - East River	\$858,346	\$1,490	576	\$1,490	1.26
RATE 762 - Firm Industrial Gas Service - East River	\$0	\$0	0	\$0	0.00
Rates 700,760,762	\$6,429,736	Weighted Average	4,125	\$1,559	1.31
RATE 701 - Large Firm General Gas Service	\$3,500,437	\$1,990	1.759	\$1,990	1.68
RATE 703 - Large Firm General Gas Service	\$0	\$0	0	\$0	0.00
RATE 761 - Large Firm General Service - East River	\$369,047	\$2,073	178	\$2,073	1.75
Rates 701, 703, 761	\$3,869,484	Weighted Average	1,937	\$1,998	1.68
RATE 710 - Small Interuptable General Gas Service	\$36,389	\$3,639	10	\$3,639	3.07
'					
RATE 810 - Small Interuptable General Transportation Service	\$52,382	\$4,029	13	\$4,029	3.40
Rates 710 & 810	\$88,772	Weighted Average	23	\$3,860	3.25
RATE 820 - Large Interuptable General Transportation Service	\$4,633	\$4,633	1	\$4,633	3.91
RATE 850 - Large Interuptable General Gas Service	\$1,895	\$1,895	1	\$1,895	1.60
Rates 820 &850	\$6,528	Weighted Average	2	\$3,264	2.75

#### Notes:

<sup>1)</sup> 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.

#### SOUTH DAKOTA MONTANA-DAKOTA UTILITIES CO. AVERAGE INSTALLED METER COSTS 2022

	SD Number of Meters	Average Meter Cost	Total	Average Weighted Cost	Class Weighting
Residential - Rate 60					
Group 1 meters - 250 size	51,394	\$498.77	\$25,633,785		
Group 1 meters - 425 size	1,511	\$840.17	\$1,269,497		
Group 2 meters - 630 size	312	\$1,063.58	\$331,837		
Group 2 Meters - Size 750/AL800	8	\$1,722.32	\$13,779		
Group 2 Meters - Size AC800	18	\$1,484.64	\$26,724		
Group 2 Meters - Size >1000	3	\$2,181.98	\$6,546		
Group 2 Meters - Size Sm Rot TC 8C/15C	1	\$4,858.89	\$4,859		
Residential - Rate 66					
Group 1 Meters - Size 250	3,779	\$498.77	\$1,884,852		
Group 1 Meters - Size 425	42	\$840.17	\$35,287		
Group 2 Meters - Size 630	16	\$1,063.58	\$17,017		
Group 3 Meters - Sm Rot TC 2M/3M	1	\$5,979.61 <u> </u>	\$5,980		
Total Residential	57,085	=	\$29,230,162	\$512	1.00
Small Firm General - Rate 70					
Group 1 Meters - Size 250	3,551	\$498.77	\$1,771,132		
Group 1 Meters - Size 425	1,259	\$840.17	\$1,057,774		
Small General - Rate 76					
Group 1 Meters - Size 250	514	\$498.77	\$256,368		
Group 1 Meters - Size 425	120	\$840.17	\$100,820		
Small General - Optional Seasonal - Rate 72					
Group 1 Meters - Size 425	1	\$840.17	\$840		
Total Small General	5,445	_	\$3,186,935	\$585	1.14
Large Firm General - Rate 70					
Group 2 Meters - Size >1000	415	\$2,181.98	\$905,522		
Group 2 Meters - Size >1000 Cor	2	\$5,627.87	\$11,256		
Group 2 Meters - Size 630	719	\$1,063.58	\$764,714		
Group 2 Meters - Size 750/AL800	328	\$1,722.32	\$564,921		
Group 2 Meters - Size AC800	57	\$1,484.64	\$84,624		
Group 2 Meters - Sm Rot TC 8C/15C	3	\$4,858.89	\$14,577		
Group 3 Meters - Lg Rot Cor > 3M	10	\$11,465.01	\$114,650		
Group 3 Meters - Lg Rot TC > 3M	181	\$7,422.73	\$1,343,514		
Group 3 Meters - Lrg diaph	1	\$1,948.08	\$1,948		
Group 3 Meters - Sm Rot Cor 2M/3M	3	\$9,447.87	\$28,344		
Group 3 Meters - Sm Rot TC 2M/3M	178	\$5,979.61	\$1,064,371		
Group 4 Meters - Turbine Meters	1	\$49,958.62	\$49,959		

