MONTANA-DAKOTA UTILITIES CO. ELECTRIC UTILITY - SOUTH DAKOTA EXHIBIT 5

Appendix:

Page #:

- 1. Income Statement and Rate Base update assumptions
- 2. Income Statement update
- 3. Rate Base update
- 4. Revenue Requirement update
- 5. Income Statement from Settlement
- 6. Rate Base from Settlement
- 7-10. Plant Additions through October 31, 2018
- 11. Deferred Income Tax on Plant Additions
- 12. Ad Valorem Tax and Current Income Tax update

MONTANA-DAKOTA UTILITIES CO. ELECTRIC UTILITY – SOUTH DAKOTA EXHIBIT 5 – UPDATE ASSUMPTIONS

Assumptions:

Pursuant to the Settlement Stipulation filed on September 28, 2018, Montana-Dakota provides the following updates to the Income Statement, Rate Base, and Revenue Requirement, as approved in Order GE17-003.

- Income Statement update:
 - Depreciation expense adjusted to include depreciation for 2018 plant additions.
 - Taxes Other Than Income adjusted to reflect updated Ad Valorem tax for 2018 plant additions.
 - Current and Deferred Income Taxes adjusted to reflect the adjustments made based on the plant additions.
- Rate Base update:
 - Plant in service has been adjusted for one half of the plant additions through October 31, 2018 to reflect an average.
 - Accumulated reserve for depreciation has been adjusted to reflect average of the depreciation adjustment for 2018 plant additions.
 - Accumulated Deferred Income Taxes was adjusted to reflect deferred tax for the 2018 plant additions.

MONTANA-DAKOTA UTILITIES CO. INCOME STATEMENT ELECTRIC UTILITY - SOUTH DAKOTA TWELVE MONTHS ENDED DECEMBER 31, 2017 PRO FORMA REFLECTING TAX CUTS AND JOBS ACT UPDATED TO REFLECT PLANT IN-SERVICE THROUGH OCTOBER 31, 2018

	Pro Forma Settlement 1/	Pro Forma Adjustments	Pro Forma 2018 Updated
Operating Revenues			
Retail Sales Revenue	\$13,743,424	\$0	\$13,743,424
Sales for Resale	0	0	0
Unbilled Revenue	0	0	0
Other	564,110	0	564,110
Total Revenues	\$14,307,534	\$0	\$14,307,534
Operating Expenses			
Operation and Maintenance			
Fuel & Purchased Power	\$3,635,484	\$0	\$3,635,484
Other O&M	4,802,851	0	4,802,851
Total O&M	\$8,438,335	\$0	\$8,438,335
Depreciation	2,128,127	112,084	2,240,211 2/
Taxes Other Than Income	622,314	20,878	643,192 3/
Current Income Taxes	(151,119)	(68,619)	(219,738) 3/
Deferred Income Taxes	512,338	30,582	542,9204/
Total Expenses	\$11,549,995	\$94,925	\$11,644,920
Operating Income	\$2,757,539	(\$94,925)	\$2,662,614
Rate Base	\$35,064,602	\$2,099,680	\$37,164,282
Rate of Return on Rate Base	7.864%		7.164%
Rate of Return on Equity	10.945%		9.569%

1/ See Page 5.

2/ See Pages 7 through 10.

3/ See Page 12.

4/ See Page 11.

MONTANA-DAKOTA UTILITIES CO. RATE BASE ELECTRIC UTILITY - SOUTH DAKOTA TWELVE MONTHS ENDED DECEMBER 31, 2017 PRO FORMA REFLECTING TAX CUTS AND JOBS ACT UPDATED TO REFLECT PLANT IN-SERVICE THROUGH OCTOBER 31, 2018

