

February 23, 2018

Executive Secretary
North Dakota Public Service Commission
State Capitol Building
600 East Boulevard Ave.
Bismarck, ND 58505-0480

Re: Update to the Renewable Resource Cost Adjustment Rate 55 Tariff
Case No. PU-18-_____

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc., herewith submits for Commission approval an original and (7) copies of the Company's Application to update its Renewable Resource Cost Adjustment Rate 55 tariff pursuant to the terms of the tariff. The Company's preliminary estimates for 2018 resulted in a slight increase to rates, but are now being adjusted to implement the changes to income tax rates from the Tax Cuts and Jobs Act of 2017. The proposed rates, included herein on Exhibit 1, reflect the projected costs through 2018 related to the Company's investment in the Thunder Spirit Wind Project, Cedar Hills Wind Project, and Diamond Willow Wind Project.

Montana-Dakota requests approval of 2nd Revised Sheet No. 39 of its electric tariff.

The total cost to be recovered through the proposed rates is \$11,966,679, which is net of the over collected balance of \$635,944 as of December 31, 2017. The Company began amortizing the prior period over collected balance of \$947,527 effective with service rendered August 7, 2017, pursuant to the Order in Case No. PU-16-666, and has updated the amortization rate to return the remaining balance during 2018.

The current filing represents a reduction of \$1,009,474 from the rates currently in effect. A residential customer using 894 Kwh would see a total decrease of \$0.31 per month from the currently authorized charge under Rate 55.

The proposed Renewable Resource Cost Adjustments (RRCA) rates are shown below, along with the change from the current RRCA rates implemented August 7, 2017:

	<u>Proposed Rate</u>	<u>Current Rate</u>	<u>Change</u>
Residential & Small General Rate/Kwh	\$0.00607	\$0.00642	(\$0.00035)
Large General/Kwh	\$0.00586	\$0.00620	(\$0.00034)
Lighting/Kwh	\$0.00526	\$0.00557	(\$0.00031)

Please refer all inquiries regarding this filing to:

Tamie A. Aberle
Director of Regulatory Affairs
Montana-Dakota Utilities Co.
400 North Fourth Street
Bismarck, ND 58501
Tamie.aberle@mdu.com

Also, please send copies of all written inquiries, correspondence and pleadings to:

Karl Liepitz
Assistant General Counsel
MDU Resources Group, Inc.
P.O. Box 5650
Bismarck, ND 58506-5650
Karl.Liepitz@mduresources.com

Montana-Dakota submits a check in the amount of \$10,000 for the filing fees in this case. In the event the Commission deems an additional deposit is required, Montana-Dakota will submit the required fees.

Montana-Dakota respectfully requests that this filing be accepted as being in full compliance with the filing requirements of this Commission.

Please contact me at 701.222.7856 or tamie.aberle@mdu.com with any questions.

Please acknowledge receipt by stamping or initialing the duplicate copy of this letter attached hereto and returning the same in the enclosed self-addressed, stamped envelope.

Sincerely,



Tamie A. Aberle
Director of Regulatory Affairs

Attachments
cc: Karl Liepitz
Garret Senger

**STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION**

In the Matter of the Application of)
MONTANA-DAKOTA UTILITIES CO., a)
Division of MDU Resources Group, Inc., for) Case No. PU-18-____
Approval its Annual Update to Renewable)
Resource Cost Adjustment Rate 55)

I. Summary of Application

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. (Montana-Dakota or Applicant), herewith submits this Application to update the rates applicable under its Renewable Resource Cost Adjustment Rate 55 tariff pursuant to the terms of Rate 55 to reflect projected costs through December 2018 related to the Company's investment in its existing renewable generation resources; namely the Thunder Spirit Wind Project, Cedar Hills Wind Project, and Diamond Willow Wind Project. Montana-Dakota respectfully requests approval of its Renewable Resource Cost Adjustment Rate 55 tariff, 2nd Revised Sheet No. 39. In support of the Company's Application, Montana-Dakota is providing the following Exhibits:

- Exhibit 1 - Renewable Resource Cost Adjustment Rate 55 2nd Revised Sheet No. 39
- Exhibit 2 - Derivation of Proposed Rates
- Exhibit 3 - Projected 2018 Revenue Requirement
- Exhibit 4 - Balancing Account Summary
- Exhibit 5 - Projected 2018 Revenue Requirement - Detail Schedule by wind project.
- Exhibit 6 - Customer Notice of Filing

II. Description of Applicant

Montana-Dakota is a Division of MDU Resources Group, Inc., a Delaware corporation duly authorized to do business in the State of North Dakota as a foreign corporation, and doing business in the State of North Dakota as a public utility subject to the jurisdiction of and regulation by the North Dakota Public Service Commission (Commission) under NDCC Title 49. Montana-Dakota's Certificate of Incorporation and amendments thereto have been previously filed with the Commission and such Certificate and Amendments are hereby incorporated by reference as though fully set forth herein. Montana-Dakota provides electric service to approximately 92,800 customers in North Dakota as of December 31, 2017.

