



UTILITIES CO.

A Subsidiary of MDU Resources Group, Inc.

400 North Fourth Street
Bismarck, ND 58501
(701) 222-7900

July 19, 2019

Executive Secretary
North Dakota Public Service Commission
State Capitol Building
Bismarck, ND 58505-0480

Re: Update to the Transmission Cost
Adjustment Rate 59 Tariff
Case No. PU-19-_____

Montana-Dakota Utilities Co. (Montana-Dakota) herewith submits for Commission approval an original and (7) copies of the Company's Application to update its Transmission Cost Adjustment (TCA) Rate 59 tariff pursuant to NDCC §49-05-04.3 and §49-05-06 and Paragraph 2c of the Company's Rate 59 tariff. Montana-Dakota requests approval of Transmission Cost Adjustment Rate 59 (8th Revised Sheet No. 43.1 of its electric service tariffs), provided herein as Exhibit 1, to be effective with service rendered on and after November 1, 2019.

The Company is requesting to update its TCA rates to reflect the projected charges for July 2019 through June 2020 assessed Montana-Dakota for transmission-related services provided by Midcontinent Independent System Operator (MISO) and Southwest Power Pool (SPP), along with the projected revenues and/or credits received for that same period by Montana-Dakota for transmission-related services. In addition, the Company is including the projected revenue requirement associated with six transmission capital projects in this TCA update. The projected net costs to be recovered through this TCA rates, proposed herein, are currently not being recovered through Montana-Dakota's North Dakota retail electric rates. The total projected net transmission-related costs are \$8,113,201 and the total projected cost related to the addition of six transmission capital projects is \$1,539,964, as allocated to North Dakota. The proposed TCA rates also reflect a projected over-recovered deferred balance of \$440,274 for a total net cost of \$9,212,891 to be recovered through new TCA rates proposed to be effective November 1, 2019. The \$9,212,891 represents a net increase of \$617,078, or approximately 7.2 percent, from the net cost of \$8,595,813 (Docket No. PU-18-379, Exhibit 2) as requested in the current TCA rates.

1 PU-19-285 Filed 07/19/2019 Pages: 65
Application to update Transmission Cost Adjustment (TCA) Rate 59 tariff
Montana-Dakota Utilities Co.
Tamie Aberle, Director of Reg. Affairs

The balancing account and resulting under-recovered deferred balance was reduced by \$828,364 to reflect the non-plant related excess deferred income tax credit applied to the TCA in accordance with the Settlement Agreement approved in Montana-Dakota's Tax Reform docket, Case No. PU-18-89 (Settlement Agreement). The non-plant excess deferred income tax amount credited to the TCA reflects the credit balance remaining after eliminating the deferred balances of the Company's Environmental Cost Recovery Rider and Generation Resource Recovery Rider balances in compliance with the approved Settlement Agreement.

A residential customer using 894 Kwh a month would see an increase of \$0.25 under the proposed TCA rate or an increase of \$3.00 annually. The proposed TCA rates are shown in the table below, along with the change from the current TCA rates implemented March 1, 2019:

| | | Proposed Rate/Kwh | Current Rate/Kwh | Change/Kwh |
|-----------------------------|---------------------------------|----------------------|---------------------|------------|
| Residential & Small General | (Rates 10, 13, 16, 20, 25 & 40) | \$0.00474 | \$0.00446 | \$0.00028 |
| Large General & Contracts | (Rates 30, 31, 32, 38, & 48) | \$0.00390 | \$0.00372 | \$0.00018 |
| Lighting | (Rates 41 & 52) | \$0.00234 | \$0.00209 | \$0.00025 |

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:

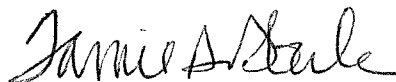
Karl Liepitz
 Assistant General Counsel
 MDU Resources Group, Inc.
 P.O. Box 5650
 Bismarck, ND 58506-5650
Karl.Liepitz@MDUResources.com

Montana-Dakota herewith submits a check for \$10,000 in accordance with North Dakota Century Code §49-05-04.3 and respectfully requests the Commission reduce the required \$100,000 filing fee pursuant to North Dakota Century Code §49-05-04.3.2.d which states the North Dakota Public Service Commission may waive or reduce the fee.

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

Please contact me at (701) 222-7856 or at Tamie.Aberle@mdu.com with any questions regarding this filing.

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. for)
Approval its Annual Update to Transmission) Case No. PU-19-_____
Cost Adjustment Rate 59)
)

I. Summary of Application

Montana-Dakota Utilities Co. (Montana-Dakota) herewith submits this Application for approval to update its Transmission Cost Adjustment (TCA) Rate 59 tariff pursuant to NDCC §49-05-04.3 and §49-05-06 and Paragraph 2c of the Company's Rate 59 tariff to reflect projected transmission-related costs, revenues, and credits through June 2020, and the projected revenue requirement for transmission investments being placed into service in 2019 and proposed to be recovered through the TCA mechanism. The Company requests approval of Transmission Cost Adjustment Rate 59 (8th Revised Sheet No. 43.1) to be effective with service rendered on and after November 1, 2019.

In support of this Application, Montana-Dakota is providing the following exhibits:

- Exhibit 1 - Transmission Cost Adjustment Rate 59 8th Revised Sheet No. 43.1
- Exhibit 2 – Transmission Cost Adjustment Proposed Rates
- Exhibit 3 – Projected Summary of Revenue and Expenses, July 2019 – June 2020.
- Exhibit 4 – Projected 2019 and 2020 Revenue Requirement Schedules for Transmission Related Capital Projects
- Exhibit 5 – Transmission Cost Adjustment Balancing Account and Carrying Charge Calculation
- Exhibit 6 – Projected Revenue and Expenses by Schedule
- Exhibit 7 – Customer Notice of Filing

II. Description of Applicant

Montana-Dakota is a Subsidiary 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 92,900 customers in North Dakota as of May 31, 2019.

III. Background of Transmission Cost Adjustment Rate 59

On October 11, 2011, Montana-Dakota filed a Transmission Cost Adjustment Rate 59 tariff and proposed TCA rates in Case Nos. PU-11-672 and PU-11-681, pursuant to NDCC §49-05-04.3, for the recovery of the North Dakota allocation of transmission related expenses assessed by the Midcontinent Independent System Operator (MISO), Western Area Power Administration (WAPA), and the revenue requirement for transmission facilities not currently recovered through the Company's North Dakota electric service rates. On May 16, 2012, the Commission approved Montana-Dakota's Transmission Cost Adjustment Rate 59 tariff. The first TCA rates were implemented effective with service rendered on and after June 1, 2012.