#### SOUTH DAKOTA MONTANA-DAKOTA UTILITIES CO. AVERAGE INSTALLED METER COSTS 2022

	SD Number of Meters	Average Meter Cost	Total	Average Weighted Cost	Class Weighting
Large Firm General - Rate 76		-			
Group 2 Meters - Size >1000	37	\$2,181.98	\$80,733		
Group 2 Meters - Size 630	65	\$1,063.58	\$69,133		
Group 2 Meters - Size 750/AL800	24	\$1,722.32	\$41,336		
Group 2 Meters - Size AC800	15	\$1,484.64	\$22,270		
Group 2 Meters - Sm Rot TC 8C/15C	3	\$4,858.89	\$14,577		
Group 3 Meters - Lg Rot Cor > 3M	3	\$11,465.01	\$34,395		
Group 3 Meters - Lg Rot TC > 3M	36	\$7,422.73	\$267,218		
Group 3 Meters - Sm Rot TC 2M/3M	11	\$5,979.61	\$65,776		
Total Large Firm General	2,092	=	\$5,543,836	\$2,650	5.18
Small Interruptible Gas Sales - Rate 71					
Group 3 Meters - Lg Rot Cor > 3M	13	\$11,465.01	\$149,045		
Group 3 Meters - Lg Rot TC > 3M	9	\$7,422.73	\$66,805		
Group 4 Meters - Turbine Meters	4	\$49,958.62	\$199,834		
Small Interruptible Transportation Sales - R					
Group 3 Meters - Lg Rot Cor > 3M	12	\$11,465.01	\$137,580		
Group 3 Meters - Lg Rot TC > 3M	7	\$7,422.73	\$51,959		
Group 3 Meters - Sm Rot TC 2M/3M	1	\$5,979.61	\$5,980		
Group 4 Meters - Lg Rot Cor > 3M	1	\$10,821.35	\$10,821		
Group 4 Meters - Turbine Meters	1	\$49,958.62	\$49,959		
Total Small Interruptible Transport	48	_	\$671,983	\$14,000	27.34
Large Interruptable Gas - Rate 85					
Group 3 Meters - Lg Rot Cor > 3M	1	\$11,465.01	\$11,465		
Group 4 Meters - Turbine Meters	1	\$49,958.62	\$49,959		
Group 1 meters - Rate 64	1	\$0	\$0		
Group 2 meters - Rate 64	1	\$7,423	\$7,423		
Large Interruptible Transportion - Rate 82					
Group 3 Meters - Lg Rot Cor > 3M	5	\$11,465.01	\$57,325		
Group 3 Meters - Sm Rot Cor 2M/3M	1	\$9,447.87	\$9,448		
Group 4 Meters - Turbine Meters	4	\$49,958.62 <u> </u>	\$199,834		
Total Large Interruptible Sales	14	=	\$335,454	\$23,961	46.80
TOTAL METERS	64,684				

# MONTANA-DAKOTA UTILTIES CO. GAS UTILITY - SOUTH DAKOTA CLASS COST OF SERVICE STUDY FOR THE TWELVE MONTHS ENDING DECEMBER 31, 2022 PLANT ALLOCATION

		Total	Allocation
374.1	Land	87,780	Factor No. 45 - Dist. Mains & Meas. & Reg Equip.
374.2	Rights of Way	129,244	Factor No. 45 - Dist. Mains & Meas. & Reg Equip.
375	Structures & Improvements	375,234	Factor No. 45 - Dist. Mains & Meas. & Reg Equip.
376	Mains	56,724,156	
	72.2% Demand Related 27.8% Customer Related	40,982,617 15,741,539	Factor No. 5 - 1-Day Peak @ Distribution Factor 9 - Average Customers @ Distribution
378	Meas. & Reg. Equip General	1,430,912 28,227	Factor No. 2 - Peak Day Design Direct to Small Firm General
379	Meas. & Reg. Equip City Gate	1,810,870	Factor 2 - Peak Day Design
380	Services	29,365,191	Factor 37 - Weighted Services @ Distribution
381	Meters	20,134,131	Factor No. 10 - Total Weighted Customers
383	Service Regulators	2,948,353 2,925,624 4,951 4,736 3,917 9,125	Total Factor No. 10 - Total Weighted Customers Direct to Small Firm General Direct to Small Interruptible Direct to Small IT Transportation Direct to Large IT Transportation
385	Ind. Meas. & Reg. Station Equipment	110,213	Factor 44 - Peak Day Excl. Res. & Sm. Comm.
387	Cathotic Protection & Other Equipment	103,576	Factor No. 13 - Distribution Mains
Distrib	oution Plant	113,247,887	

# MONTANA-DAKOTA UTILITIES CO. EMBEDDED COST OF SERVICE STUDY ALLOCATION OF PER BOOKS REVENUES GAS UTILITY - SOUTH DAKOTA TWELVE MONTHS ENDING DECEMBER 31, 2022

			Firm	Firm	Small Inte	erruptible	Large Inte	erruptible
	Total	Residential	General-Small	General-Large	Sales	Transport	Sales	Transport
Billing Units	64,508	56,822	5,428	2,081	25	20	2	120
Dk	9,394,571	4,083,241	798,902	2,626,597	53,246	339,464	403,005	1,090,116
Total Revenue	\$74,568,331	\$41,524,906	\$7,193,391	\$22,804,878	\$411,532	\$155,791	\$2,236,621	\$241,212
Commodity 1/	47,366,383	25,027,865	3,985,403	15,695,582	339,578	112,303	1,997,440	208,212
Customer 2/	8,683,586	6,188,463	1,084,933	1,272,286	54,816	43,488	6,600	33,000
Demand 3/	18,518,362	10,308,578	2,123,055	5,837,010	17,138	0	232,581	0

<sup>1/</sup> Residual after deducting customer and demand revenues.

<sup>2/</sup> Per 'SD Revenue Analysis 2022' file.

<sup>3/</sup> Average cost of gas demand component by class.