III. Background of Renewable Resource Recovery Rider Rate 55

On October 26, 2015, Montana-Dakota filed an application and notice to implement a Renewable Resource Cost Adjustment (RRCA) tariff and rates for purposes of recovering its investment in renewable generation resources, specifically the Thunder Spirit Wind Project ("TSW"), a 107.5 MW generation project located near Hettinger, North Dakota in Case No. PU-15-703. On January 5, 2016, the Commission approved a Settlement Agreement between Montana-Dakota and the Commission Advocacy Staff thereby authorizing the Company's RRCA Rate 55 tariff effective with service rendered on and after January 7, 2016 on an interim basis pending the outcome of a general electric rate case to be filed by the Company. On October 14, 2016, Montana-Dakota filed an application and notice to increase its electric service rates in Case No. PU-16-666, which included an update to the RRCA rate. The update to the

RRCA rates reflected the inclusion of all existing wind facilities (Cedar Hills, Diamond Willow, and Thunder Spirit) to be recovered under the Rate 55 tariff. On June 16, 2017, the Commission approved the Settlement Agreement entered into between Montana-Dakota, the Commission Advocacy Staff, and the AARP, authorizing the recovery of the existing wind facilities (Cedar Hills, Diamond Willow, and Thunder Spirit) through the Rate 55 tariff, as well as a true up of the over collected balance through December 31, 2016. The current RRCA rates were implemented effective with service rendered on and after August 7, 2017.

The RRCA rates approved in Case No. PU-16-666 reflect an annual projected 2017 revenue requirement that was recovered through interim rates in that case implemented on December 13, 2016 and final rates implemented on August 7, 2017.

Effective January 1, 2018, the first full annual period, the collection of revenue will be compared to the revenue requirement with the difference shown in the over/under recovered balance.

Montana-Dakota is now requesting to update its RRCA rates to reflect projected costs through December 2018 for all existing wind facilities (Cedar Hills, Diamond Willow and Thunder Spirit). The projected costs reflect the effects of the Tax Cuts and Jobs Act of 2017 (TCJA). The Company began amortizing the prior period over collected balance of \$947,527 effective with service rendered August 7, 2017, pursuant to the Order in Case No. PU-16-666, and has updated the deferral rates to amortize the balance as of December 2017, including interest owed to customers that will accrue during 2018.

IV. Calculation of the Proposed RRCA Rates

The following exhibits are included herein in support of the Company's proposed RRCA rates and in accordance with the Company's Rate 55 tariff:

- *Exhibit 2* shows the proposed RRCA rates and the allocation of the total costs to each of the rate classes, excluding special contracts (per Paragraph 2b of Rate 55). Total costs to be recovered include the RRCA balance as of December 31, 2017 and the projected 2018 revenue requirement for Thunder Spirit, Cedar Hill, and Diamond Willows wind projects. Project costs are then allocated to the rate classes based on the Company's Demand/Energy Factor No. 3 from Case No. PU-16-666, and divided by the forecasted billing determinants.
- *Exhibit 3* shows the projected monthly revenue requirements for the three wind projects for the year ending December 2018. The revenue requirement for the twelve months ending December 31, 2018 as allocated to North Dakota is \$12,602,623 as shown in Exhibit 3. This represents a decrease of \$1,009,474 from the revenue requirement authorized in Case No. PU 16-666. The revenue requirement is comprised of:
 - Average rate base of \$135,264,657.
 - Federal Production Tax Credits (PTCs): reflects a credit of 2.4 cents per Kwh of production from each of the facilities taking into account the expiration of Production Tax Credits related to thirteen of the twenty Diamond Willow turbines that went into service in December 2007 through February 2008. The PTCs for the project are included as a reduction to tax expense. Montana-Dakota was not able to claim the PTCs, so they

were included as an addition to rate base during 2015 and 2016. The Company expects to utilize all PTC carry forward in 2018.

- Return: reflective of the projected 2018 Capital Structure and the Return on Equity of 9.65% authorized in the Company's last electric rate case (Case No. PU-16-666).
- O&M: reflects the annual operating costs and the annual easement payments for each facility. O&M costs are recorded separately for each wind facility.
- Depreciation Expense: annual depreciation rates for production and transmission related assets, based on a 25-year life for all wind facilities, and the continued amortization of decommissioning costs authorized as authorized in Case No. PU-16-666.
- Taxes Other than Income: Cedar Hills and Diamond Willow are assessed property taxes. Thunder Sprit is assessed Wind Generation taxes in lieu of property taxes. Payroll taxes for all wind facilities are included.
- Income Taxes: Current federal and state income tax rates. Projected income tax expense for 2018 is based on the 21% federal corporate income tax rate, authorized in the Tax Cuts and Jobs Act of 2017.
- ARAM Reversal: The Tax Cuts and Jobs Act of 2017 requires re-measurement of the accumulated deferred income tax balance to determine the amount of excess deferred income tax to be returned to customers over the remaining life of the asset. The excess of deferred income taxes on the Cedar Hills and Diamond Willow assets results in an

annual amortization of \$268,421, which is a reduction to deferred tax expense. Excess deferred income taxes on the Thunder Spirit assets were calculated as of December 31, 2017, however, tax depreciation still exceeds book depreciation. Therefore, the amortization of the excess deferred income tax balance related to Thunder Spirit will take place in future periods when book depreciation exceeds tax depreciation.

- The facilities located in North Dakota are eligible for the North Dakota income tax credit (ITC) for installation of wind energy devices under N.D.C.C. Section 57-38-30. Cedar Hills has a carry forward credit of approximately \$4.1 million available at the end of 2017, and it is projected that \$2 million of the credit will be utilized in 2018. Thunder Spirit has a carry forward credit of approximately \$18 million available at the end of 2017. Carry forward credits accrued for Thunder Spirit cannot be utilized until the Cedar Hills credits are utilized in full. Since the credit allowed under the statute may not exceed the liability for tax, the excess will be carried forward for future use. Deferred tax is only established when the credit is utilized, and the deferred tax benefit is then amortized over the life of the assets. Based on the projected credit utilization, the deferred tax balance at the end of 2018 is projected to be approximately \$3.6 million.
- *Exhibit No. 4* shows the RRCA Balancing Account (per Paragraph 2d of Rate 55) through December 2017. The over recovered balance includes a carrying charge owed to customers based on the three-month Treasury Bill rate as published monthly by the Federal Reserve Board.

