Montana-Dakota Utilities Co.
Electric Utility - South Dakota
Infrastructure Rider
Revenue Requirement
Projected 2020

	Projected												Average Balance
	Jan 2020	Feb 2020	Mar 2020	Apr 2020	May 2020	June 2020	July 2020	Aug 2020	Sept 2020	Oct 2020	Nov 2020	Dec 2020	
Rate Base													
Plant Balance													
Thunder Spirit	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	$10,348,034	
Thunder Spirit Expansion	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	4,228,603	
Bowdle Substation / Lines	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	2,941,496	
Sidney Transmission Line 8/	0	0	0	0	0	68,774	68,774	68,774	68,774	68,774	68,774	68,774	
Mandan Substation 10/	0	0	0	0	0	0	0	0	0	0	343,540	343,540	
Total Plant Balance	$17,518,133	$17,518,133	$17,518,133	$17,518,133	$17,518,133	$17,586,907	$17,586,907	$17,586,907	$17,586,907	$17,586,907	$17,930,447	$17,930,447	$17,615,508
Accumulated Depreciation													
Thunder Spirit	$1,405,485	$1,439,190	$1,472,895	$1,506,600	$1,540,305	$1,574,010	$1,607,715	$1,641,420	$1,675,125	$1,708,830	$1,742,535	$1,776,240	
Thunder Spirit Expansion	210,754	224,848	238,942	253,036	267,130	281,224	295,318	309,412	323,506	337,600	351,694	365,788	
Bowdle Substation / Lines	31,220	35,178	39,136	43,094	47,052	51,010	54,968	58,926	62,884	66,842	70,800	74,758	
Sidney Transmission Line	0	0	0	0	0	0	88	176	264	352	440	528	
Mandan Substation	0	0	0	0	0	0	0	0	0	0	0	453	
Total Accumulated Reserve	$1,647,459	$1,699,216	$1,750,973	$1,802,730	$1,854,487	$1,906,244	$1,958,089	$2,009,934	$2,061,779	$2,113,624	$2,165,469	$2,217,767	$1,932,314
Net Plant in Service	$15,870,674	$15,818,917	$15,767,160	$15,715,403	$15,663,646	$15,680,663	$15,628,818	$15,576,973	$15,525,128	$15,473,283	$15,764,978	$15,712,680	$15,683,194
Accum Def Income Taxes - Thunder Spirit 1/	$2,909,485	$2,929,178	$2,946,883	$2,962,663	$2,976,453	$2,988,319	$2,998,197	$3,006,087	$3,012,053	$3,016,031	$3,018,084	$3,018,147	
Accum Def Income Taxes - Bowdle 1/	20,084	22,511	24,693	26,637	28,336	29,798	31,015	31,987	32,722	33,212	33,465	33,473	
Accum Def Income Taxes - Sidney Line 1/	33	63	90	114	135	153	168	180	189	195	198	198	
Accum Def Income Taxes - Mandan Sub 1/	200	383	548	695	823	933	1,025	1,098	1,154	1,191	1,210	1,211	
PTC Carryforward 2/	263,582	263,582	263,582	197,686	197,686	131,790	131,790	131,790	65,894	65,894	65,894	0	
Total Rate Base	$13,204,454	$13,130,364	$13,058,528	$12,922,980	$12,855,585	$12,793,250	$12,730,203	$12,669,411	$12,544,904	$12,488,548	$12,777,915	$12,659,651	$12,819,649
Return on Rate Base 3/	$79,403	$78,957	$78,525	$77,710	$77,305	$76,930	$76,551	$76,185	$75,437	$75,098	$76,838	$76,127	**$925,066**