# MONTANA-DAKOTA UTILITIES CO. EMBEDDED COST OF SERVICE STUDY ALLOCATION OF 2023 REVENUES GAS UTILITY - SOUTH DAKOTA TWELVE MONTHS ENDING DECEMBER 31, 2022

			Firm	Firm	Small Inte	rruptible	Large Inter	ruptible
_	Total	Residential	General-Small	General-Large	Sales	Transport	Sales	Transport
Billing Units	64,894	57,300	5,458	2,098	6	20	2	10
Dk	8,871,554	3,803,810	710,559	2,498,683	27,935	332,427	381,433	1,116,707
Total Revenue	\$66,455,112	\$37,648,175	\$6,312,618	\$20,174,038	\$146,115	\$152,951	\$1,774,924	\$246,291
Commodity 1/	42,471,256	22,894,905	3,470,688	14,086,539	119,059	109,751	1,577,023	213,291
Adjustment	(4,895,127)	(2,132,960)	(514,715)	(1,609,043)	(220,519)	(2,552)	(420,417)	5,079
Customer 2/	8,752,298	6,274,350	1,095,694	1,286,494	12,960	43,200	6,600	33,000
Adjustment	68,712	85,887	10,761	14,208	(41,856)	(288)	0	0
Demand 3/	15,231,558	8,478,920	1,746,236	4,801,005	14,096	0	191,301	0
Adjustment	(3,286,804)	(1,829,658)	(376,819)	(1,036,005)	(3,042)	0	(41,280)	0
Total Pro Forma Ac	(8,113,219)	(3,876,731)	(880,773)	(2,630,840)	(265,417)	(2,840)	(461,697)	5,079

<sup>1/</sup> Residual after deducting customer and demand revenues.

<sup>2/</sup> Per 'SD Revenue Analysis 2022' file.

<sup>3/</sup> Average cost of gas demand component by class.