Electric Plant in Service Accumulated Reserve for Depreciation Net Electric Plant in Service	Pro Forma Settlement 1/ \$78,267,125 36,348,067 \$41,919,058	Pro Forma Adjustments \$2,186,304 <u>56,042</u> \$2,130,262	Pro Forma 2018 Updated \$80,453,429 2/ 36,404,109 2/ \$44,049,320
Additions Materials and Supplies Fuel Stocks Prepayments Unamortized Loss on Debt Unamortized Redemption of Pref Stock Decommissioning of Retired Plants	\$781,259 211,277 53,176 154,135 20,359 (37,148)	\$0 0 0 0 0	\$781,259 211,277 53,176 154,135 20,359 (37,148)
SD Rate Case Advanced Tax Collection Cash Working Capital Total Additions Total Before Deductions	(37,148) 119,172 (39,565) <u>51,996</u> \$1,314,661 \$43,233,719	0 0 0 \$0 \$2,130,262	(37,148) 119,172 (39,565) <u>51,996</u> \$1,314,661 \$45,363,981
Deductions Accumulated Deferred Income Taxes Customer Deposits Customer Advances Total Deductions	\$8,136,825 26,914 <u>5,378</u> \$8,169,117	\$30,582 0 0 \$30,582	\$8,167,407 3/ 26,914 <u>5,378</u> \$8,199,699
Total Rate Base	\$35,064,602	\$2,099,680	\$37,164,282

1/ See Page 6.

2/ See Pages 7 through 10.

3/ See page 11.

MONTANA-DAKOTA UTILITIES CO. PRO FORMA OPERATING INCOME AND RATE OF RETURN REFLECTING ADDITIONAL REVENUE REQUIREMENTS ELECTRIC UTILITY - SOUTH DAKOTA PRO FORMA REFLECTING TAX CUTS AND JOBS ACT UPDATED TO REFLECT PLANT IN-SERVICE THROUGH OCTOBER 31, 2018

	Pro Forma Before Additional Revenue Requirements 1/	Additional Revenue Requirements	Pro Forma Reflecting Additional Revenue Requirements
Operating Revenues			
Sales	\$13,743,424	(\$76,419)	\$13,667,005
Sales for Resale	0		0
Other	564,110		564,110
Total Revenues	14,307,534	(76,419)	14,231,115
Operating Expenses Operation and Maintenance			
Cost of Gas	3,635,484		3,635,484
Other O&M	4,802,851		4,802,851
Total O&M	8,438,335	0	8,438,335
Depreciation	2,240,211	-	2,240,211
Taxes Other Than Income	643,192	(115)	643,077
Current Income Taxes	(219,738)	(16,024)	(235,762)
Deferred Income Taxes	542,920		542,920
Total Expenses	11,644,920	(16,139)	11,628,781
Operating Income	\$2,662,614	(\$60,371)	\$2,602,243
Rate Base	\$37,164,282		\$37,164,282
Rate of Return	7 164%		7 002% 2

Rate of Return7.164%

7.002% 2/

1/ See Page 2.

2/ Pursuant to the Confidential Settlement in Docket EL15-024 with an updated cost of debt.

MONTANA-DAKOTA UTILITIES CO. INCOME STATEMENT ELECTRIC UTILITY - SOUTH DAKOTA TWELVE MONTHS ENDED DECEMBER 31, 2017 PRO FORMA REFLECTING TAX CUTS AND JOBS ACT - REVISED 7/31/2018

	Per Books 2017	Pro Forma Adjustments	Pro Forma 2018 1/
Operating Revenues			
Retail Sales Revenue	\$14,625,650	(\$882,226)	\$13,743,424
Sales for Resale	40,320	(40,320)	0
Unbilled Revenue	54,892	(54,892)	0
Other	1,579,345	(1,015,235)	564,110 2/
Total Revenues	\$16,300,207	(\$1,992,673)	\$14,307,534
Operating Expenses			
Operation and Maintenance			
Fuel & Purchased Power	\$3,256,886	\$378,598	\$3,635,484
Other O&M	6,698,055	(1,895,204)	4,802,851
Total O&M	\$9,954,941	(\$1,516,606)	\$8,438,335
Depreciation	2,486,493	(358,366)	2,128,127 3/
Taxes Other Than Income	641,823	(19,509)	622,314
Current Income Taxes	(954,506)	803,387	(151,119)
Deferred Income Taxes	1,022,795	(510,457)	512,338
Total Expenses	\$13,151,546	(\$1,601,551)	\$11,549,995
Operating Income	\$3,148,661	(\$391,122)	\$2,757,539
Rate Base	\$42,932,319	(\$7,867,717)	\$35,064,602
Rate of Return on Rate Base	7.334%		7.864%
Rate of Return on Equity	9.516%		10.945%

1/ Excluded revenue, expense and rate base associated with the Infrastructure and Transmission Cost Recovery Riders.