Expenses													
Operating Expenses													Total
O&M 4/	$11,688	$11,688	$11,688	$11,688	$11,688	$11,688	$11,688	$11,688	$11,688	$11,688	$11,688	$45,903	$174,471
Insurance - Property	813	813	813	813	813	813	813	813	813	813	813	815	9,758
Depreciation - Thunder Spirit	33,705	33,705	33,705	33,705	33,705	33,705	33,705	33,705	33,705	33,705	33,705	33,705	404,460
Depreciation - Thunder Spirit Expansion	14,094	14,094	14,094	14,094	14,094	14,094	14,094	14,094	14,094	14,094	14,094	14,094	169,128
Depreciation - Bowdle Substation / Lines	3,958	3,958	3,958	3,958	3,958	3,958	3,958	3,958	3,958	3,958	3,958	3,958	47,496
Depreciation - Sidney Transmission Line 9/	0	0	0	0	0	0	88	88	88	88	88	88	528
Depreciation - Mandan Substation 11/	0	0	0	0	0	0	0	0	0	0	0	453	453
Payroll Taxes	46	46	46	46	46	46	46	46	46	46	46	40	546
Taxes Other Than Income 5/	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,103	3,098	37,231
Total Expenses	$67,407	$67,407	$67,407	$67,407	$67,407	$67,407	$67,495	$67,495	$67,495	$67,495	$67,495	$102,154	$844,071
Income before Taxes	($67,407)	($67,407)	($67,407)	($67,407)	($67,407)	($67,407)	($67,495)	($67,495)	($67,495)	($67,495)	($67,495)	($102,154)	
Interest Expense	28,379	28,219	28,065	27,774	27,629	27,495	27,359	27,229	26,961	26,840	27,462	27,208	330,620
AFUDC Equity Add Back	747	747	747	747	747	747	747	747	747	747	747	746	8,963
Taxable income	($95,039)	($94,879)	($94,725)	($94,434)	($94,289)	($94,155)	($94,107)	($93,977)	($93,709)	($93,588)	($94,210)	($128,616)	($1,165,728)
Income Taxes 6/	($19,958)	($19,925)	($19,892)	($19,831)	($19,801)	($19,773)	($19,762)	($19,735)	($19,679)	($19,653)	($19,784)	($27,009)	($244,802)
Less: Production Tax Credit 7/	84,003	58,577	60,203	49,745	58,322	51,651	51,846	41,122	50,905	80,719	68,330	88,264	743,687
Net Income Taxes	($103,961)	($78,502)	($80,095)	($69,576)	($78,123)	($71,424)	($71,608)	($60,857)	($70,584)	($100,372)	($88,114)	($115,273)	($988,489)
Operating Income	$36,554	$11,095	$12,688	$2,169	$10,716	$4,017	$4,113	($6,638)	$3,089	$32,877	$20,619	$13,119	$144,418
Increase in Operating Income Required	$42,849	$67,862	$65,837	$75,541	$66,589	$72,913	$72,438	$82,823	$72,348	$42,221	$56,219	$63,008	$780,648
Gross Revenue Conversion Factor 6/	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582
Revenue Increase	$54,239	$85,901	$83,338	$95,621	$84,290	$92,295	$91,693	$104,839	$91,580	$53,444	$71,163	$79,757	$988,160
Gross Receipts Tax (.0015)	81	129	125	143	126	138	138	157	137	80	107	120	1,481
Total Revenue Requirement	$54,320	$86,030	$83,463	$95,764	$84,416	$92,433	$91,831	$104,996	$91,717	$53,524	$71,270	$79,877	$989,641