The Company's currently authorized TCA rates reflect the projected 2019 net transmission-related expenses as authorized in Case No. PU-18-379, and the updated amortization of the deferred balance, initially established in Case No. PU-16-666, and implemented with service rendered on and after March 1, 2019. Montana-Dakota proposes to change to this mid-year filing in order to provide more timely information regarding proposed transmission projects and to stagger the filing dates for Montana-Dakota's electric rate riders.

IV. Calculation of the Proposed TCA Rates

The following exhibits are included herein in support of the Company's proposed TCA rates and in accordance with the Company's Transmission Cost Adjustment Rate 59 tariff:

- *Exhibit 2* shows the proposed TCA rates, along with the allocation of the total net projected expenses to each of the respective rate classes. The total projected cost to be recovered through the proposed TCA rates is \$9,212,891 which is comprised of July 2019 – June 2020 net projected transmission costs of \$8,113,201, the projected revenue requirement of \$1,539,964 related to transmission investments in six projects being placed into service in 2019, along with an over-recovered balance of the Company's current costs of \$440,274. The total costs are allocated to the respective rate classes based on the Company's transmission allocation factor (Demand Factor No. 2).

Allocated costs are then divided by the forecasted billing determinants, including the billing determinants associated with contract rate customers subject

to the TCA, to derive the transmission revenue requirement rates. The Projected TCA revenue requirement, including the transmission investment revenue requirement, of \$9,653,165 reflects an increase of \$1,441,586 from the \$8,211,579 TCA revenue requirement authorized in Case No. PU-18-379, Exhibit 2. This increase is primarily attributable to the inclusion of the transmission related capital projects.

The proposed TCA rates also reflect a decrease in the deferred account surcharge from the amount included in the Company's current TCA rates that was authorized in Case No. PU-18-379 and implemented with the TCA rates effective on March 1, 2019. As shown on Exhibit 5, the proposed surcharge rates reflect the deferred balance projected through June 2019. The amount to be recovered has been reduced by the non-plant related excess deferred income taxes credit (non-plant EDITs) remaining after the elimination of the deferred balances of the Company's Environmental Cost Recovery Rider and Generation Resource Recovery Riders as provided for in the Settlement Agreement approved in Montana-Dakota's Tax Reform docket, Case No. PU-18-89 as shown on Exhibit 5, page 1.

- *Exhibit 3* provides a summary of the projected transmission-related expenses assessed Montana-Dakota under MISO and SPP transmission schedules as well as the projected revenue and/or credits received by Montana-Dakota for transmission related services by schedule.
- *Exhibit 4* shows the projected monthly revenue requirements for the investment in six transmission projects being placed into service in 2019. A revenue

requirement for each project for 2019 and 2020 is provided. The revenue requirement for the period July 2019 through June 2020 is reflected in the proposed revenue requirement to be recovered through this proposed TCA. The revenue requirement is comprised of:

- Transmission investment allocated to North Dakota = \$19,679,594.
 - Return on Rate Base: reflective of the authorized Capital Structure and the Return on Equity of 9.65% authorized in the Company's last electric rate case (Case No. PU-16-666).
 - Depreciation Expense: annual depreciation rates for transmission related assets as authorized in Case No. PU-16-666.
 - Taxes Other than Income: property tax based on the effective property tax rate for transmission property reflective of the location of the project.
 - Income Taxes: current federal and state income tax rates.
- *Exhibit 5* shows the TCA Balancing Account (per Paragraph 2d of Rate 59) through June 2019. As shown on Exhibit 5, page 1, the Company applied \$28,471 to the deferred balance to reflect the remaining balance of the non-plant EDITs for October through December 2018. This in addition to the \$799,893 applied to January through September 2018 in Docket No. PU-18-379, Exhibit 4 page 1, for a total of \$828,364 applied to the deferred balance per the Settlement Agreement approved in Case No. PU-18-89. The total amount applied to the TCA deferred balance differs from what was estimated in Docket No. PU-18-379 as that filing including estimated costs and recoveries for October through December 2018. Upon true-up of the October through December months in the

Environmental and Generation riders, the total non-plant EDIT credit remaining to be applied to the Transmission rider deferred balance was \$828,364 after extinguishing the deferred balance in the other two riders at year end. Any over or under recovery is assessed a carrying charge at the three-month Treasury Bill rate as published monthly by the Federal Reserve Board.

- *Exhibit 6* provides the detail of the derivation of the projected transmission-related expenses, revenues and credits for the twelve months ended June 30, 2020.
 - Pages 1 – 3 provide an explanation for the MISO and SPP expenses and revenue schedules
 - Page 4 shows the projected revenue for MISO Schedules 1, 2, 7, 8, and 24.
 - Schedule 1 revenue is the revenue received for Montana-Dakota's scheduling and administration of moving power through MISO.
 - Schedule 2 is revenue received for Montana-Dakota's maintenance of voltage on the system.
 - Schedule 7 is revenue received by Montana-Dakota for Firm Point to Point Transmission Service.
 - Schedule 8 is revenue received by Montana-Dakota for Non-Firm Point to Point Transmission Service.
 - Schedule 24 is revenue received by Montana-Dakota as a Load Balancing Authority which it receives for services provided to others in MISO.

- Page 5 shows the projected charges for MISO Schedule 10 charges and direct FERC assessments. As transmission providers, both MISO, on behalf of Montana-Dakota, and Montana-Dakota are assessed annual charges by the Federal Energy Regulatory Commission in accordance with FERC's regulations. These charges reflect the projected charges to be assessed by FERC to Montana-Dakota either directly or through MISO
- Page 6 shows the projected Schedule 26 charges and revenue. The Schedule 26 charges reflect the indicative charges posted by MISO on May 1, 2018 by Pricing Zone for Approved Baseline Reliability Projects, Generation Interconnection Projects, and Market Efficiency Projects. The Schedule 26 charges reflect Montana-Dakota's share of costs for projects that qualify for regional cost allocation under the MISO tariff.

The Schedule 26 revenue reflects the Company's Projected MISO Attachment GG revenue requirement for MISO Transmission Expansion Plan (MTEP) project 1355 (Heskett Substation). The Heskett Substation was deemed a baseline reliability project under MISO's 2009 Transmission Expansion Plan.