- *Exhibit No. 5* shows the projected monthly revenue requirements in detail for each of the three existing wind projects for the year ending December 2018.

V. Estimated Impact by Customer Class

As shown in Exhibit No. 2, Montana-Dakota’s projected 2018 costs to be recovered under the RRCA rates are \$11,966,679, including the remaining amount of the over-recovered balance originally established in Case No. PU-16-666 of \$635,944. The amortization rate has been updated to return the remaining balance to customers in 2018. A residential customer using 894 Kwh would see a decrease of \$0.31 per month.

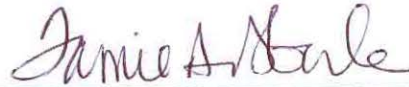
Montana-Dakota requests approval of the following RRCA rates to be effective with services rendered on and after the date of Commission approval:

	Proposed Rate	Current Rate	Change
Residential & Small General Rate/Kwh	\$0.00607	\$0.00642	(\$0.00035)
Large General/Kwh	\$0.00586	\$0.00620	(\$0.00034)
Lighting/Kwh	\$0.00526	\$0.00557	(\$0.00031)

VI. Conclusion

Montana-Dakota respectfully requests that the Commission approve this annual update to the Company’s RRCA rates applicable under Renewable Resource Cost Adjustment Rate 55 tariff.

Dated this 23rd day of February, 2018.

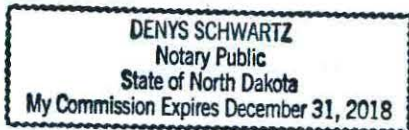


Tamie A. Aberle
Director of Regulatory Affairs

Subscribed and sworn to before me this 23 day of February, 2018.



Denys Schwartz, Notary Public
Burleigh County, North Dakota
My Commission Expires: 12/31/2018



Of Counsel:

Karl Liepitz
Assistant General Counsel
MDU Resources Group, Inc.
P.O. Box 5650
Bismarck, ND 58506-5650

Exhibit 1

Exhibit 1



Montana-Dakota Utilities Co.

A Division of MDU Resources Group, Inc.
400 N 4th Street
Bismarck, ND 58501

State of North Dakota Electric Rate Schedule

NDPSC Volume 4
2nd Revised Sheet No. 39
Canceling 1st Revised Sheet No. 39

Renewable Resource Cost Adjustment Rate 55

Page 1 of 1

1. Applicability:

This rate schedule represents a Renewable Resource Cost Adjustment (RRCA) and specifies the procedure to be utilized to recover the jurisdictional costs associated with renewable generation resource modifications or additions approved by the Commission, but not recovered through retail rates. Costs to be recovered may include operation and maintenance expenditures, depreciation, taxes, and a current return on the project costs.

2. Renewable Resource Cost Adjustment:

- a. An adjustment per Kwh will be calculated using the projected capital costs and related expenses, along with the forecasted Kwh sales, to determine a North Dakota jurisdictional revenue requirement to be recovered through the RRCA rates. The return component of the revenue requirement calculation will include the return on equity established in the Company's most recent rate case.
- b. The RRCA is applicable to all retail customers for electric energy sold, except those served under special contracts, and are allocated amongst the rate classes based on the Company's Demand/Energy Factor No. 3 established in the Company's most recent general rate case.
- c. The RRCA will be adjusted annually (or other period authorized by the Commission) to reflect the Company's most recent projected capital costs and related expenses for projects determined to be recoverable under this schedule.
- d. A true-up will reflect any over or under collection of revenue under the RRCA based on actual expenditures from the preceding twelve month recovery period plus carrying charges or credits accrued at a rate equal to the three-month Treasury Bill rate as published monthly by the Federal Reserve Board.

3. Renewable Resource Cost Adjustment:

Residential & Small General	0.607¢ per Kwh
Large General	0.586¢ per Kwh
Lighting	0.526¢ per Kwh

Date Filed: February 23, 2018

Effective Date:

Issued By: Tamie A. Aberle
Director – Regulatory Affairs

Case No.:

Tariffs Reflecting Proposed Changes



Montana-Dakota Utilities Co.

A Division of MDU Resources Group, Inc.

400 N 4th Street
Bismarck, ND 58501

State of North Dakota Electric Rate Schedule

NDPSC Volume 4
1st Revised Sheet No. 39
Canceling Original Sheet No. 39

Renewable Resource Cost Adjustment Rate 55

Page 1 of 1

1. Applicability:

This rate schedule represents a Renewable Resource Cost Adjustment (RRCA) and specifies the procedure to be utilized to recover the jurisdictional costs associated with renewable generation resource modifications or additions approved by the Commission, but not recovered through retail rates. Costs to be recovered may include operation and maintenance expenditures, depreciation, taxes, and a current return on the project costs.

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- d. A true-up will reflect any over or under collection of revenue under the RRCA based on actual expenditures from the preceding twelve month recovery period plus carrying charges or credits accrued at a rate equal to the three-month Treasury Bill rate as published monthly by the Federal Reserve Board.