Montana-Dakota Utilities Co.
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Revenue Requirement
Projected 2020

1/ Monthly Deferred Income Tax activity is 1/12 of projected 2020 DIT activity. Monthly activity prorated based on DIT proration methodology.

	Thunder Spirit
DIT Balance - 12/31/2019:	58,368,321
Factor #271 SD - 2020:	4.947884%
January 1, 2020 Opening DIT Balance:	2,887,997

	Thunder Spirit
DIT Balance - 12/31/2019:	58,368,321
DIT Balance - 12/31/2020:	64,046,731
DIT activity 2020:	5,678,410
SD Factor. #271:	4.947884%
SD projected activity:	280,961
Monthly:	23,413

	Bowdle
DIT activity 2020:	686,241
SD Factor. #15:	5.044876%
SD projected activity:	34,620
Monthly:	2,885

	Sidney Line
DIT activity 2020:	8,642
SD Factor. #15:	5.044876%
SD projected activity:	436
Monthly:	36

	Mandan Sub
DIT activity 2020:	51,736
SD Factor. #15:	5.044876%
SD projected activity:	2,610
Monthly:	218

	January	February	March	April	May	June	July	August	September	October	November	December
	91.78%	84.11%	75.62%	67.40%	58.90%	50.68%	42.19%	33.70%	25.48%	16.99%	8.77%	0.27%
Thunder Spirit:	21,488	19,693	17,705	15,780	13,790	11,866	9,878	7,890	5,966	3,978	2,053	63
Bowdle:	2,648	2,427	2,182	1,944	1,699	1,462	1,217	972	735	490	253	8
Richland:	33	30	27	24	21	18	15	12	9	6	3	0
Mandan:	200	183	165	147	128	110	92	73	56	37	19	1

2/ Production Tax Credit (PTC) prior year carryforward of 263,582 is fully utilized during year 2020. Utilization of prior credits is quarterly in April, June, September, and December. Current year PTC's assumed to be fully utilized.

Utilization of prior year carryforward:	
Quarterly carryforward utilized:	263,582
	4
Quarterly SD carryforward utilized:	(65,896)

3/ Authorized ROR per Docket No. EL15-024. 7.216%

4/ Projected O&M:

Budgeted O&M Labor:	104,417	
Budgeted O&M Maintenance:	2,688,000	
Budgeted O&M Other Costs:	42,255	
	2,834,672	
SD Factor #271:	4.947884%	
Budgeted SD O&M:	140,256	
Monthly Budgeted O&M:	11,688	
Budgeted Annual Easement:	691,500	
SD Factor #271:	4.947884%	
Budgeted SD O&M:	34,215	Added to December monthly balance

5/ Taxes Other Than Income:

Rated Capacity:	155,500
Capacity Tax Rate:	2.5
Capacity Tax:	388,750

2019 Generation:	548,180,000
Generation Tax Rate:	0.0005
Generation Tax:	274,090

Capacity and Generation Tax:	662,840
Thunder Spirit Property Taxes 2019:	5,568
Total:	668,408
SD Factor. #271:	4.947884%
South Dakota:	33,072
Monthly:	2,756
Estimated 2020 Property Tax:	82,445
SD Fac. #15:	5.044876%
Estimated SD Property Tax:	4,159
Monthly:	347

6/ Tax Rate	21.0000%	(Federal Tax Rate = 21%, SD State Tax Rate = 0%)
1- tax rate	79.0000%	
Gross Revenue Conversion Factor	1.26582	

7/ Production Tax Credit.

	January	February	March	April	May	June	July	August	September	October	November	December
Thunder Spirit:	67,910,000	47,355,000	48,670,000	40,215,000	47,149,000	41,756,000	41,914,000	33,244,000	41,153,000	65,255,000	55,240,000	71,355,000
Projected PTC (rate $.025/Kwh):	1,697,750	1,183,875	1,216,750	1,005,375	1,178,725	1,043,900	1,047,850	831,100	1,028,825	1,631,375	1,381,000	1,783,875
Projected SD PTC (Factor #271):	84,003	58,577	60,203	49,745	58,322	51,651	51,846	41,122	50,905	80,719	68,330	88,264

Montana-Dakota Utilities Co.
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Infrastructure Rider
Sidney Transmission Line
Projected 2020

South Dakota Factor #15:	5.044876%

8/ Plant in Service, assumed in service date June 2020:

Reconductor Circuit:	1,363,243
SD Demand Allocation (15):	5.044876%
Total:	68,774

9/ Depreciation: (Depreciation booked on prior month plant balance, starts booking in July)

Plant (SD Alloc.):	$68,774
Depreciation Rate:	1.53%
Annual Depreciation:	$1,052
Monthly:	$88

Montana-Dakota Utilities Co.
Electric Utility - South Dakota
Infrastructure Rider
Mandan Substation Breakers/Bays
Projected 2020

South Dakota Factor #15:	5.044876%

10/ Plant in Service, assumed in service date November 2020:

Substation:	6,809,688
SD Demand Allocation (15):	5.044876%
Total:	343,540

11/ Depreciation: (Depreciation booked on prior month plant balance, starts booking in December)

Plant (SD Alloc.):	$343,540
Depreciation Rate:	1.58%
Annual Depreciation:	$5,428
Monthly:	$453