- Page 7 shows the projected MISO Schedule 26A charges and credits. The Schedule 26A expenses reflect Montana-Dakota's forecasted load at the indicative charge posted by MISO on October 2, 2018 with Montana-Dakota's share of the Big Stone South to Ellendale (BSSE) retail revenue requirement stated separately. Montana-Dakota's share of the BSSE retail revenue requirement reflects the estimated retail portion of the BSSE

project using Montana-Dakota's load ratio share within the MISO footprint and the Company's Projected MISO Attachment MM revenue requirement for MTEP Project 2220 (BSSE MVP project). The BSSE MVP project is one of seventeen MVPs approved by MISO as part of the MTEP 2011 report. Schedule 26A is charged equally to all MISO load for recovery of MISO's MVP portfolio.

A revenue credit for administrative and general (A&G) expenses is also shown on page 7 to reflect a credit or reimbursement for the A&G expenses that will be recovered from all MISO load under Attachment MM as an offset to the A&G expenses recovered through the Company's North Dakota electric rates today.

- Page 8 shows the projected MISO Schedule 9 revenue and revenue received by Montana-Dakota under a Facility Sharing Agreement with Basin Electric Power Cooperative (BEPC).
 - Montana-Dakota receives revenue under MISO Schedule 9 for Network Integration Transmission Service. It is the estimated revenue received from BEPC for MISO NITS service. This revenue is then offset by the revenue requirements of BEPC member cooperatives received by Montana-Dakota from MISO for transmission service in Montana-Dakota's pricing zone that are in turned paid to BEPC.
 - The Facility Sharing Agreement reflects revenue received from BEPC for the use of Montana-Dakota's facilities to serve BEPC

member cooperative loads.

- Page 9 shows the projected SPP charges and credits by schedule.
 - Schedule 1 are the charges paid by Montana-Dakota to SPP for the scheduling and administration of power through SPP.
 - Schedule 1a are the charges paid by Montana-Dakota to SPP for SPP's administration of the market and transmission system.
 - Schedule 9 reflects the charges paid by Montana-Dakota for Network Integration Transmission Service. Also reflected on page 9 are the payments made to BEPC for the use of BEPC facilities by Montana-Dakota that were included in the Basin Electric Interconnection and Common Use Agreement
 - Schedule 12 are the FERC assessments to SPP associated with Montana-Dakota's loads on the SPP system, similar to MISO's Schedule 10 charges.

V. Transmission Investments

Montana-Dakota is proposing to include costs related to transmission capital projects being placed into service in 2019, for new or modified electric transmission facilities as permitted by NDCC 49-05-04.3. Following is an explanation of the specified projects proposed to be recovered through the TCA:

- Bowdle Substation and Lines – Montana-Dakota installed a 115/41.6 kilovolt transmission substation near Bowdle, South Dakota that serves the Bowdle area as well as providing support for the Company's Integrated Electrical System in

May 2019. This substation replaces a substation that was in a location that experienced an inundation from surrounding water sources causing the concrete foundations to heave and move. The project consisted of constructing a new substation on a new piece of property and routing all existing transmission lines to this new substation. The new substation includes a new larger transformer with improved voltage regulation, new gas insulated circuit breakers, and new protection and control equipment. The project cost is \$5.6 Million with 55% of the substation used to support the integrated electrical system. The rerouted integrated system transmission lines connected to the Bowdle substation were also included in the revenue requirement. The integrated system portion of the project was allocated to North Dakota based on the ND demand allocator of 70.925157 percent.

- Leola Substation and Ellendale Ring Bus – Montana-Dakota performed a steady state planning study that determined a need for an additional source into the 41.6 kilovolt transmission system near Leola, South Dakota. After analysis of available options, the decision was made to construct a 45-mile 115 kilovolt line from Ellendale, North Dakota to Leola, South Dakota and construct a 115/41.6 kilovolt substation near Leola, South Dakota that would interconnect to the existing 41.6 kilovolt transmission system. The new substation will support both the local Leola, South Dakota and surrounding areas, as well as support the electric integrated transmission system. An upgraded communications node is being installed with the new substation as well. The existing transfer bus in Ellendale will also be upgraded to a 115-kilovolt ring bus. This project will benefit the

existing integrated electric transmission system by increasing reliability by reducing line exposure and outages and will allow better load serving capability for the Ellendale area. The substation and ring bus project is estimated at \$6.3 Million with a planned completion of December 2019. The ring bus at the Ellendale substation estimated at \$1.1 million and the Leola Substation facilities serving the integrated electric system, including the communications node, are estimated at \$2.5 million were allocated to North Dakota electric operations based on the North Dakota demand allocator of 70.925157 percent.

- Dickinson Breaker and Transmission Lines – Montana-Dakota currently has two transmission substations in the Dickinson area that feed from radial 115 kV lines; the Dickinson North Substation and the Dickinson West Substation. A new substation at the Dickinson Refinery, west of Dickinson, is being constructed and paid for by Marathon. In order to provide more reliable transmission service, it was determined a new 11-mile 115 kV line from the Dickinson North Substation be routed to interconnect to the new Dickinson Refinery, and another 6 miles of 115 kV line will be routed to interconnect the Dickinson West Substation to the Dickinson Refinery Substation was the most economic means of increasing reliability in this area. This transmission addition will provide a redundant transmission line feed to both the Dickinson North and West Substations, as the project will also allow electricity to flow through Dickinson from the Coyote generating station to the Hettinger area in cases of outage. This requires a rebuild of the 115 kV bus and the addition of a breaker at the Dickinson North Substation. The 11-mile 115 kV line to connect the Dickinson North Substation

to the Refinery Substation, along with Dickinson North Substation upgrades have a planned completion date of December 2019 with an estimated cost of \$5.9 Million. This is an integrated electric system project; therefore, 70.925157 percent has been allocated to North Dakota based on the North Dakota demand allocator. The remaining 6 miles of new 115 kV transmission line is expected to be completed in November 2020 and is expected to be included in future TCA filings.