3. Renewable Resource Cost Adjustment:

Residential & Small General	0-6420.607¢ per Kwh
Large General	0-6200.586¢ per Kwh
Lighting	0-5570.526¢ per Kwh

Date Filed: June 26, 2017

Effective Date: Service rendered on and after August 7, 2017

Issued By: Tamie A. Aberle
Director – Regulatory Affairs

Case No.: PU-16-666

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Renewable Resource Cost Adjustment
Proposed RRCA Rates - Updated for Change in Tax Rate**

	<u>Total</u>	<u>Residential & Small General</u>	<u>Large General</u>	<u>Lighting</u>
Revenue Requirement 1/ 2/	\$12,602,623	\$5,676,849	\$6,774,570	\$151,204
(Over)/Under Recovery 2/ 3/	(635,944)	(286,461)	(341,853)	(7,630)
Net to be Recovered	<u>11,966,679</u>	<u>5,390,388</u>	<u>6,432,717</u>	<u>143,574</u>
Projected Kwh 4/	2,014,529,000	888,808,000	1,098,438,000	27,283,000
Proposed RRCA Rate per Kwh				
Revenue Requirement per Kwh		\$0.00639	\$0.00617	\$0.00554
Amortization per Kwh		(0.00032)	(0.00031)	(0.00028)
Proposed RRCA Rate per Kwh		<u>0.00607</u>	<u>0.00586</u>	<u>0.00526</u>
Current RRCA Rate per Kwh 5/				
Revenue Requirement per Kwh		\$0.00690	\$0.00666	\$0.00599
Amortization per Kwh		(0.00048)	(0.00046)	(0.00042)
Current RRCA Rate per Kwh		<u>0.00642</u>	<u>0.00620</u>	<u>0.00557</u>
Increase in RRCA Rate		<u><u>(\$0.00035)</u></u>	<u><u>(\$0.00034)</u></u>	<u><u>(\$0.00031)</u></u>

1/ Exhibit 3

2/ Demand/Energy for Wind Allocation Factor 3 (Case No. PU-16-666):

Residential & Small General	45.044981%	(Rates 10, 13, 16, 20, 25, 26, and 40)
Large General	53.755236%	(Rates 30, 31, 32, 38, and 48)
Lighting	1.199783%	(Rates 41, 52)
	<u>100.000000%</u>	

3/ Exhibit 4

4/ Projected Kwh sales excluding contracts

5/ Current RRCA rates effective August 7, 2017

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Renewable Resource Cost Adjustment
Revenue Requirement - Wind Resources
Projected Year End 2018**

	Projected												Average Balance
	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018	July 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018	
Rate Base													
Total Plant Balance	\$221,128,702	\$221,128,702	\$221,128,702	\$221,128,702	\$221,128,702	\$221,128,702	\$221,493,728	\$221,493,728	\$221,493,728	\$221,493,728	\$221,493,728	\$221,493,728	221,311,215
Total Accumulated Reserve	39,515,472	40,285,784	41,056,096	41,826,408	42,596,720	43,367,032	44,137,344	44,908,932	45,680,520	46,452,108	47,223,696	47,995,281	
Net Plant in Service	\$181,613,230	\$180,842,918	\$180,072,606	\$179,302,294	\$178,531,982	\$177,761,670	\$177,356,384	\$176,584,796	\$175,813,208	\$175,041,620	\$174,270,032	\$173,498,447	177,557,432
Less: Deferred Taxes	46,391,102	46,579,981	46,745,124	46,887,288	47,005,689	47,101,111	47,172,798	47,220,750	47,245,723	47,246,961	47,225,219	47,179,713	
Add: PTC Carryforward	13,338,805	13,338,805	13,338,805	10,004,104	10,004,104	6,669,403	6,669,403	6,669,403	3,334,702	3,334,702	3,334,702	0	
Less: Investment Tax Credit	1,979,400	2,127,824	2,276,248	2,424,672	2,573,096	2,721,520	2,869,944	3,018,368	3,166,792	3,315,216	3,463,640	3,612,068	
Total Rate Base	\$146,581,533	\$145,473,918	\$144,390,039	\$139,994,438	\$138,957,301	\$134,608,442	\$133,983,045	\$133,015,081	\$128,735,395	\$127,814,145	\$126,915,875	\$122,706,666	135,264,657
Return on Rate Base 1/	\$880,100	\$873,450	\$866,942	\$840,550	\$834,323	\$808,212	\$804,457	\$798,645	\$772,949	\$767,417	\$762,024	\$736,751	\$9,745,820
Expenses													
Operating Expenses													Total
Total O&M	235,469	235,469	235,469	235,469	235,469	235,469	235,469	235,469	235,469	235,469	235,469	235,466	2,825,625
Total Depreciation	770,312	770,312	770,312	770,312	770,312	770,312	770,312	771,588	771,588	771,588	771,588	771,585	9,250,121
Property taxes	50,945	50,945	50,945	50,945	50,945	50,945	50,945	50,945	50,945	50,945	50,945	50,943	611,338
Payroll taxes	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	2,879	34,548
Total Expenses	\$1,059,605	\$1,059,605	\$1,059,605	\$1,059,605	\$1,059,605	\$1,059,605	\$1,059,605	\$1,060,881	\$1,060,881	\$1,060,881	\$1,060,881	\$1,060,873	\$12,721,632
Income before Taxes (EBIT)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,060,881)	(\$1,060,881)	(\$1,060,881)	(\$1,060,881)	(\$1,060,873)	(\$12,721,632)
Interest Expense	280,215	278,098	276,026	267,623	265,640	257,326	256,131	254,280	246,099	244,338	242,621	234,574	3,102,971
Taxable income	(\$1,339,820)	(\$1,337,703)	(\$1,335,631)	(\$1,327,228)	(\$1,325,245)	(\$1,316,931)	(\$1,315,736)	(\$1,315,161)	(\$1,306,980)	(\$1,305,219)	(\$1,303,502)	(\$1,295,447)	(\$15,824,603)
Income Taxes 2/	(\$326,982)	(\$326,465)	(\$325,959)	(\$323,909)	(\$323,425)	(\$321,396)	(\$321,104)	(\$320,964)	(\$318,967)	(\$318,537)	(\$318,118)	(\$316,153)	(\$3,861,979)
Less: ARAM Amortization	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,373	\$268,421
Production Tax Credit	1,085,956	842,868	595,929	671,694	780,446	640,289	518,295	487,282	553,841	813,449	851,035	969,003	8,810,087
Net Income Taxes	(\$1,435,306)	(\$1,191,701)	(\$944,256)	(\$1,017,971)	(\$1,126,239)	(\$984,053)	(\$861,767)	(\$830,614)	(\$895,176)	(\$1,154,354)	(\$1,191,521)	(\$1,307,529)	(\$12,940,487)
Operating Income	\$375,701	\$132,096	(\$115,349)	(\$41,634)	\$66,634	(\$75,552)	(\$197,838)	(\$230,267)	(\$165,705)	\$93,473	\$130,640	\$246,656	\$218,855
Revenue Requirement	\$667,238	\$980,691	\$1,299,411	\$1,166,986	\$1,015,527	\$1,169,076	\$1,325,873	\$1,361,083	\$1,241,686	\$891,518	\$835,218	\$648,316	\$12,602,623

