

**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	\$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	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	2,941,496
Sidney Transmission Line 8/	0	0	0	0	0	39,499	39,499	39,499	39,499	39,499	39,499	39,499	39,499
Mandan Substation 10/	0	0	0	0	0	0	0	0	0	0	60,539	60,539	60,539
Total Plant Balance	\$17,518,133	\$17,518,133	\$17,518,133	\$17,518,133	\$17,518,133	\$17,557,632	\$17,557,632	\$17,557,632	\$17,557,632	\$17,557,632	\$17,618,171	\$17,618,171	\$17,551,264
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	\$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	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	74,758
Sidney Transmission Line	0	0	0	0	0	0	51	101	152	202	253	303	303
Mandan Substation	0	0	0	0	0	0	0	0	0	0	0	80	80
Total Accumulated Reserve	\$1,647,459	\$1,699,216	\$1,750,973	\$1,802,730	\$1,854,487	\$1,906,244	\$1,958,052	\$2,009,859	\$2,061,667	\$2,113,474	\$2,165,282	\$2,217,169	\$1,932,218
Net Plant in Service	\$15,870,674	\$15,818,917	\$15,767,160	\$15,715,403	\$15,663,646	\$15,651,388	\$15,599,580	\$15,547,773	\$15,495,965	\$15,444,158	\$15,452,889	\$15,401,002	\$15,619,046
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	\$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	33,473
Accum Def Income Taxes - Sidney Line 1/	19	37	53	67	79	90	99	106	111	115	117	117	117
Accum Def Income Taxes - Mandan Sub 1/	35	67	96	122	144	163	179	192	202	208	211	211	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	0
Total Rate Base	\$13,204,633	\$13,130,706	\$13,059,017	\$12,923,600	\$12,856,320	\$12,764,808	\$12,701,880	\$12,641,191	\$12,516,771	\$12,460,486	\$12,466,906	\$12,349,054	\$12,756,281
Return on Rate Base 3/	\$79,404	\$78,959	\$78,528	\$77,714	\$77,309	\$76,759	\$76,381	\$76,016	\$75,268	\$74,929	\$74,968	\$74,259	\$920,494
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	51	51	51	51	51	51	306
Depreciation - Mandan Substation 11/	0	0	0	0	0	0	0	0	0	0	0	80	80
Payroll Taxes	46	46	46	46	46	46	46	46	46	46	46	40	546
Taxes Other Than Income 5/	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	2,960	35,520
Total Expenses	\$67,264	\$67,264	\$67,264	\$67,264	\$67,264	\$67,264	\$67,315	\$67,315	\$67,315	\$67,315	\$67,315	\$101,606	\$841,765
Income before Taxes	(\$67,264)	(\$67,264)	(\$67,264)	(\$67,264)	(\$67,264)	(\$67,264)	(\$67,315)	(\$67,315)	(\$67,315)	(\$67,315)	(\$67,315)	(\$101,606)	
Interest Expense	28,379	28,220	28,066	27,775	27,630	27,434	27,298	27,168	26,901	26,780	26,793	26,540	328,984
AFUDC Equity Add Back	747	747	747	747	747	747	747	747	747	747	747	746	8,963
Taxable income	(\$94,896)	(\$94,737)	(\$94,583)	(\$94,292)	(\$94,147)	(\$93,951)	(\$93,866)	(\$93,736)	(\$93,469)	(\$93,348)	(\$93,361)	(\$127,400)	(\$1,161,786)
Income Taxes 6/	(\$19,928)	(\$19,895)	(\$19,862)	(\$19,801)	(\$19,771)	(\$19,730)	(\$19,712)	(\$19,685)	(\$19,628)	(\$19,603)	(\$19,606)	(\$26,754)	(\$243,975)
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	(\$103,931)	(\$78,472)	(\$80,065)	(\$69,546)	(\$78,093)	(\$71,381)	(\$71,558)	(\$60,807)	(\$70,533)	(\$100,322)	(\$87,936)	(\$115,018)	(\$987,662)
Operating Income	\$36,667	\$11,208	\$12,801	\$2,282	\$10,829	\$4,117	\$4,243	(\$6,508)	\$3,218	\$33,007	\$20,621	\$13,412	\$145,897
Increase in Operating Income Required	\$42,737	\$67,751	\$65,727	\$75,432	\$66,480	\$72,642	\$72,138	\$82,524	\$72,050	\$41,922	\$54,347	\$60,847	\$774,597
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	\$54,097	\$85,761	\$83,199	\$95,483	\$84,152	\$91,952	\$91,314	\$104,461	\$91,202	\$53,066	\$68,794	\$77,021	\$980,502
Gross Receipts Tax (.0015)	81	129	125	143	126	138	137	157	137	80	103	116	1,472
Total Revenue Requirement	\$54,178	\$85,890	\$83,324	\$95,626	\$84,278	\$92,090	\$91,451	\$104,618	\$91,339	\$53,146	\$68,897	\$77,137	\$981,974

**Montana-Dakota Utilities Co.
Electric Utility - South Dakota
Infrastructure Rider
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.

	<u>Thunder Spirit</u>		<u>Thunder Spirit</u>		<u>Bowdle</u>		<u>Sidney Line</u>		<u>Mandan Sub</u>
DIT Balance - 12/31/2019:	58,368,321	DIT Balance - 12/31/2019:	58,368,321	DIT activity 2020:	686,241	DIT activity 2020:	5,074	DIT activity 2020:	8,920
Factor #271 SD - 2020:	4.947884%	DIT Balance - 12/31/2020:	64,046,731	SD Factor. #15:	5.044876%	SD Factor. #15:	5.044876%	SD Factor. #15:	5.044876%
January 1, 2020 Opening DIT Balance:	2,887,997	DIT activity 2020:	5,678,410	SD projected activity:	34,620	SD projected activity:	256	SD projected activity:	450
		SD Factor. #271:	4.947884%	Monthly:	2,885	Monthly:	21	Monthly:	38
		SD projected activity:	280,961						
		Monthly:	23,413						

	January	February	March	April	May	June	July	August	September	October	November	December
Thunder Spirit:	91.78%	84.11%	75.62%	67.40%	58.90%	50.68%	42.19%	33.70%	25.48%	16.99%	8.77%	0.27%
Bowdle:	21,488	19,693	17,705	15,780	13,790	11,866	9,878	7,890	5,966	3,978	2,053	63
Richland:	2,648	2,427	2,182	1,944	1,699	1,462	1,217	972	735	490	253	8
Mandan:	19	18	16	14	12	11	9	7	5	4	2	0
	35	32	29	26	22	19	16	13	10	6	3	0

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.

<u>Utilization of prior year carryforward:</u>	
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	2019 Generation:	548,180,000
Capacity Tax Rate:	2.5	Generation Tax Rate:	0.0005
Capacity Tax:	388,750	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:	48,517		
SD Fac. #15:	5.044876%		
Estimated SD Property Tax:	2,448		
Monthly:	204		

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.
Electric Utility - South Dakota
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:	782,950
SD Demand Allocation (15):	<u>5.044876%</u>
Total:	39,499

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

Plant (SD Alloc.):	\$39,499
Depreciation Rate:	<u>1.53%</u>
Annual Depreciation:	\$604
Monthly:	\$51

**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:	1,200,000
SD Demand Allocation (15):	<u>5.044876%</u>
Total:	60,539

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

Plant (SD Alloc.):	\$60,539
Depreciation Rate:	<u>1.58%</u>
Annual Depreciation:	\$957
Monthly:	\$80