#### 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, 2022

Residential         Energy         \$19,667,849         \$3.725         \$15,911,110           Demand         10,308,578         2.687         8,478,920           Total Residential         \$29,976,427         \$6.412         \$24,390,030           Firm General Small         Energy         \$3,848,091         \$3.725         2,809,868           Demand         2,123,055         2.687         1,746,236           Total Small Firm General         \$5,971,146         \$6.412         \$4,556,104           Firm General Large           Energy         \$12,651,595         \$3.725         11,220,551           Demand         5,837,010         2.687         4,801,005           Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible         Energy         \$256,471         \$3.725         110,075           Demand         17,138         0.720         14,096           Total Small Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible         \$2,173,745         \$4.445         \$1,504,169           Demand         232,581         0.720         191,301           Total Large Interrruptible         \$2,173,745         \$4.445 </th <th></th> <th>Per Books 1/</th> <th>Pro Forma Per Unit Cost</th> <th>Pro Forma 2023 4/</th>		Per Books 1/	Pro Forma Per Unit Cost	Pro Forma 2023 4/
Energy Demand         \$19,667,849 10,308,578         \$3.725 2,687         \$15,911,110 2,687           Total Residential         \$29,976,427         \$6.412         \$24,390,030           Firm General Small Energy Demand         \$3,848,091 2,123,055 2,687 1,746,236         \$3.725 2,809,868 1,746,236           Total Small Firm General         \$5,971,146         \$6.412         \$4,556,104           Firm General Large Energy S12,651,595 Demand 5,837,010 2.687 4,801,005         \$3.725 11,220,551 2,687 4,801,005           Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible Energy S256,471 Demand 17,138 0,720 14,096         \$3.725 110,075 14,096         \$14,096           Total Small Interruptible Energy \$1,941,164 \$273,609         \$4.445 \$124,171         \$1,504,169 2,173,745           Large Interruptible Energy S1,941,164 S2,581 0,720 191,301         \$3.725 1,504,169 2,173,745         \$4,445 \$1,695,470	Residential			
Demand         10,308,578         2.687         8,478,920           Total Residential         \$29,976,427         \$6.412         \$24,390,030           Firm General Small           Energy         \$3,848,091         \$3.725         2,809,868           Demand         2,123,055         2.687         1,746,236           Total Small Firm General         \$5,971,146         \$6.412         \$4,556,104           Firm General Large           Energy         \$12,651,595         \$3.725         11,220,551           Demand         5,837,010         2.687         4,801,005           Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible           Energy         \$256,471         \$3.725         110,075           Demand         17,138         0.720         14,096           Total Small Interruptible           Energy         \$1,941,164         \$3.725         1,504,169           Demand         232,581         0.720         191,301           Total Large Interruptible         \$2,173,745         \$4.445         \$1,695,470		\$19.667.849	\$3.725	\$15.911.110
Firm General Small  Energy \$3,848,091 \$3.725 2,809,868 Demand 2,123,055 2.687 1,746,236  Total Small Firm General \$5,971,146 \$6.412 \$4,556,104  Firm General Large Energy \$12,651,595 \$3.725 11,220,551 Demand 5,837,010 2.687 4,801,005  Total Large Firm General \$18,488,605 \$6.412 \$16,021,556  Small Interruptible Energy \$256,471 \$3.725 110,075 Demand 17,138 0.720 14,096  Total Small Interruptible Energy \$1,941,164 \$3.725 \$124,171  Large Interruptible Energy \$1,941,164 \$3.725 1,504,169 Demand 232,581 0.720 191,301  Total Large Interrruptible \$2,173,745 \$4.445 \$1,695,470	Demand	10,308,578	2.687	8,478,920
Energy       \$3,848,091       \$3.725       2,809,868         Demand       2,123,055       2.687       1,746,236         Total Small Firm General       \$5,971,146       \$6.412       \$4,556,104         Firm General Large         Energy       \$12,651,595       \$3.725       11,220,551         Demand       5,837,010       2.687       4,801,005         Total Large Firm General       \$18,488,605       \$6.412       \$16,021,556         Small Interruptible         Energy       \$256,471       \$3.725       110,075         Demand       17,138       0.720       14,096         Total Small Interruptible       \$273,609       \$4.445       \$124,171         Large Interruptible       Energy       \$1,941,164       \$3.725       1,504,169         Demand       232,581       0.720       191,301         Total Large Interruptible       \$2,173,745       \$4.445       \$1,695,470	Total Residential	\$29,976,427	\$6.412	\$24,390,030
Demand         2,123,055         2.687         1,746,236           Total Small Firm General         \$5,971,146         \$6.412         \$4,556,104           Firm General Large         Energy         \$12,651,595         \$3.725         \$1,220,551           Demand         5,837,010         2.687         4,801,005           Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible         Energy         \$256,471         \$3.725         \$110,075           Demand         17,138         0.720         \$14,096           Total Small Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible         Energy         \$1,941,164         \$3.725         \$1,504,169           Demand         232,581         0.720         191,301           Total Large Interruptible         \$2,173,745         \$4.445         \$1,695,470	Firm General Small			
Total Small Firm General         \$5,971,146         \$6.412         \$4,556,104           Firm General Large         Energy         \$12,651,595         \$3.725         11,220,551           Demand         5,837,010         2.687         4,801,005           Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible         Energy         \$256,471         \$3.725         110,075           Demand         17,138         0.720         14,096           Total Small Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible         Energy         \$1,941,164         \$3.725         1,504,169           Demand         232,581         0.720         191,301           Total Large Interrruptible         \$2,173,745         \$4.445         \$1,695,470	Energy	\$3,848,091	\$3.725	2,809,868
Firm General Large Energy \$12,651,595 Demand 5,837,010 Total Large Firm General \$18,488,605  Small Interruptible Energy \$256,471 Demand 17,138 Total Small Interruptible Energy \$273,609  Large Interruptible Energy \$1,941,164 Demand 232,581 Total Large Interruptible Energy \$1,941,745  Large Interruptible Energy \$1,941,164 Demand 232,581 Total Large Interruptible Energy \$2,173,745  \$3.725 \$1,504,169 \$1,504,169 \$1,941,164 \$2,173,745  \$4.445 \$1,695,470	Demand	2,123,055	2.687	1,746,236
Energy Demand         \$12,651,595 Demand         \$3.725 Demand         \$11,220,551 Demand           Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible Energy         \$256,471 Sa.725 Demand         \$3.725 110,075 Demand         \$17,138 0.720 14,096           Total Small Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible Energy         \$1,941,164 Sa.725 1,504,169 Demand         \$232,581 0.720 191,301           Total Large Interrruptible         \$2,173,745         \$4.445         \$1,695,470	Total Small Firm General	\$5,971,146	\$6.412	\$4,556,104
Demand         5,837,010         2.687         4,801,005           Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible         Energy         \$256,471         \$3.725         \$10,075           Demand         17,138         0.720         \$14,096           Total Small Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible         Energy         \$1,941,164         \$3.725         1,504,169           Demand         232,581         0.720         191,301           Total Large Interrruptible         \$2,173,745         \$4.445         \$1,695,470	Firm General Large			
Total Large Firm General         \$18,488,605         \$6.412         \$16,021,556           Small Interruptible             Energy             Demand             17,138             720             14,096         110,075             14,096           Total Small Interruptible             Energy             1941,164             232,581             0.720             191,301         1,504,169             191,301           Total Large Interruptible          \$2,173,745         \$4.445         \$1,695,470	Energy	\$12,651,595	\$3.725	11,220,551
Small Interruptible         Energy Demand 17,138       \$3.725       \$110,075         Demand Total Small Interruptible       \$273,609       \$4.445       \$124,171         Large Interruptible         Energy St,941,164 Demand 232,581       \$3.725       \$1,504,169         Demand 232,581       \$0.720       \$191,301         Total Large Interruptible       \$2,173,745       \$4.445       \$1,695,470	Demand	5,837,010	2.687	4,801,005
Energy Demand Demand         \$256,471 17,138 0.720 14,096           Total Small Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible Energy Demand         \$1,941,164 232,581 0.720 191,301         \$3.725 1,504,169 0.720 191,301           Total Large Interrruptible         \$2,173,745         \$4.445         \$1,695,470	Total Large Firm General	\$18,488,605	\$6.412	\$16,021,556
Demand Total Small Interruptible         17,138 \$ 273,609         0.720 \$ 14,096           Large Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible         \$3.725 \$ 1,504,169           Demand         232,581 \$ 0.720 \$ 191,301           Total Large Interrruptible         \$2,173,745         \$4.445 \$ 1,695,470	Small Interruptible			
Total Small Interruptible         \$273,609         \$4.445         \$124,171           Large Interruptible         Energy         \$1,941,164         \$3.725         1,504,169           Demand         232,581         0.720         191,301           Total Large Interrruptible         \$2,173,745         \$4.445         \$1,695,470	Energy	\$256,471	\$3.725	110,075
Large Interruptible       \$1,941,164       \$3.725       1,504,169         Demand       232,581       0.720       191,301         Total Large Interrruptible       \$2,173,745       \$4.445       \$1,695,470	Demand	17,138	0.720	14,096
Energy Demand Total Large Interrruptible       \$1,941,164 \$3.725 \$1,504,169 \$1,004 \$1,604 \$1,604 \$1,604 \$1,605 \$1,605,470	Total Small Interruptible	\$273,609	\$4.445	\$124,171
Demand         232,581         0.720         191,301           Total Large Interrruptible         \$2,173,745         \$4.445         \$1,695,470	Large Interruptible			
Total Large Interrruptible \$2,173,745 \$4.445 \$1,695,470	Energy .	\$1,941,164	\$3.725	1,504,169
	Demand	232,581	0.720	191,301
Total Cost of Gas \$56,883,532 \$46,787,331	Total Large Interrruptible	\$2,173,745	\$4.445	\$1,695,470
	Total Cost of Gas	\$56,883,532		\$46,787,331