1/ Projected Capital Structure with Authorized Return on Equity

	Ratio	Cost	
Long Term Debt:	42.485%	4.990%	2.120%
Short Term Debt:	6.622%	2.625%	0.174% 2.294%
Common Equity:	50.893%	9.650%	4.911%
	100.000%		7.205%

2/ Tax Rate 24.4049% (Federal Tax Rate = 21%, Tax Rate = 4.31%)
1- tax rate 75.5951%

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Renewable Resource Cost Adjustment
Balancing Account and Carry Charge Calculation**

	<u>Cumulative</u>				Grand Total (Over)/Under Collection
	<u>Beginning Balance</u>	<u>Less: Amortization 1/</u>	<u>Ending Balance 2/</u>	<u>Carrying Charge 3/</u>	
December 2016			(948,368)		(947,527)
January 2017	(948,368)		(948,368)	(403)	(947,930)
February	(948,368)		(948,368)	(411)	(948,341)
March	(948,368)		(948,368)	(585)	(948,926)
April	(948,368)		(948,368)	(632)	(949,558)
May	(948,368)		(948,368)	(703)	(950,261)
June	(948,368)		(948,368)	(775)	(951,036)
July	(948,368)		(948,368)	(846)	(951,882)
August	(948,368)	(19,894)	(928,474)	(798)	(932,786)
September	(928,474)	(73,071)	(855,403)	(797)	(860,512)
October	(855,403)	(71,158)	(784,245)	(763)	(790,117)
November	(784,245)	(71,026)	(713,219)	(804)	(719,895)
December	(713,219)	(84,736)	(628,483)	(785)	(635,944)
Total		<u>(319,885)</u>		<u>(8,302)</u>	

1/ Amortization of deferred balance per Case No. PU-16-666.

2/ (Over)/Under collection on revenue requirement not including the carrying charge, for use in calculating the carrying charge.

3/ Carrying charges calculated based on the three-month Treasury Bill rate, based on prior month ending balance.

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Renewable Resource Cost Adjustment
Revenue Requirement - Wind Resources
Projected Year End 2018