- Watford City Substation and Lines – All of Watford City's customers are being provided service through one power transformer at Western Area Power Administration's (WAPA) Watford City Substation through a single transmission line. If an outage occurs for this transformer or transmission line, all electric service to Watford City is interrupted. To mitigate this condition, a second power transformer is needed in Watford City and a redundant transmission line needs to be installed. A request to WAPA for a second power transformer within their substation was denied by WAPA due to lack of space in the WAPA substation. The decision was then made to interconnect to WAPA's Watford City Substation at 230 kV, construct a new 230/34.5 kV substation, and a 10-mile 60 kV (operated at 34.5 kV) transmission loop line around Watford City. One end of the loop will connect to the existing power transformer in WAPA's substation and the other end of the loop will connect to the new Montana-Dakota Watford Substation providing redundant feeds to all distribution substations in the service area providing enhanced reliability. To support the interconnection at WAPA's substation, WAPA had to upgrade a 230 kV circuit breaker and associated

switches and protection equipment. The new Watford Substation, the 1,500 feet of 230 kV line needed to interconnect to the WAPA substation, upgrades to the WAPA substation circuit breaker system, and a portion of the 60 kV loop line, operated at 34.5 kV, have a planned completion of November 2019 at an estimated cost of \$9.4 Million. The remaining loop line will be constructed in 2020 with a planned completion in October 2020, at an estimated cost of \$5 Million and is expected to be included in future TCA filings. This project is assigned directly to the North Dakota electric system.

- Richland to WAPA Reconductor – Southwest Power Pool planning studies determined the need to install larger conductor on Montana-Dakota's 115 kV line from Montana-Dakota's Substation located at the Lewis and Clark Generating Station to WAPA's Richland Substation near Sidney, Montana. Montana-Dakota will receive Facility Credits from SPP for this Network Upgrade that will serve to offset the cost of the project and will be credited through the TCA. The project is estimated at \$1.2 Million and is expected to be completed in October 2019. This project benefits the integrated electric system: therefore, 70.925157 percent has been allocated to the North Dakota electric system.
- Lightning Protection – Transmission lines built with out shield wire, which was historically a standard practice, are more susceptible to lightning strikes during thunderstorms causing momentary outages to the line and connected customers. This project involves attaching a surge arrester to the top phase of the transmission line to allow lightning strike on the high voltage transmission line to safely reach the ground and reduce outages. This is an ongoing project

throughout the system. In 2019, arrestors will be installed on the 60 kV Tioga to Kincaid transmission line at an estimated cost of \$420,000 and planned completion in September 2019. Installation of the arrestors will avoid rebuilding the line in order to provide the same protection. This transmission line is directly assigned to North Dakota electric operations and therefore the surge arrestors included in this TCA are also directly assigned to North Dakota.

VI. Estimated Impact by Customer Class

As shown in Exhibit 2, Montana-Dakota’s projected costs to be recovered under the TCA rates as allocated to North Dakota are \$9,212,891. A residential customer using 894 Kwh a month would see an increase of \$0.25 per month under the proposed TCA rates or an increase of \$3.00 annually. Montana-Dakota requests approval of the following TCA rates to be effective November 1, 2019:

| | Proposed Rate | Current Rate | Change |
|--------------------------------------|------------------|-----------------|-----------|
| Residential & Small General Rate/Kwh | \$0.00474 | \$0.00446 | \$0.00028 |
| Large General & Contracts/Kwh | \$0.00390 | \$0.00372 | \$0.00018 |
| Lighting/Kwh | \$0.00234 | \$0.00209 | \$0.00025 |

Montana-Dakota has included as Exhibit 7 a Customer Notice to be included with customer’s bills starting thirty days from date of filing in accordance with NDCC § 69-09-02-02.1 requiring a notice to be provided to customers, within thirty days after filing, informing customers of the Company’s request to update rates.

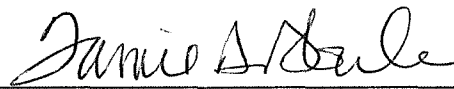
Montana-Dakota is submitting a check in the amount of \$10,000. Montana-Dakota respectfully requests the Commission reduce the required \$100,000 filing fee

pursuant to NDCC §49-05-04.3.2d which states the North Dakota Public Service Commission may waive or reduce the fee.

VII. Conclusion

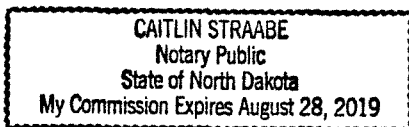
Montana-Dakota respectfully requests that the Commission approve this annual update to the Company's TCA rates to be effective with service rendered on and after November 1, 2019.

Dated this 19th day of July 2019



Tamie A. Aberle
Director of Regulatory Affairs

Subscribed and sworn to before me this 19th day of July 2019



Caitlin Straabe, Notary Public
Burleigh County, North Dakota
My Commission Expires: 08/28/2019

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

Exhibit 1



Montana-Dakota Utilities Co.

A Subsidiary of MDU Resources Group, Inc.

400 N 4th Street
Bismarck, ND 58501

State of North Dakota Electric Rate Schedule

NDPSC Volume 4
8th Revised Sheet No. 43.1
7th Revised Sheet No. 43.1

TRANSMISSION COST ADJUSTMENT Rate 59

Page 2 of 2

- d. The true-up will reflect any over or under collection of revenue under the Transmission Adjustment from the preceding twelve month 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. Transmission Cost Adjustment Rate by class:

| | |
|-----------------------------|----------------|
| Residential & Small General | 0.474¢ per Kwh |
| Large General | 0.390¢ per Kwh |
| Lighting | 0.234¢ per Kwh |

Date Filed: July 19, 2019

Effective Date:

Issued By: Tamie A. Aberle
Director - Regulatory Affairs

Case No.:

Tariff Reflecting Proposed Changes



Montana-Dakota Utilities Co.

A Subsidiary of MDU Resources Group, Inc.