Customer Class		Dk Per Books 2022 Sales		sign - Firm - 100% LF
Residential	4,083,241	51.264854%	46,317	55.666795%
Firm General Small	798,902	10.030168%	9,539	11.464593%
Firm General Large	2,626,597	32.976773%	26,226	31.520119%
Small Interruptible - Sales 5/	53,246	0.668500%	77	0.092544%
Small Interruptible - Transport	0	0.000000%	0	0.000000%
Large Interruptible - Sales	403,005	5.059705%	1,045	1.255949%
Large Interruptible - Transport	0	0.000000%	0	0.000000%
Total	7,964,991	100.000000%	83,204	100.000000%

	Г	Dk		sign - Firm
Customer Class	· -	na Sales	Interruptible	U
Residential	3,803,810	51.247572%	46,317	55.666795%
Firm General Small	710,559	9.573145%	9,539	11.464593%
Firm General Large	2,498,683	33.663994%	26,226	31.520119%
Small Interruptible - Sales	27,935	0.376360%	77	0.092544%
Small Interruptible - Transport	0	0.000000%	0	0.000000%
Large Interruptible - Sales	381,433	5.138931%	1,045	1.255949%
Large Interruptible - Transport	0	0.000000%	0	0.000000%
Total	7,422,420	100.000002%	83,204	100.000000%

1/ Allocation of Per Books Cost of Gas based on Normalized 2023 volumes and March 2023 Gas Cost

Total Cost of Gas	Energy 2/	Demand 3/	Reallocated Demand Costs
\$56,883,532	\$38,365,169	\$18,518,363	15,231,557

<sup>2/</sup> Allocated on Pro Forma Dk Sales.

<sup>3/</sup> Allocated on Factor 2 excluding transportation. Demand costs from March 2023 Purchased Gas Adjustment Residential & General Service, reflecting weighted seasonal demand.

<sup>4/</sup> Statement H, Schedule H-1, Page 3 Pro Forma 2023 Cost of Gas

<sup>5/</sup> Design Day Peak

#### MONTANA-DAKOTA UTILITIES CO. **GAS UTILITY - SOUTH DAKOTA CLASS COST OF SERVICE STUDY** 12 MONTHS ENDING DECEMBER 31, 2022

#### **CUSTOMER ADVANCES FOR CUSTRUCTION WORKPAPER**

	Per Books			Pro Forma Adjustment-DIT			Pro Forma Adjustment		
	Demand	Customer	Total	Demand	Customer	Total	Demand	Customer	Total
Residential	(\$759,861)	(\$1,782,331)	(\$2,542,192)	\$22,490	\$52,751	\$75,241	(\$22,490)	(\$52,751)	(\$75,241)
Small Firm General	(39,143)	(49,858)	(89,001)	1,158	1,476	2,634	(1,158)	(1,476)	(2,634)
Large Firm General	(2,224)	(870)	(3,094)	68	26	94	(68)	(26)	(94)
Small Interruptible	(162,987)	(92,118)	(255,105)	4,825	2,727	7,552	(4,825)	(2,727)	(7,552)
	(964,215)	(1,925,177)	(2,889,392)	28,541	56,980	85,521	(28,541)	(56,980)	(85,521)
						85,521	Adj		(85,521) Adj
						Distribution F	Plant 1/		
			Allocated					% of Total	
	2022 Balance	% of Total	Total Balance	Demand	Customer	Total	Demand	Customer	Total
Residential	(2,542,192)	87.98%	(2,542,192)	\$23,959,599	\$56,211,576	\$80,171,175	29.89%	70.11%	100.0000%
Small Firm General	(89,001)	3.08%	(89,001)	4,962,991	6,321,787	11,284,778	43.98%	56.02%	100.0000%
Large Firm General	(3,094)	0.11%	(3,094)	13,658,896	5,346,396	19,005,292	71.87%	28.13%	100.0000%
Small Interruptible	(255,105)	8.83%	(255,105)	473,888	267,823	741,711	63.89%	36.11%	100.0000%
	(2,889,392)	100.00%	(2,889,392)	\$43,055,374	68,147,582	111,202,956			
1/ Based on Allocation Factor 15.									
	Total								
Distribution Plant	113,247,887								
	Demand	Customer	Total						
Residential	\$23,959,599	\$56,211,576	\$80,171,175						
Small Firm General	4,962,991	6,321,787	11,284,778						
Large Firm General	13,658,896	5,346,396	19,005,292						
Small Interruptible	473,888	267,823	741,711						
Large Interruptible	1,847,901	197,030	2,044,931						
	44,903,275	68,344,612	113,247,887						