	Projected					
	Jan 2018	Feb 2018	Mar 2018	Apr 2018	May 2018	June 2018
Rate Base						
Plant Balance						
Thunder Spirit Production	\$141,502,360	\$141,502,360	\$141,502,360	\$141,502,360	\$141,502,360	\$141,502,360
Thunder Spirit Transmission	5,433,118	5,433,118	5,433,118	5,433,118	5,433,118	5,433,118
Cedar Hills Production	30,237,492	30,237,492	30,237,492	30,237,492	30,237,492	30,237,492
Diamond Willow Production	41,643,401	41,643,401	41,643,401	41,643,401	41,643,401	41,643,401
Diamond Willow Transmission	2,312,331	2,312,331	2,312,331	2,312,331	2,312,331	2,312,331
Total Plant Balance	221,128,702	221,128,702	221,128,702	221,128,702	221,128,702	221,128,702
Accumulated Reserve						
Thunder Spirit Production	\$11,885,000	\$12,356,666	\$12,828,332	\$13,299,998	\$13,771,664	\$14,243,330
Thunder Spirit Transmission	163,164	170,421	177,678	184,935	192,192	199,449
Cedar Hills Production	10,826,292	10,923,699	11,021,106	11,118,513	11,215,920	11,313,327
Diamond Willow Production	15,988,454	16,138,269	16,288,084	16,437,899	16,587,714	16,737,529
Diamond Willow Transmission	405,818	408,861	411,904	414,947	417,990	421,033
Decommissioning Balance	246,744	287,868	328,992	370,116	411,240	452,364
Total Accumulated Reserve	39,515,472	40,285,784	41,056,096	41,826,408	42,596,720	43,367,032
Net Plant in Service	\$181,613,230	\$180,842,918	\$180,072,606	\$179,302,294	\$178,531,982	\$177,761,670
Adds:						
PTC Carryforward - Thunder Spirit 1/	5,956,265	5,956,265	5,956,265	4,467,198	4,467,198	2,978,131
PTC Carryforward - Cedar/Diamond 1/	7,382,540	7,382,540	7,382,540	5,536,906	5,536,906	3,691,272
Def. Tax on ND Invest. Tax Credit 2/	483,071	519,293	555,516	591,739	627,962	664,184
Def. Tax on Wind Decommissioning 3/	60,218	70,254	80,290	90,326	100,363	110,399
Less:						
Accum DIT - Thunder Spirit 4/	\$30,857,174	\$31,100,598	\$31,319,451	\$31,514,515	\$31,684,979	\$31,831,653
Accum DIT - Cedar/Diamond 4/	16,077,217	16,068,930	16,061,479	16,054,838	16,049,035	16,044,041
Accum. Def. Invest. Tax Credit 2/	1,979,400	2,127,824	2,276,248	2,424,672	2,573,096	2,721,520
Total Rate Base	\$146,581,533	\$145,473,918	\$144,390,039	\$139,994,438	\$138,957,301	\$134,608,442
Return on Rate Base 5/	\$880,100	\$873,450	\$866,942	\$840,550	\$834,323	\$808,212
Expenses						
Operating Expenses						
O&M - Thunder Spirit 6/	\$172,931	\$172,931	\$172,931	\$172,931	\$172,931	\$172,931
O&M - Cedar Hills 6/	27,183	27,183	27,183	27,183	27,183	27,183
O&M - Diamond Willow 6/	35,355	35,355	35,355	35,355	35,355	35,355
Total O&M	235,469	235,469	235,469	235,469	235,469	235,469
Depreciation Expense						
Thunder Spirit Production	471,666	471,666	471,666	471,666	471,666	471,666
Thunder Spirit Transmission	7,257	7,257	7,257	7,257	7,257	7,257
Cedar Hills Production	97,407	97,407	97,407	97,407	97,407	97,407
Diamond Willow Production	149,815	149,815	149,815	149,815	149,815	149,815
Diamond Willow Transmission	3,043	3,043	3,043	3,043	3,043	3,043
Wind Decommissioning	41,124	41,124	41,124	41,124	41,124	41,124
Total Depreciation	770,312	770,312	770,312	770,312	770,312	770,312
Property taxes 7/	50,945	50,945	50,945	50,945	50,945	50,945
Payroll taxes	2,879	2,879	2,879	2,879	2,879	2,879
Total Expenses	\$1,059,605	\$1,059,605	\$1,059,605	\$1,059,605	\$1,059,605	\$1,059,605
Income before Taxes (EBIT)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)	(\$1,059,605)
Interest Expense	280,215	278,098	276,026	267,623	265,640	257,326
Taxable income	(\$1,339,820)	(\$1,337,703)	(\$1,335,631)	(\$1,327,228)	(\$1,325,245)	(\$1,316,931)
Income Taxes 8/	(\$326,982)	(\$326,465)	(\$325,959)	(\$323,909)	(\$323,425)	(\$321,396)
Less: ARAM Amortization 9/	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368
Production Tax Credit 10/	1,085,956	842,868	595,929	671,694	780,446	640,289
Net Income Taxes	(\$1,435,306)	(\$1,191,701)	(\$944,256)	(\$1,017,971)	(\$1,126,239)	(\$984,053)
Operating Income	\$375,701	\$132,096	(\$115,349)	(\$41,634)	\$66,634	(\$75,552)
Revenue Requirement	\$667,238	\$980,691	\$1,299,411	\$1,166,986	\$1,015,527	\$1,169,076

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Renewable Resource Cost Adjustment
Revenue Requirement - Wind Resources
Projected Year End 2018**