- 2/ Pro forma Other Revenue reduced for Transmission Cost Recovery Rider revenue of \$992,396 and late payment revenue of \$22,839.
- 3/ Less aircraft depreciation of \$2,888 per Docket EL15-024, JMR-1 Sch. 2 and depreciation expense of \$407,296 for the Infrastructure Rider.

MONTANA-DAKOTA UTILITIES CO. RATE BASE ELECTRIC UTILITY - SOUTH DAKOTA TWELVE MONTHS ENDED DECEMBER 31, 2017 PRO FORMA REFLECTING TAX CUTS AND JOBS ACT - REVISED 7/31/2018

Per Books 2017 \$89,098,766 37,040,034 \$52,058,732	Pro Forma Adjustments (\$10,831,641) (691,967) (\$10,139,674)	Pro Forma <u>2018 1/</u> \$78,267,125 1/ <u>36,348,067</u> 1/ \$41,919,058
\$781,259	\$0	\$781,259
211,277	0	211,277
53,176	0	53,176
173,732	(19,597)	154,135
10,180	10,179	20,359
(41,792)	4,644	(37,148)
154,097	(34,925)	119,172
	(39,565)	(39,565) 2/
	51,996	51,996_2/
\$1,341,929	(\$27,268)	\$1,314,661
\$53,400,661	(\$10,166,942)	\$43,233,719
\$10,462,964	(\$2,326,139)	\$8,136,825
	26,914	26,914
5,378	0	5,378
\$10,468,342	(\$2,299,225)	\$8,169,117
\$42,932,319	(\$7,867,717)	\$35,064,602
-	2017 \$89,098,766 37,040,034 \$52,058,732 \$781,259 211,277 53,176 173,732 10,180 (41,792) 154,097 \$1,341,929 \$53,400,661 \$10,462,964 <u>5,378</u> \$10,468,342	$\begin{array}{c ccccc} 2017 & Adjustments \\ \hline & & & & & & & \\ \hline & & & & & & \\ \hline & & & &$

1/ Reflects adjustments consistent with Docket EL15-024, including plant adjustments and aircraft, and includes decommissioning of \$84,217 (\$42,108 and \$126,325 for 2016 and 2017, respectively).

2/ Pro Forma amount adjusted for Docket EL15-024, PJS-4 Sch. 3 and PJS-4 Sch. 2 adjustments.

Account		Actual Close October	Depr Rate	Annual Depr.
	Steam Production			* • -
311	Replace railroad ties & subgrade - Heskett	\$1,124	5.75%	\$65
312	Minor construction project - Heskett	\$7,260	3.37%	\$245
312	Minor construction project - Lewis & Clark	14,138	4.16%	588
312	Minor construction project - Coyote	2,765	1.35%	37
312	Minor construction project - Big Stone	2,991	1.58%	47
312	Replace APH H&C end baskets - Big Stone	39,634	1.58%	626
312	Replace emissions monitors - Heskett	7,040	3.37%	237
312	Rebuild coal mills - Lewis & Clark	2,481	4.16%	103
312	Replace sootblower - Big Stone	1,204	1.58%	19
312	Replace air preheater drive pins - Lewis & Clark	15,101	4.16%	628
312	Online coal analyzer - Coyote	5,530	1.35%	75
312	Purchase circulating water pump - Lewis & Clark	6,437	4.16%	268
312	Scrubber pond liner - Lewis & Clark	232,005	4.16%	9,651
312	Replace - Boiler Insullation - Coyote	(106)	1.35%	(1)
312	Replace Sand Processor Control Heskett	(869)	3.37%	(29)
312	Replace IK Sootblowers - Big Stone	(158)	1.58%	(2)
	Total Account 312	\$335,453		
314	Replace static exciter - Lewis & Clark	\$26,607	2.41%	\$641
314	Replace b.house bags, sootblower, mist elim Coyote	11,612	2.42%	281
314	Replace turbine & generator overhaul - Lewis & Clark	24,955	2.41%	601
314	Replace feedwater heaters - Big Stone	6,839	1.70%	116
	Total Account 314	\$70,013		
315	Repl Generator Relay Hesket	\$876	3.51%	\$31
316	Minor work equipment - Lewis & Clark	\$843	4.67%	\$39
316	Vehicles - Coyote	448	3.85%	17
316	Minor work equipment - Heskett	1,814	3.72%	67
316	Vehicles - Big Stone	418	2.50%	10
316	Environmental compliance - Big Stone	74,983	2.50%	1,875
316	Replace plant UPS - Heskett	9,340	3.72%	347
316	Replace Air Dryer & Compressor - Big Stone	490	2.50%	12
	Total Account 316	\$88,336		
	Total Steam Production	\$495,802		\$16,594
	Other Production			
341	Add shop - Cedar Hills	\$7,080	3.88%	\$275
344	Minor construction project - Cedar Hills	\$371	3.81%	\$14
344	Minor construction project - Ormat	3,134	5.21%	163
344	Minor construction project - Diamond Willow	4,573	4.21%	193
344	Minor construction project - Miles City	222	4.11%	9
344	Minor construction project - Glendive	4,314	2.74%	118
344	Replace gearboxes - Diamond Willow	10,414	4.21%	438
344	Replace YAW PUC assemblies - Diamond Willow	4,645	4.21%	196
344	Add Turbine CMS - Diamond Willow	5,527	4.21%	233
344	Mod. Hot Gas Path - Miles City	649	4.11%	27