400 N 4th Street
Bismarck, ND 58501

State of North Dakota Electric Rate Schedule

NDPSC Volume 4

7th Revised Sheet No. 43.1

6th Revised Sheet No. 43.1

TRANSMISSION COST ADJUSTMENT Rate 59

Page 2 of 2

- d. The true-up will reflect any over or under collection of revenue under the Transmission Adjustment from the preceding twelve month 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. Transmission Cost Adjustment Rate by class:

| | |
|-----------------------------|---------------------|
| Residential & Small General | 0.4460.474¢ per Kwh |
| Large General | 0.3720.390¢ per Kwh |
| Lighting | 0.2090.234¢ per Kwh |

Date Filed: November 1, 2018

Effective Date: Service rendered on and
after March 1, 2019

Issued By: Tamie A. Aberle
Director - Regulatory Affairs

Case No.: PU-18-379

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Cost Adjustment
Proposed TCA Rates

| | <u>Total</u> | <u>Residential & Small General</u> | <u>Large General</u> | <u>Lighting</u> |
|---|------------------|--|--------------------------|-------------------------|
| Projected Costs to be Recovered | | | | |
| Net Expense 1/ 2/ | \$8,113,201 | \$3,811,271 | \$4,264,179 | \$37,751 |
| Transmission Projects' Revenue Requirement 3/ | 1,539,964 | 723,417 | 809,382 | 7,165 |
| Under/(Over) Balance 4/ | <u>(440,274)</u> | <u>(206,823)</u> | <u>(231,402)</u> | <u>(2,049)</u> |
| Net Transmission Expense | \$9,212,891 | \$4,327,865 | \$4,842,159 | \$42,867 |
| Projected Kwh 5/ | 2,169,403,178 | 911,741,575 | 1,239,361,603 | 17,928,680 |
| Proposed TCA Rate per Kwh | | | | |
| Revenue Requirement per Kwh | | \$0.00497 | \$0.00409 | \$0.00245 |
| Amortization per Kwh | | <u>(0.00023)</u> | <u>(0.00019)</u> | <u>(0.00011)</u> |
| Proposed TCA Rate per Kwh | | 0.00474 | 0.00390 | 0.00234 |
| Current TCA Rate per Kwh 6/ | | | | |
| Revenue Requirement per Kwh | | \$0.00426 | \$0.00355 | \$0.00200 |
| Amortization per Kwh 7/ | | <u>0.00020</u> | <u>0.00017</u> | <u>0.00009</u> |
| Current TCA Rate per Kwh | | 0.00446 | 0.00372 | 0.00209 |
| Change in TCA Rate | | <u><u>\$0.00028</u></u> | <u><u>\$0.00018</u></u> | <u><u>\$0.00025</u></u> |

1/ Exhibit 3

2/ Demand Allocation Factor 2

| | | |
|-----------------------------|---------------------------|--|
| Residential & Small General | 46.976176% | (Rates 10, 13, 16, 20, 25, 26, and 40) |
| Large General | 52.558524% | (Rates 30, 31, 32, 38, and 48) |
| Lighting | 0.465300% | (Rates 41, 52) |
| | <u><u>100.000000%</u></u> | |

3/ Exhibit 4

4/ Exhibit 5

5/ Projected Kwh sales.

6/ Current TCA rates effective March 1, 2019.

7/ Amortization rate per Kwh as authorized in Docket No. PU-18-379.

Montana-Dakota Utilities Co.
Transmission Cost Adjustment
Summary of Revenue and Expenses Allocated to North Dakota
Projected Twelve Months Ending June 2020

| | 2019 | | | | | | 2020 | | | | | | Total |
|----------------------------|----------|----------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-------------|
| | July | August | September | October | November | December | January | February | March | April | May | June | |
| Facility Sharing Agreement | \$20,333 | \$20,333 | \$20,333 | \$20,333 | \$20,333 | \$20,337 | \$20,333 | \$20,333 | \$20,333 | \$20,333 | \$20,333 | \$20,333 | \$244,000 |
| MISO | | | | | | | | | | | | | |
| Revenue/Credits | | | | | | | | | | | | | |
| Schedule 1 | 2,921 | 2,921 | 2,921 | 2,921 | 2,921 | 2,921 | 2,921 | 2,921 | 2,921 | 2,921 | 2,921 | 2,919 | 35,050 |
| Schedule 2 | 27,819 | 27,819 | 27,819 | 27,819 | 27,819 | 27,819 | 27,819 | 27,819 | 27,819 | 27,819 | 27,819 | 27,816 | 333,825 |
| Schedule 7 | 107,817 | 107,817 | 107,817 | 107,817 | 107,817 | 107,817 | 107,817 | 107,817 | 107,817 | 107,817 | 107,817 | 107,822 | 1,293,809 |
| Schedule 8 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,458 | 2,459 | 29,497 |
| Schedule 9 | 325,163 | 325,163 | 325,163 | 325,163 | 325,163 | 325,163 | 325,163 | 325,163 | 325,163 | 325,163 | 325,163 | 325,157 | 3,901,950 |
| NITS Cust Rev Req. | (55,540) | (55,540) | (55,540) | (55,540) | (55,540) | (55,540) | (55,540) | (55,540) | (55,540) | (55,540) | (55,540) | (55,537) | (666,477) |
| Schedule 24 | 65,569 | 65,569 | 65,569 | 65,569 | 65,569 | 65,569 | 65,569 | 65,569 | 65,569 | 65,569 | 65,569 | 65,571 | 786,830 |
| Schedule 26 | 96,024 | 96,024 | 96,024 | 96,024 | 96,024 | 96,027 | 96,024 | 96,024 | 96,024 | 96,024 | 96,024 | 96,024 | 1,152,291 |
| | 572,231 | 572,231 | 572,231 | 572,231 | 572,231 | 572,234 | 572,231 | 572,231 | 572,231 | 572,231 | 572,231 | 572,231 | 6,866,775 |
| Charges | | | | | | | | | | | | | |
| Schedule 10 | | | | | | | | | | | | | |
| MISO - FERC Energy | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 47,093 | 565,116 |
| MISO - FERC Demand | 3,485 | 3,485 | 3,485 | 3,485 | 3,485 | 3,485 | 3,485 | 3,485 | 3,485 | 3,485 | 3,485 | 3,479 | 41,814 |
| FERC Direct | 9,868 | 9,868 | 9,868 | 9,868 | 9,868 | 9,868 | 9,868 | 9,868 | 9,868 | 9,868 | 9,868 | 9,862 | 118,410 |
| | 60,446 | 60,446 | 60,446 | 60,446 | 60,446 | 60,446 | 60,446 | 60,446 | 60,446 | 60,446 | 60,446 | 60,434 | 725,340 |
| Schedule 26 | 214,898 | 214,898 | 214,898 | 214,898 | 214,898 | 214,898 | 212,149 | 212,149 | 212,149 | 212,149 | 212,149 | 212,149 | 2,562,282 |
| Schedule 26A | 523,816 | 490,662 | 463,454 | 448,819 | 510,863 | 575,890 | 574,107 | 539,140 | 505,652 | 457,582 | 444,396 | 450,371 | 5,984,752 |
| A&G Retail Rate Credit | (95,593) | (95,593) | (95,593) | (95,593) | (95,593) | (95,593) | (95,593) | (95,593) | (95,593) | (95,593) | (95,593) | (95,592) | (1,147,115) |
| | 703,567 | 670,413 | 643,205 | 628,570 | 690,614 | 755,641 | 751,109 | 716,142 | 682,654 | 634,584 | 621,398 | 627,362 | 8,125,259 |