Work Order	WO Description	2022	Class
257976	Instl Main 311 N Waldon St Pierre		Firm General < 500 cubic feet
284643	Inst Main 19550 Glenco Rd Sturgis	, ,	Firm General < 500 cubic feet
288712	Inst Main 2211 Dakota Av Belle Fche	, ,	Firm General < 500 cubic feet
290501	Inst Main Fargo Ln Rapid City	, ,	Firm General < 500 cubic feet
292968	Instl Main Democracy Ln. Summerset	,	Firm General < 500 cubic feet
293402	Install 2in main Chisholm Box Elder	, ,	Firm General < 500 cubic feet
295181	Inst Main 6211 BlackHawk Rd Blk Hwk	, ,	Firm General < 500 cubic feet
295769	Inst Main Mt Rushmore Rd Rapid City	, ,	Firm General < 500 cubic feet
296211	Inst Main 2800 Raccoon Rd Sturgis	,	Firm General < 500 cubic feet
273293	InstI main Airport Pierre	, ,	Firm General < 500 cubic feet
284467	Inst Main 114 9th Ave E Ft Pierre	, ,	Firm General < 500 cubic feet
288116	Inst Main 13151 US HWY 12 Rosco	, ,	Firm General < 500 cubic feet
290110	Inst Main 13131 0311W1 12 Nosco	, ,	Firm General < 500 cubic feet
290648	Inst Main 31100 164th St Gettysburg	, ,	Firm General < 500 cubic feet
293503	Inst Main Potter Place Pierre	, ,	Firm General < 500 cubic feet
294656	Instl S/L 200 Chestnut Ipswich	, ,	Firm General < 500 cubic feet
296165	Instl S/L 916 deadwood ft pierre	, ,	Firm General < 500 cubic feet
296582	Instl Main Lookout Ridge Ft Pierre	, ,	Firm General < 500 cubic feet
200002	mai waiii Lookodi Nage i ti iciic	(89,001.40)	- I IIII General 1 300 cable leet
		(03,001.40)	
245679	Main Ext KEVN 2001 Skyline Dr RC	_	Firm General > 500 cubic feet
271249	Instl Main N Bryne Ave Mobridge	(575.00)	Firm General > 500 cubic feet
272323	Inst Main Belle Fourch 19026 Hwy 85		Firm General > 500 cubic feet
2.2020	met main Belie i earen 1862e i my ee	(3,094.13)	•
		(0,001.10)	
294790	main ext at 10th Ct Onida SD	(2,426.00)	Residential
209820	Extend 4" Main to Powder House Pass	(113,261.72)	Residential
219312	Powder House Pass - Dist Ph 1	(834.70)	Residential
228356	Istl main Vista Lakes Sub Rapid Cty	` <b>-</b>	Residential
236673	2" main Ext.Peridot Ln. Durr	-	Residential
243046	Ext Main Cove Court Ft Pierre SD	(6,875.00)	Residential
244148	Ext Main Mark Goebel Gettysburg SD	-	Residential
245499	Instl Main Justin Loesch Glenham	-	Residential
246119	Ext Main James Langer Gettysburg SD	(238.00)	Residential
249360	Ext Main Kyle Jensen Mobridge	(4,483.00)	Residential
257970	Inst Main Pobbenoldt Add Gettysburg	(2,377.00)	Residential
259898	Instl Main 205 W 1th St Mobridge	(328.00)	Residential
260942	Inst Main 19081 Three Pines Bel Fch	(2,809.00)	Residential
263109	Instl 2000' 2"PE GME-Mac Spearfish	, ,	Residential
267970	Extend 2" main at Elmwood	(817.22)	Residential
271285	perry stieger main ext Mobridge	-	Residential
271962	zach perman main extension Mobridge	-	Residential
272376	Inst Main Whitetail Dr Sturgis	(6,934.00)	Residential
273747	Instl Main 709 11th St Ipswich SD	,	Residential
275342	Ext Main 4190 Airport Rd Spearfish	,	Residential
275375	Inst Main 5807 Oak Ct Black Hawk SD	,	Residential
276129	Instl Main 3620 Hillsview Spearfish	,	Residential
276556	Instl Main 945 Penny Ln Rapid City	,	Residential
277742	Instl Main Charles St Spearfish	,	Residential
277752	Inst Main 5050 Heather Ln Rpd City	, ,	Residential
279139	Instl Main Greg Preszler Roscoe	, ,	Residential
279603	Instl Main 713 Comet Ct Rapid City	(930.92)	Residential