Account		Actual Close October	Depr Rate	Annual Depr.
344 344	Ins Rice Units - Lewis & Clark Replace Fuel Nozzle Premixers - Glendive Total Account 344	(17,619) 7,158 \$23,388	2.50% 2.74%	(440) 196
345 345	Replace controls - Miles City Replace controls - Glendive Total Account 345	\$25,736 34,895 \$60,631	11.41% 6.95%	\$2,936 2,425
	Total Other Production	\$91,099		\$6,783
362	Distribution Minor Distribution Substation	\$5,610	1.92%	\$108
365	Overhead & Underground replace - Lemmon	\$130,443	2.55%	\$3,326
367	Overhead & Underground replace	\$149,551	2.14%	\$3,200
368	Replace Transformer	\$157,755	1.85%	\$2,918
369	Service Lines replacement	\$10,222	1.65%	\$169
370	Meters	\$14,794	5.00%	\$740
373	Street & Yard Lights - Dakota Heartland	\$34,873	2.88%	\$1,004
	Total Distribution	\$503,248		\$11,465
	Transmission			
353	Replace Control Relay Leola Cap Bank	\$27,759	1.58%	\$439
353	Replace Cap Bank Cntrl Rly Ipswich Sub	27,209	1.58%	430
353	Replace PCB 7043 @ Glenham Electric Minor Transmission Sub	159,921	1.58% 1.58%	2,527
353 353	Electric Minor Transmission Sub	1,561 580	1.58%	25 9
353	Ins Wishek Jct Reactor	(23)	1.58%	9
353	Replace Aux Xmfr Lewis & Clark Station	1,072	1.58%	17
353	Replace Heskett 230/115 Auto Xfmr	259	1.58%	4
353	Replace Rlys at Heskett-GU & Beul Line	5,037	1.58%	80
	Total Account 353	\$223,375	1.0070	
355	Const New Leola Jct Sub	\$2,531,092	2.03%	\$51,381
355	Williston WTR Plant 60KV	3,945	2.03%	80
355	Relocate TL430-1 to New Leola Sub	74,282	2.03%	1,508
355	Raise Bismarck - Wishek 115KV - NERC	(1,799)	2.03%	(37)
355	Replace 115 Str On TL089-1 Storm Damge	6,194	2.03%	126
355	Replace SD Trans Lines Storm Damage	1,456	2.03%	30
355	Replace TL091-1 2016 Storm Damage	1,523	2.03%	31
355	Replace Trans Lines from Fire Wstrn Total Account 355	<u>2,085</u> \$2,618,778	2.03%	42
356	Install Lightning Protection	\$4,987	1.53%	\$76
356	Minor Transmission Lines - Dakota Heartland	32,782	1.53%	502
356	Minor Transmission Lines - Badlands	16,610	1.53%	254