Montana-Dakota Utilities Co.
Transmission Cost Adjustment
Summary of Revenue and Expenses Allocated to North Dakota
Projected Twelve Months Ending June 2020

| | 2019 | | | | | | 2020 | | | | | | Total |
|--------------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| | July | August | September | October | November | December | January | February | March | April | May | June | |
| SPP | | | | | | | | | | | | | |
| Revenue/Credits | | | | | | | | | | | | | |
| Facility Credits | 859,997 | 859,997 | 859,997 | 859,997 | 859,997 | 859,991 | 859,997 | 859,997 | 859,997 | 859,997 | 859,997 | 859,997 | 10,319,958 |
| Charges | | | | | | | | | | | | | |
| Schedule 1 | 49,536 | 49,536 | 49,536 | 49,536 | 49,536 | 49,538 | 49,536 | 49,536 | 49,536 | 49,536 | 49,536 | 49,536 | 594,434 |
| Schedule 1a | 89,067 | 89,067 | 89,067 | 89,067 | 89,067 | 89,068 | 89,067 | 89,067 | 89,067 | 89,067 | 89,067 | 89,067 | 1,068,805 |
| Schedule 9 | 1,412,199 | 1,412,199 | 1,412,199 | 1,412,199 | 1,412,199 | 1,412,202 | 1,412,199 | 1,412,199 | 1,412,199 | 1,412,199 | 1,412,199 | 1,412,199 | 16,946,391 |
| Schedule 11 | 169,283 | 169,283 | 169,283 | 169,283 | 169,283 | 169,286 | 169,283 | 169,283 | 169,283 | 169,283 | 169,283 | 169,283 | 2,031,399 |
| Schedule 12 | 8,629 | 8,629 | 8,629 | 8,629 | 8,629 | 8,625 | 8,629 | 8,629 | 8,629 | 8,629 | 8,629 | 8,629 | 103,544 |
| | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,719</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>1,728,714</u> | <u>20,744,573</u> |
| Total Company Revenue/Credits | | | | | | | | | | | | | |
| Facility Sharing | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 20,337 | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 244,000 |
| MISO | 572,231 | 572,231 | 572,231 | 572,231 | 572,231 | 572,234 | 572,231 | 572,231 | 572,231 | 572,231 | 572,231 | 572,231 | 6,866,775 |
| SPP | 859,997 | 859,997 | 859,997 | 859,997 | 859,997 | 859,991 | 859,997 | 859,997 | 859,997 | 859,997 | 859,997 | 859,997 | 10,319,958 |
| | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,562</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>1,452,561</u> | <u>17,430,733</u> |
| Allocated to ND 1/ | 1,030,231 | 1,030,231 | 1,030,231 | 1,030,231 | 1,030,231 | 1,030,232 | 1,030,231 | 1,030,231 | 1,030,231 | 1,030,231 | 1,030,231 | 1,030,231 | 12,362,773 |
| Total Company Charges | | | | | | | | | | | | | |
| MISO | 703,567 | 670,413 | 643,205 | 628,570 | 690,614 | 755,641 | 751,109 | 716,142 | 682,654 | 634,584 | 621,398 | 627,362 | 8,125,259 |
| SPP | 1,728,714 | 1,728,714 | 1,728,714 | 1,728,714 | 1,728,714 | 1,728,719 | 1,728,714 | 1,728,714 | 1,728,714 | 1,728,714 | 1,728,714 | 1,728,714 | 20,744,573 |
| | <u>2,432,281</u> | <u>2,399,127</u> | <u>2,371,919</u> | <u>2,357,284</u> | <u>2,419,328</u> | <u>2,484,360</u> | <u>2,479,823</u> | <u>2,444,856</u> | <u>2,411,368</u> | <u>2,363,298</u> | <u>2,350,112</u> | <u>2,356,076</u> | <u>28,869,832</u> |
| Allocated to ND 1/ | 1,725,099 | 1,701,585 | 1,682,287 | 1,671,907 | 1,715,912 | 1,762,036 | 1,758,818 | 1,734,018 | 1,710,267 | 1,676,173 | 1,666,821 | 1,671,051 | 20,475,974 |
| Net ND Expense | <u>\$694,868</u> | <u>\$671,354</u> | <u>\$652,056</u> | <u>\$641,676</u> | <u>\$685,681</u> | <u>\$731,804</u> | <u>\$728,587</u> | <u>\$703,787</u> | <u>\$680,036</u> | <u>\$645,942</u> | <u>\$636,590</u> | <u>\$640,820</u> | <u>\$8,113,201</u> |

1/ Allocated to ND on Factor 15 Integrated System 12 Month Peak Demand: 70.925157%

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Index of Revenue Requirement Schedules**

| <u>Project</u> | <u>Page #'s</u> |
|--------------------------------------|-----------------|
| Total Projects | Pages 2 - 3 |
| Bowdle Substation and Lines | Pages 4 - 7 |
| Leola Substation | Pages 8 - 11 |
| Dickinson Breaker and Lines | Pages 12 - 15 |
| Watford City Substation and Lines | Pages 16 - 19 |
| Richland to WAPA Reconductor Circuit | Pages 20 - 23 |
| Lightning Protection | Pages 24 - 27 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Transmission Projects Total
Projected 2019