Work Order	WO Description	2022	Class
279618	Inst Main Cole Ln Airport Rd Sprfsh	(4,766.00)	Residential
280349	Instl Main 5799 Oak Ct Black Hawk	(1,081.00)	Residential
280772	Inst Main Shadowlnd Rnch Black Hawk	(3,505.00)	Residential
281019	Inst Main Crst Wht Dble Tree Piedmt	(2,699.00)	Residential
281400	Instl Main Anderson Rd Black Hawk	(2,847.00)	Residential
281700	Instl Main Horse Run Rd Piedmont	(518.00)	Residential
281792	Instl Main Rushmore St Rapid City	(2,199.52)	Residential
281860	Instl Main Riata Loop Piedmont	(14,578.00)	Residential
281938	Instl Main Turtle Ln Spearfish	(2,004.00)	Residential
282828	Inst Main Meadowbrook Dr Rapid City	(1,058.18)	Residential
283292	Instl Main 5780 Bennett Rd Rpd Cty	(5,619.00)	Residential
283895	Instl Main Little Elk Crk Piedmont	(2,747.00)	Residential
283990	Instl Main Larene Dr Black Hawk	(1,640.49)	Residential
284062	Instl Main River Pl Dvlpmnt Pierre	(4,925.00)	Residential
284213	Instl Main Powder House Pass Lead	,	Residential
284360	Inst Main Prairie Hills Rd Ble Fche	(2,186.25)	Residential
284383	Inst Main Bulldog Canyon Rd Sturgis	(2,636.25)	Residential
284435	Instl Main 3332 Hall St Rapid City	(432.00)	Residential
284666	Instl Main 29055 Range Rd Pierre	(3,503.00)	Residential
284752	Instl Main Creekside Pl Piedmont	(2,043.00)	Residential
284827	Inst Main 5130 Airport Rd Spearfish	(17,043.00)	Residential
286012	Inst Main 4907 Copper Hill Rpd City	(2,866.00)	Residential
286021	Instl Main 1420 Mac Ln. Spearfish	, ,	Residential
286214	Inst Main Cedar Berry Canyon Sprfsh	(22,808.00)	Residential
286644	Instl Main Waxwing Lane Rapid City	• • • • • • • • • • • • • • • • • • • •	Residential
286829	Instl Main Hidden Hills Est Sturgis	(16,764.64)	Residential
286916	Inst Main Stagebarn Canyon Piedmont	,	Residential
287012	Instl Main Foley Dr Summerset	,	Residential
287013	Instl Main Treasure Coach Piedmont	, ,	Residential
287147	Instl Main Davenport Lp Sturgis	,	Residential
287335	Instl Main Trailside Addition Lead	• • • • • • • • • • • • • • • • • • • •	Residential
287376	Inst Main Scotland Hills Rapid City		Residential
287384	Inst Main Rivrsde MHP Belle Fourche	,	Residential
287630	Instl Main 5330 Vista Dr Rapid City	,	Residential
287645	Install Main Lost Camp Lead		Residential
287702	Instl Main Bridal Ridge Rapid City	,	Residential
287712	Instl Main 3808 Chief Dr Rapid City	· · · /	Residential
287757	Instl Main 9th & 13th Mobridge	(4,502.97)	
287829	Instl Main Solomon/Aaron Ct Rpd Cty	(12,018.87)	Residential
287833	Instl Main Alcorn Court Spearfish	,	Residential
287845	Instl Main 3445 Skyline Hts Ct RC	(2,004.00)	
287880	Instl Main Sunshine Valley Piedmont	(3,842.64)	
287913	Instl main N Elk Vale Rd Rapid City	(2,710.12)	Residential
288050	Instl Main Raider Point Box Elder	(6,477.00)	Residential
288069	Instl Main Rockerville SD	(174,585.00)	Residential
288114	Instl Main Brookstone Lp Pierre	(5,515.00)	Residential
288371	Instl Main Frontier Loop Piedmont	(3,349.00)	Residential