Account 356 356 356 356 356 356	Install Fault Ind & M.O.s TL424-1 Upgrade Foxtail Wind Facilities Elec Minor Trans Lines-Dak Hrtld Elect Minor Trans Lines-Badlands Elect Minor Trans Lines-Badlands Rep Conductor TL059-1 Beulah-Coyote	Actual Close October 41,103 25,093 13,434 1,401 273 580	Depr Rate 1.53% 1.53% 1.53% 1.53% 1.53% 1.53%	Annual Depr. 629 384 206 21 4 9
356	Replace Line At TL091-1 Storm Damage Total Account 356 Total Transmission	(4,541) \$131,722 \$2,973,875	1.53%	(69) \$58,708
390	<u>General</u> Install Sec Equip EMS Integ System	\$296	0.81%	\$2
392.2	Vehicles	(\$43,444)	5.48%	(\$2,381)
394	Minor Work Equipment	\$1,623	5.00%	\$81
396.2	Work Equipment	\$258,692	5.39%	\$13,943
397.2	Electric North Dakota Commun Equip	\$1,206	6.67%	\$80
397.6	Replace SCADA Rtus, upgrade OSI EMS	\$6,086	10.00%	\$609
397.8	Install BES Facilities Compliance	\$147	20.00%	\$29
	Total General	\$224,606		\$12,363
303 303 303	<u>General Intangible</u> Replace nMarket - EMS Install Distribution SCADA Purchase PSAT/TSAT Software EMS Total General Intangible	\$35,886 (4) <u>3,992</u> \$39,874	10.00% 10.00% 10.00%	\$3,589 0 <u>399</u> \$3,988
389	<u>Common</u> Add Sidewalk Mobridge Office	\$2,077	0.00%	\$0
390 390 390 390 390 390 390 390 390 390	Remodel Print Shop Replace Roof on Halo Replace HVAC & Furnaces - Dickinson Svc Cntr Purch Carpet Replace Annex Carpet Remodel Bathrooms & Hallway BSC Evaluate Structural Roof Design BSC Replace Dock Leveler & hook at BSC Purch Bldg Comm & Sub Depart Bsmrk Remodel Hallways Bismarck Serv Cntr Replace Drinking Fountain Dkn Srvc Cnt Replace Thermostat Heaters Dkn Sv Cntr Replace Carpet Elec Eng Dkn Serv Cntr Replace Tile Mobridge Warehouse Replace Whse Lighting Dcknsn Svc Cntr	\$2,127 1,401 170 2,936 1,548 3 8,737 24 (259) 869 34 66 24 890 42	0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85% 0.85%	\$18 12 1 25 13 0 74 0 (2) 7 0 1 0 8 0

Account 390	Instl Heater Vehicle Maint Bldg Total Account 390	Actual Close October 125 \$18,737	Depr <u>Rate</u> 0.85%	Annual Depr1
391.1 391.1	Office Structure & Equipment Purchase Lateral Files Bis Serv Center Total Account 391.1	\$597 	6.67% 6.67%	\$40 3
391.3 391.3	Toughbook Replacements for Field Itron Mobile Radio (IMR), Field GIS Survey Devices Total Account 391.3	\$586 \$542 \$2,128	20.00% 20.00%	\$117 308
392.2	Vehicles	\$8,030	6.65%	\$534
397.1	Communication Equipment	\$5,828	6.67%	\$389
397.3	Upgrade District Offices to VoIP	\$238	10.00%	\$24
398 398 398 398	Purchase Audio Test Equipment Upg JetVision Mail Inserter Main Pur Ice Maker for Annex Building Pur AED Units District Offices Total Account 398	\$309 (2) 124 <u>209</u> \$640	5.00% 5.00% 5.00% 5.00%	\$15 0 6 10
	Total Common	\$38,324		\$1,604
303 303 303 303 303 303	Common Intangible GIS Data Conversion Completion PragmaFIELD Implementation UG-CC&B Upgrade to v2.4 Migrate Gates System To CC&B Pur Payment Processing Software Total Common Intangible	\$245 5,116 339 70 <u>10</u> \$5,780	10.00% 10.00% 10.00% 10.00% 10.00%	\$25 512 34 7 <u>1</u> \$579
	Total 2018 Plant Additions	\$4,372,608		<u>\$112,084</u>