| | Projected | | | | | | | | | | | | Average Balance |
|----------------------------|----------------|----------------|----------------|----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|------------------|------------------|--------------------|
| | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | June 2019 | July 2019 | Aug 2019 | Sept 2019 | Oct 2019 | Nov 2019 | Dec 2019 | |
| Rate Base | | | | | | | | | | | | | |
| Plant Balance | | | | | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,665,159 | \$3,461,178 | \$12,898,127 | \$19,679,594 | |
| Accumulated Depreciation | | | | | 0 | 2,980 | 5,960 | 8,940 | 11,920 | 15,433 | 50,960 | 69,583 | |
| Net Plant in Service | \$0 | \$0 | \$0 | \$0 | \$2,247,091 | \$2,244,111 | \$2,241,131 | \$2,238,151 | \$2,653,239 | \$3,445,745 | \$12,847,167 | \$19,610,011 | \$3,960,554 |
| Accum Def Income Taxes | \$13,055 | \$25,020 | \$35,776 | \$45,363 | \$53,741 | \$60,950 | \$66,952 | \$71,746 | \$75,371 | \$77,788 | \$79,036 | \$79,075 | |
| Total Rate Base | (\$13,055) | (\$25,020) | (\$35,776) | (\$45,363) | \$2,193,350 | \$2,183,161 | \$2,174,179 | \$2,166,405 | \$2,577,868 | \$3,367,957 | \$12,768,131 | \$19,530,936 | \$3,903,564 |
| Return on Rate Base | (\$80) | (\$153) | (\$220) | (\$278) | \$13,460 | \$13,396 | \$13,343 | \$13,294 | \$15,820 | \$20,669 | \$78,353 | \$119,856 | \$287,460 |
| Expenses | | | | | | | | | | | | | Year End |
| Depreciation | | | | | | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$3,513 | \$4,528 | \$18,623 | \$38,584 |
| Taxes Other Than Income | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 87,408 |
| Total Expenses | \$7,284 | \$7,284 | \$7,284 | \$7,284 | \$7,284 | \$10,264 | \$10,264 | \$10,264 | \$10,264 | \$10,797 | \$11,812 | \$25,907 | \$125,992 |
| Income before Taxes | (\$7,284) | (\$7,284) | (\$7,284) | (\$7,284) | (\$7,284) | (\$10,264) | (\$10,264) | (\$10,264) | (\$10,264) | (\$10,797) | (\$11,812) | (\$25,907) | (\$125,992) |
| Interest Expense | (26) | (49) | (70) | (89) | 4,302 | 4,282 | 4,265 | 4,249 | 5,056 | 6,607 | 25,046 | 38,313 | 91,886 |
| Taxable income | (\$7,258) | (\$7,235) | (\$7,214) | (\$7,195) | (\$11,586) | (\$14,546) | (\$14,529) | (\$14,513) | (\$15,320) | (\$17,404) | (\$36,858) | (\$64,220) | (\$217,878) |
| Income Taxes | (\$1,772) | (\$1,766) | (\$1,762) | (\$1,755) | (\$2,827) | (\$3,549) | (\$3,546) | (\$3,542) | (\$3,738) | (\$4,248) | (\$8,996) | (\$15,673) | (\$53,174) |
| Operating Income | (\$5,512) | (\$5,518) | (\$5,522) | (\$5,529) | (\$4,457) | (\$6,715) | (\$6,718) | (\$6,722) | (\$6,526) | (\$6,549) | (\$2,816) | (\$10,234) | (\$72,818) |
| Revenue Requirement | \$7,186 | \$7,097 | \$7,014 | \$6,945 | \$23,701 | \$26,604 | \$26,537 | \$26,478 | \$29,561 | \$36,005 | \$107,374 | \$172,089 | \$476,591 |

Note: The revenue requirement information above and on page 3 is summarized from the individual projects shown on pages 4 - 27.

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Transmission Projects Total
Projected 2020**

| | Projected | | | | | | Average Balance |
|----------------------------|------------------|------------------|------------------|------------------|------------------|------------------|---|
| | Jan 2020 | Feb 2020 | Mar 2020 | Apr 2020 | May 2020 | June 2020 | |
| Rate Base | | | | | | | |
| Plant Balance | \$19,679,594 | \$19,679,594 | \$19,679,594 | \$19,679,594 | \$19,679,594 | \$19,679,594 | |
| Accumulated Depreciation | 95,169 | 120,755 | 146,341 | 171,927 | 197,513 | 223,099 | |
| Net Plant in Service | \$19,584,425 | \$19,558,839 | \$19,533,253 | \$19,507,667 | \$19,482,081 | \$19,456,495 | \$19,520,460 |
| Accum Def Income Taxes | \$191,476 | \$210,526 | \$227,652 | \$242,918 | \$256,258 | \$267,735 | |
| Total Rate Base | \$19,392,949 | \$19,348,313 | \$19,305,601 | \$19,264,749 | \$19,225,823 | \$19,188,760 | \$19,287,699 |
| Return on Rate Base | \$119,008 | \$118,734 | \$118,471 | \$118,221 | \$117,982 | \$117,754 | \$710,170 |
| Expenses | | | | | | | Year To Date |
| Depreciation | \$25,586 | \$25,586 | \$25,586 | \$25,586 | \$25,586 | \$25,586 | \$153,516 |
| Taxes Other Than Income | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 7,284 | 43,704 |
| Total Expenses | \$32,870 | \$32,870 | \$32,870 | \$32,870 | \$32,870 | \$32,870 | \$197,220 |
| Income before Taxes | (\$32,870) | (\$32,870) | (\$32,870) | (\$32,870) | (\$32,870) | (\$32,870) | (\$197,220) |
| Interest Expense | 38,043 | 37,954 | 37,873 | 37,790 | 37,713 | 37,642 | 227,015 |
| Taxable income | (\$70,913) | (\$70,824) | (\$70,743) | (\$70,660) | (\$70,583) | (\$70,512) | (\$424,235) |
| Income Taxes | (\$17,306) | (\$17,286) | (\$17,264) | (\$17,243) | (\$17,226) | (\$17,208) | (\$103,533) |
| Operating Income | (\$15,564) | (\$15,584) | (\$15,606) | (\$15,627) | (\$15,644) | (\$15,662) | (\$93,687) |
| Revenue Requirement | \$178,018 | \$177,681 | \$177,362 | \$177,059 | \$176,765 | \$176,488 | \$1,063,373 |
| | | | | | | | 2019 Revenue Requirement (page 2): \$476,591 |
| | | | | | | | Total Projected Revenue Requirement: \$1,539,964 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Bowdle Substation & Lines
Projected 2019