Work Order	WO Description	2022		Class
288438	Instl Main Spring Crk Ln Belle Fche	(3,645.00)	Residential	
288923	Instl Main Discovery Ct. Piedmont	(15,303.00)	Residential	
288926	Instl Main 509 N 5th St Piedmont	(1,993.54)	Residential	
289046	Instl Main AR Estates II Piedmont	(31,929.00)	Residential	
289170	Install 2" Pl Main Lantern Ln Lead	(33,872.00)	Residential	
289174	Inst Main Hat Rnch Blk 7&8 Ble Fche	(12,078.00)	Residential	
289181	Instl Main Murphy Ranch Rapid City	(6,660.00)	Residential	
289196	Instl Main Frdm Est Ph 5 Box Elder	(12,237.00)	Residential	
289205	Instl Main Misty Meadows Rapid City	(5,982.00)	Residential	
289217	Inst Main Hillsview Est Rapid City	(11,843.00)	Residential	
289269	Inst 2" main Copperfield Rapid City	(3,738.00)	Residential	
289566	Install Main 20013 Ashlee Ct, Spear	(10,206.97)	Residential	
289703	Instl Main Meadowlark Dr Box Elder	(1,706.00)	Residential	
289956	Instl Main Frontier Lp Piedmont	(13,017.03)	Residential	
289997	Instl Main S Powderhouse Lead	(88,618.00)	Residential	
290006	Instl Main Miles Cooper Ct Sturgis	(11,257.06)	Residential	
290045	Instl Main Thrush Dr Rapid City	- '	Residential	
290265	Install 2in main Elks Rapid City	(12,168.00)	Residential	
290539	Instl Main Miller Ranch 1 Spearfish	(36,732.00)	Residential	
290545	Instl Main 11565 Moon Mdws Deadwood	(19,076.00)	Residential	
290802	Instl Main Bridgestone Ct Spearfish	(2,795.64)	Residential	
290903	Inst Main 9840 Sheridan Lake Rd RC	(4,333.00)	Residential	
291162	Inst Main 11498 US HWY 14A Deadwood	(1,408.35)	Residential	
291654	Instl Main Walley Wy Rapid City	(11,709.00)	Residential	
291674	Inst 2" PL Main Turtle Ln Spearfish	(15,686.00)	Residential	
291679	Instl Main Eastwood Court Spearfish	(10,928.00)	Residential	
292248	Instl 2" PL Main Park St, Whitewood	(10,482.00)	Residential	
292256	Inst Main R Ranch Est Belle Fourche	(29,948.00)	Residential	
292311	Instl Main S Powderhouse Ph 3 Lead	(46,816.00)	Residential	
292368	Instl Main Dunn Road Rapid City	(4,905.00)	Residential	
292807	Instl Main Powderhouse Pass 6 Lead	(382,538.00)	Residential	
293177	Inst Main VOG Hart Ranch Rapid City	(19,809.00)	Residential	
293371	Ins Main Highpoint Crescent Rpd Cty	(6,471.00)	Residential	
293374	Inst Main Scotland Hills 2 Rpd City	(9,822.00)	Residential	
293439	Install 4" Main Paradise Gulch Lead	(98,873.00)	Residential	
293443	Miracle Road 2" Main Ext Rapid City	(3,581.71)	Residential	
293575	Instl Main 401 S Broadway Ipswich	(7,485.00)	Residential	
293735	Install Main Noah Court Rapid City	(39,916.00)	Residential	
293886	Instl Main Prairie Haven 4 Piedmont	(34,989.00)	Residential	
294288	Instl Dakota Highlands Whitewood	(139,617.00)	Residential	
294607	Inst Main Miller Ranch ph 2 Sprfsh	(165,894.08)	Residential	
294847	Instl Main Countryside Ph 2 Sprfsh	(42,365.00)	Residential	
294963	Instl Main 2102 Highwood Rd Rpd Cty	(8,570.00)	Residential	
294985	Ins Main Auburn Hills 8 Rapid City	(37,756.00)	Residential	
295051	Instl Main Rombauer Dr Rapid City	(38,244.00)	Residential	
295119	Instl Main Norseman Ln Rapid City	(17,917.00)	Residential	
295211	Instl Main Moon Meadow Rapid City	(21,018.00)	Residential	
295215	Instl Main Last Chance Trail Lead	(18,236.00)	Residential	
295229	Instl Main 22129 Gold Pan Trl Lead	(1,755.00)	Residential	
295256	Inst Main Liberty Plaza 2 Box Elder	(52,918.00)	Residential	
295306	Inst Main Ridge Gold Spike 1 Deadwd	(31,653.00)		
295384	Instl Main Elkhorn Ridge 5&6 Sprfsh	(37,633.00)	Residential	

Work Order	WO Description	2022	Class
295629	Install 2" Main Sky Ridge Phase 2	(91,057.00)	Residential
295768	Inst Main Franklin & 1st Rapid City	(2,160.00)	Residential
295974	Instl Main Meadowlark Dr Box Elder	(3,819.00)	Residential
295980	Inst Main 15721 Brunson Ln Piedmont	(12,675.00)	Residential
296021	Inst Main Pikes Peak Cloud Rpd City	(51,669.00)	Residential
296072	Install main Freedom Box Elder	(58,135.00)	Residential
296206	Inst Main 21935 Hawkins Dr Piedmont	(13,415.00)	Residential
296219	Inst Main Crooked Canyon Rd Blk Hwk	(10,614.00)	Residential
296264	Instl Main Lost Irishman, Lead	(2,846.00)	Residential
296476	Instl Main Red Rock Shadows Rpd Cty	(18,187.00)	Residential
296786	Ins Main Sturgis Thomas Cir Sturgis	(2,714.00)	Residential
		(2,542,191.08)	
279932	Inst Main Beyers Grain Dryer Roscoe	(6,000,00)	Small Interruptible
282887	AHLEMEIER FARM TAP-GETT	(21,766.27)	Small Interruptible
286481	GR-SELBY-STIEGELMEIER TBS-MAIN	,	Small Interruptible
294859	Inst Main 714 Yorktown Box Elder	, , ,	Small Interruptible
234038	IIIST MAIII / 14 TOIRTOWN BOX EIGE	(255,104.89)	Omaii interruptible
		(200, 104.09)	

Total (2,889,391.50)