MONTANA-DAKOTA UTILITIES CO. TAX DEPRECIATION ON PLANT ADDITIONS ELECTRIC SD DEFERRED INCOME TAXES - 2018 PROJECTED

Steam Production Other Production Total Production	2018 Plant Additions \$495,802 91,099 \$586,901	Annual Depreciation \$16,594 6,783 \$23,377	Book Depr. for Taxes 1/ \$8,297 3,392 \$11,689	Tax 2/ Depreciation \$18,593 4,555 \$23,148	Book/Tax Difference \$10,296 1,163 \$11,459	Deferred 3/ Income Taxes \$2,162 244 \$2,406
Transmission	\$2,973,875	\$58,708	\$29,354	\$111,520	\$82,166	\$17,255
Distribution	\$503,248	\$11,465	\$5,733	\$18,872	\$13,139	\$2,759
<u>General</u> Other Structures & Improvements Computer Equipment	\$9,062 296 -	\$799 _2 _	\$400 1 -	\$1,295 4 -	\$895 3 -	\$188 1 -
Vehicles	(43,444)	(2,381)	(1,191)	(8,689)	(7,498)	(1,575)
Work Equipment Total General	<u> 258,692</u> \$224,606	<u> </u>	<u>6,972</u> \$6,182	<u>36,967</u> \$29,577	<u> 29,995 </u> \$23,395	<u> </u>
General Intangible	\$39,874	\$3,988	\$1,994	\$13,290	\$11,296	\$2,372
<u>Common</u>						
Other	\$7,352	\$487	\$244	\$1,051	\$807	\$169
Structures & Improvements	18,737	158	79	261	182	38
Computer Equipment	2,128	425	213	426	213	45
Vehicles	8,030	534	267	1,606	1,339	281
Total Common	\$36,247	\$1,604	\$803	\$3,344	\$2,541	\$533
Common Intangible	\$5,780	\$579	\$290	\$1,926	\$1,636	\$344
Total Additions	\$4,370,531	\$112,084	\$56,045	\$201,677	\$145,632	\$30,582

1/ Annual depreciation divided by 2 to reflect half-year convention.

2/ Tax depreciation rates are:

Steam Production	3.750%	(20 Yr.)
Other Production	5.000%	(15 Yr.)
Wind Production	20.000%	(5 Yr.)
Transmission	3.750%	(20 Yr.)
Distribution	3.750%	(20 Yr.)
General & Common	14.290%	(7 Yr.)
Transportation & Comp.	20.000%	(5 Yr.)
Structures and Improv.	1.391%	(39 Yr.)
Intangible	33.330%	(3 Yr.)
3/ Tax Rate	21.000%	

MONTANA-DAKOTA UTILITIES CO. AD VALOREM TAX & CURRENT INCOME TAX CALCULATION ELECTRIC UTILITY - SOUTH DAKOTA YEAR TO DATE OCTOBER 31, 2018

Ad Valorem Tax Calculation:

	2018 Plant	Ad Valorem	2018
	Additions	Tax Rates	Ad Valorem
Production	\$586,901	0.37%	\$2,147
Transmission	2,973,875	0.43%	12,815
Distribution	503,248	0.58%	2,937
General	224,606	1.24%	2,782
General Intangible	39,874	0.00%	0
Common	38,324	0.42%	162
Common Intangible	5,780	0.60%	35
Total Plant	\$4,372,608		\$20,878

Current Income Taxes Calculation:

Pro Forma Rate Base	\$37,164,282	
Weighted Cost of Debt:	2.294%	
Pro Forma Interest:	852,549	
	804,382	Interest included in "Pro Forma As Filed"
Change in Interest	48,167	
Change in Depreciation	112,084	
Change in Ad Valorem Taxes	20,878	
Total Change	181,129	
Tax Rate:	21.00%	
	38,037	
Deferred Tax Change:	30,582	
	68,619	