Exhibit 5
Page 2 of 4

	Projected						Average Balance
	July 2018	Aug 2018	Sept 2018	Oct 2018	Nov 2018	Dec 2018	
Rate Base							
Plant Balance							
Thunder Spirit Production	\$141,536,829	\$141,536,829	\$141,536,829	\$141,536,829	\$141,536,829	\$141,536,829	
Thunder Spirit Transmission	5,433,118	5,433,118	5,433,118	5,433,118	5,433,118	5,433,118	
Cedar Hills Production	30,395,704	30,395,704	30,395,704	30,395,704	30,395,704	30,395,704	
Diamond Willow Production	41,815,746	41,815,746	41,815,746	41,815,746	41,815,746	41,815,746	
Diamond Willow Transmission	2,312,331	2,312,331	2,312,331	2,312,331	2,312,331	2,312,331	
Total Plant Balance	221,493,728	221,493,728	221,493,728	221,493,728	221,493,728	221,493,728	221,311,215
Accumulated Reserve							
Thunder Spirit Production	\$14,714,996	\$15,186,777	\$15,658,558	\$16,130,339	\$16,602,120	\$17,073,901	
Thunder Spirit Transmission	206,706	213,963	221,220	228,477	235,734	242,991	
Cedar Hills Production	11,410,734	11,508,716	11,606,698	11,704,680	11,802,662	11,900,644	
Diamond Willow Production	16,887,344	17,037,745	17,188,146	17,338,547	17,488,948	17,639,349	
Diamond Willow Transmission	424,076	427,119	430,162	433,205	436,248	439,291	
Decommissioning Balance	493,488	534,612	575,736	616,860	657,984	699,105	
Total Accumulated Reserve	44,137,344	44,908,932	45,680,520	46,452,108	47,223,696	47,995,281	
Net Plant in Service	\$177,356,384	\$176,584,796	\$175,813,208	\$175,041,620	\$174,270,032	\$173,498,447	177,557,432
Adds:							
PTC Carryforward - Thunder Spirit 1/	2,978,131	2,978,131	1,489,064	1,489,064	1,489,064	0	
PTC Carryforward - Cedar/Diamond 1/	3,691,272	3,691,272	1,845,638	1,845,638	1,845,638	0	
Def. Tax on ND Invest. Tax Credit 2/	700,407	736,630	772,852	809,075	845,298	881,522	
Def. Tax on Wind Decommissioning 3/	120,435	130,472	140,508	150,544	160,580	170,616	
Less:							
Accum DIT - Thunder Spirit 4/	\$31,953,756	\$32,051,288	\$32,125,030	\$32,174,201	\$32,199,582	\$32,200,363	
Accum DIT - Cedar/Diamond 4/	16,039,884	16,036,564	16,034,053	16,032,379	16,031,515	16,031,488	
Accum. Def. Invest. Tax Credit 2/	2,869,944	3,018,368	3,166,792	3,315,216	3,463,640	3,612,068	
Total Rate Base	\$133,983,045	\$133,015,081	\$128,735,395	\$127,814,145	\$126,915,875	\$122,706,666	135,264,657
Return on Rate Base 5/	\$804,457	\$798,645	\$772,949	\$767,417	\$762,024	\$736,751	\$9,745,820
Expenses							
Operating Expenses							Total
O&M - Thunder Spirit 6/	\$172,931	\$172,931	\$172,931	\$172,931	\$172,931	\$172,933	
O&M - Cedar Hills 6/	27,183	27,183	27,183	27,183	27,183	27,180	
O&M - Diamond Willow 6/	35,355	35,355	35,355	35,355	35,355	35,353	
Total O&M	235,469	235,469	235,469	235,469	235,469	235,466	2,825,625
Depreciation Expense							
Thunder Spirit Production	471,666	471,781	471,781	471,781	471,781	471,781	
Thunder Spirit Transmission	7,257	7,257	7,257	7,257	7,257	7,257	
Cedar Hills Production	97,407	97,982	97,982	97,982	97,982	97,982	
Diamond Willow Production	149,815	150,401	150,401	150,401	150,401	150,401	
Diamond Willow Transmission	3,043	3,043	3,043	3,043	3,043	3,043	
Wind Decommissioning	41,124	41,124	41,124	41,124	41,124	41,121	
Total Depreciation	770,312	771,588	771,588	771,588	771,588	771,585	9,250,121
Property taxes 7/	50,945	50,945	50,945	50,945	50,945	50,943	611,338
Payroll taxes	2,879	2,879	2,879	2,879	2,879	2,879	34,548
Total Expenses	\$1,059,605	\$1,060,881	\$1,060,881	\$1,060,881	\$1,060,881	\$1,060,873	\$12,721,632
Income before Taxes (EBIT)	(\$1,059,605)	(\$1,060,881)	(\$1,060,881)	(\$1,060,881)	(\$1,060,881)	(\$1,060,873)	(\$12,721,632)
Interest Expense	256,131	254,280	246,099	244,338	242,621	234,574	3,102,971
Taxable income	(\$1,315,736)	(\$1,315,161)	(\$1,306,980)	(\$1,305,219)	(\$1,303,502)	(\$1,295,447)	(\$15,824,603)
Income Taxes 8/	(\$321,104)	(\$320,964)	(\$318,967)	(\$318,537)	(\$318,118)	(\$316,153)	(\$3,861,979)
Less: ARAM Amortization 9/	\$22,368	\$22,368	\$22,368	\$22,368	\$22,368	\$22,373	268,421
Production Tax Credit 10/	518,295	487,282	553,841	813,449	851,035	969,003	8,810,087
Net Income Taxes	(\$861,767)	(\$830,614)	(\$895,176)	(\$1,154,354)	(\$1,191,521)	(\$1,307,529)	(\$12,940,487)
Operating Income	(\$197,838)	(\$230,267)	(\$165,705)	\$93,473	\$130,640	\$246,656	\$218,855
Revenue Requirement	\$1,325,873	\$1,361,083	\$1,241,686	\$891,518	\$835,218	\$648,316	\$12,602,623

Factor 271 - Integrated Peak and Energy
2018: 68.937832%

1/ Production Tax Credit prior year carryforward of 13,363,137 will be fully utilized during the year along with all current year PTC. Utilization of prior credits is quarterly in April, June, September, and December.

2017 Carryforward:	13,338,805			Utilization of carryforward		
		4 months		per tax month		
Quarterly carryforward utilized:	(3,334,701)		Carryforward 2017	% of Total		
			Thunder Spirit:	5,956,265	44.654%	(1,489,067)
			Cedar/Diamond:	7,382,540	55.346%	(1,845,634)
				13,338,805	100.000%	(3,334,701)

2/ Investment tax credit: Cedar Hills

	Accumulated		Deferred Tax
Ending Balance: 12/31/2017:	1,830,976	Projected ITC activity 2018:	1,781,087
Projected balance: 12/31/2018:	3,612,063	Tax Rate:	24.4049%
Projected ITC activity 2018:	1,781,087	2018 Activity:	434,673

3/ Deferred Tax on Wind Decommissioning

2018 Decommissioning Dep. Expense:	493,485
Tax Rate:	24.4049%
2018 Activity:	120,435
Monthly Activity:	10,036

4/ Monthly Deferred Income Tax activity is 1/12 of projected 2018 DIT activity. Monthly activity prorated based on DIT proration methodology.

	Thunder Spirit	Cedar/Diamond				
Projected DIT activity 2018:	5,037,784	(171,511)				
ND Fac. #271:	68.937832%	68.937832%				
ND projected activity:	3,472,939	(118,236)				
Monthly:	289,412	(9,853)				
	January	February	March	April	May	June
	91.78%	84.11%	75.62%	67.40%	58.90%	50.68%
Thunder Spirit:	265,622	243,424	218,853	195,064	170,464	146,674
Cedar/Diamond:	(9,043)	(8,287)	(7,451)	(6,641)	(5,803)	(4,994)
	July	August	September	October	November	December
	42.19%	33.70%	25.48%	16.99%	8.77%	0.27%
Thunder Spirit:	122,103	97,532	73,742	49,171	25,381	781
Cedar/Diamond:	(4,157)	(3,320)	(2,511)	(1,674)	(864)	(27)

5/ Projected Capital Structure with Authorized Return on Equity

	Ratio	Cost	
Long Term Debt:	42.485%	4.990%	2.120%
Short Term Debt:	6.622%	2.625%	0.174%
Common Equity:	50.893%	9.650%	4.911%
	100.000%		7.205%
			2.294%

6/ Projected O&M:	Resp. # 859	Resp. # 858	Resp. # 856
	Thunder Spirit	Cedar Hills	Diamond Willow
Budgeted O&M:	3,010,210	473,170	615,421
ND Factor #271:	68.937832%	68.937832%	68.937832%
Budgeted ND O&M:	2,075,174	326,193	424,258
Monthly Budgeted ND O&M:	172,931	27,183	35,355

Notes: Assumes annual assessment easements paid monthly.

7/ Property tax based on December 31 2017 year end plant balance.

Thunder Spirit accrues generation taxes in lieu of ad valorem taxes for production

Property taxes - Production:	356,983
Property taxes - Transmission:	40,086
Thunder Spirit - Generation:	483,014
Landowner Easement Taxes:	6,720
	<u>886,803</u>
ND Fac. #271:	68.937832%
Total North Dakota:	<u>611,343</u>
Monthly:	50,945

8/ Tax Rate	24.4049% (Federal Tax Rate = 21%, Tax Rate = 4.31%)
1- tax rate	75.5951%

9/ ARAM Amortization	2018
Cedar Hills/Diamond Willow:	(268,421)
Monthly:	(22,368)

10/ Production Tax Credit. Current year, 13 Diamond Willow turbines are no longer eligible for the credit.

	January	February	March	April	May	June
Thunder Spirit:	48,668,174	38,888,598	29,287,644	33,012,304	38,313,860	31,677,197
Diamond (eligible for PTC):	9,677,915	5,416,839	2,355,796	2,654,933	3,099,953	2,457,868
Cedar:	7,290,121	6,638,284	4,375,051	4,930,590	5,757,055	4,564,611
Total Generation:	<u>65,636,210</u>	<u>50,943,721</u>	<u>36,018,491</u>	<u>40,597,827</u>	<u>47,170,868</u>	<u>38,699,676</u>
Projected PTC (rate \$.024/Kwh):	1,575,269	1,222,649	864,444	974,348	1,132,101	928,792
Projected ND PTC (Fac. #271):	1,085,956	842,868	595,929	671,694	780,446	640,289

	July	August	September	October	November	December
Thunder Spirit:	25,695,037	24,074,066	27,184,729	39,828,019	42,184,419	46,854,735
Diamond (eligible for PTC):	1,970,931	1,882,183	2,201,476	3,268,166	3,238,541	4,099,439
Cedar:	3,660,300	3,495,484	4,088,455	6,069,450	6,014,432	7,613,245
Total Generation:	<u>31,326,268</u>	<u>29,451,733</u>	<u>33,474,660</u>	<u>49,165,635</u>	<u>51,437,392</u>	<u>58,567,419</u>
Projected PTC (rate \$.024/Kwh):	751,830	706,842	803,392	1,179,975	1,234,497	1,405,618
Projected ND PTC (Fac. #271):	518,295	487,282	553,841	813,449	851,035	969,003

Notice of Annual Update to the Renewable Resource Cost Adjustment with the North Dakota Public Service Commission

On February 23, 2018, Montana-Dakota Utilities Co. (Montana-Dakota) filed an application with the North Dakota Public Service Commission (Commission) to update its Renewable Resource Cost Adjustment (RRCA) rates in accordance with the Company's Renewable Resource Cost Adjustment Rate 55 tariff that states the rates will be revised annually to reflect the most recent projected level of costs to be recovered.

The proposed Renewable Resource Cost Adjustment rates include North Dakota's allocation of the Company's investments in its three wind facilities (Diamond Willow, Cedar Hills, and Thunder Spirit) currently not being recovered through the Company's electric service rates and the amortization of the over-recovered RRCA balance through 2017.

If approved, a typical residential customer using 894 Kwh will see a decrease of \$0.31 per month. The RRCA is shown as a separate line item on your bill.

	<u>Residential & Small General</u>
Applicable Rate Schedules	10, 13, 16, 20, 25, & 40
Current Rate	\$0.00642 per Kwh
Proposed Rate	\$0.00607 per Kwh
Change	(\$0.00035) per Kwh
	<u>Large General</u>
Applicable Rate Schedules	30, 31, 32, 38, & 48
Current Rate	\$0.00620 per Kwh
Proposed Rate	\$0.00586 per Kwh
Change	(\$0.00034) per Kwh
	<u>Lighting</u>
Applicable Rate Schedules	41 & 52
Current Rate	\$0.00557 per Kwh
Proposed Rate	\$0.00526 per Kwh
Change	(\$0.00031) per Kwh

For more information, please contact a Montana-Dakota representative at 1-800-638-3278.