| | Projected | | | | | | | | | | | | Average Balance | |
|-------------------------------|--------------|--------------|--------------|--------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|--------------------|------------|
| | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | June 2019 | July 2019 | Aug 2019 | Sept 2019 | Oct 2019 | Nov 2019 | Dec 2019 | | |
| Rate Base | | | | | | | | | | | | | | |
| Plant Balance 1/ | | | | | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | |
| Accumulated Depreciation | | | | | | 2,980 | 5,960 | 8,940 | 11,920 | 14,900 | 17,880 | 20,860 | | |
| Net Plant in Service | \$0 | \$0 | \$0 | \$0 | \$2,247,091 | \$2,244,111 | \$2,241,131 | \$2,238,151 | \$2,235,171 | \$2,232,191 | \$2,229,211 | \$2,226,231 | \$1,491,107 | |
| Accum Def Income Taxes 3/ | \$1,184 | \$2,269 | \$3,244 | \$4,113 | \$4,873 | \$5,527 | \$6,071 | \$6,506 | \$6,835 | \$7,054 | \$7,167 | \$7,170 | | |
| Total Rate Base | (\$1,184) | (\$2,269) | (\$3,244) | (\$4,113) | \$2,242,218 | \$2,238,584 | \$2,235,060 | \$2,231,645 | \$2,228,336 | \$2,225,137 | \$2,222,044 | \$2,219,061 | \$1,485,940 | |
| Return on Rate Base 5/ | (\$7) | (\$14) | (\$20) | (\$25) | \$13,760 | \$13,737 | \$13,716 | \$13,695 | \$13,675 | \$13,655 | \$13,636 | \$13,618 | \$109,426 | |
| Expenses | | | | | | | | | | | | | Year End | |
| Depreciation 2/ | | | | | | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$20,860 |
| Taxes Other Than Income 4/ | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 765 | 765 | 9,213 |
| Total Expenses | \$768 | \$768 | \$768 | \$768 | \$768 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,745 | \$3,745 | \$30,073 |
| Income before Taxes | (\$768) | (\$768) | (\$768) | (\$768) | (\$768) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,745) | (\$3,745) | (\$30,073) |
| Interest Expense 5/ | (2) | (4) | (6) | (8) | 4,398 | 4,391 | 4,384 | 4,378 | 4,371 | 4,365 | 4,359 | 4,353 | 34,979 | |
| Taxable income | (\$766) | (\$764) | (\$762) | (\$760) | (\$5,166) | (\$8,139) | (\$8,132) | (\$8,126) | (\$8,119) | (\$8,113) | (\$8,107) | (\$8,098) | (\$85,052) | |
| Income Taxes 6/ | (\$187) | (\$186) | (\$186) | (\$185) | (\$1,261) | (\$1,986) | (\$1,985) | (\$1,983) | (\$1,981) | (\$1,980) | (\$1,979) | (\$1,976) | (\$15,875) | |
| Operating Income | (\$581) | (\$582) | (\$582) | (\$583) | \$493 | (\$1,762) | (\$1,763) | (\$1,765) | (\$1,767) | (\$1,768) | (\$1,769) | (\$1,769) | (\$14,198) | |
| Revenue Requirement | \$759 | \$751 | \$743 | \$738 | \$17,550 | \$20,503 | \$20,476 | \$20,451 | \$20,427 | \$20,402 | \$20,378 | \$20,355 | \$163,533 | |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Bowdle Substation & Lines
Projected 2019**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Plant in Service, placed in service date May 2019:

Note: The substation was built to support both the local Bowdle and surrounding areas, and to support the integrated electrical transmission system. 55% of the substation was built to support the integrated electrical transmission system.

| | | | | |
|----------------------------|-------------------|----------------------------|-------------------|--|
| Substation: | \$5,611,911 | | | |
| Integrated %: | <u>55.00%</u> | | | |
| Substation: | \$3,086,551 | Lines: | \$81,706 | |
| ND Demand Allocation (15): | <u>70.925157%</u> | ND Demand Allocation (15): | <u>70.925157%</u> | |
| | \$2,189,141 | | \$57,950 | |

2/ Depreciation: (Depreciation booked on prior month plant balance, starts booking in June)

| | | | |
|----------------------|--------------|----------------------|--------------|
| Plant (ND Alloc.): | \$2,189,141 | Plant (ND Alloc.): | \$57,950 |
| Depreciation Rate: | <u>1.58%</u> | Depreciation Rate: | <u>2.03%</u> |
| Annual Depreciation: | \$34,588 | Annual Depreciation: | \$1,176 |
| Monthly: | \$2,882 | Monthly: | \$98 |

3/ Deferred income tax, based on Half Year Convention, 20-year asset:

2019 year end plant balance: \$2,247,091
 Tax Depreciation Rate: 3.75%
 Tax Depreciation: 84,266
 Book Depreciation: 20,860
 Remainder: 63,406
 Income Tax Rate: 24.40%
 Deferred Income Tax: 15,474
 Monthly: \$1,290

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|-------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 1,184 | 1,085 | 975 | 869 | 760 | 654 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 544 | 435 | 329 | 219 | 113 | 3 | 7,170 |

4/ Property Tax:

Year End Plant Balance: \$3,168,257
 Effective Rate: 0.41% (Ad Valorem - Transmission)
 Property Tax: 12,990
 ND Demand Allocation (15): 70.925157%
 Annual Property Tax: 9,213
 Monthly: \$768

5/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | |
|------------------|----------------|---------------|---------------|
| Long Term Debt | 42.673% | 5.245% | 2.238% |
| Short Term Debt | 4.840% | 2.402% | 0.116% |
| Preferred Equity | 1.084% | 4.579% | 0.050% |
| Common Equity | <u>51.403%</u> | <u>9.650%</u> | <u>4.960%</u> |
| | 100.000% | | 7.364% |

6/ Tax Rate 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%)
 1- tax rate 75.60%
 Gross Revenue Conversion Factor 1.32284

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Bowdle Substation & Lines
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 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 | \$2,247,091 |
| Accumulated Depreciation | 23,840 | 26,820 | 29,800 | 32,780 | 35,760 | 38,740 | 41,720 | 44,700 | 47,680 | 50,660 | 53,640 | 56,620 | |
| Net Plant in Service | \$2,223,251 | \$2,220,271 | \$2,217,291 | \$2,214,311 | \$2,211,331 | \$2,208,351 | \$2,205,371 | \$2,202,391 | \$2,199,411 | \$2,196,431 | \$2,193,451 | \$2,190,471 | \$2,206,861 |
| Accum Def Income Taxes 2/ | \$17,835 | \$19,998 | \$21,943 | \$23,677 | \$25,192 | \$26,495 | \$27,580 | \$28,447 | \$29,102 | \$29,539 | \$29,765 | \$29,772 | |
| Total Rate Base | \$2,205,416 | \$2,200,273 | \$2,195,348 | \$2,190,634 | \$2,186,139 | \$2,181,856 | \$2,177,791 | \$2,173,944 | \$2,170,309 | \$2,166,892 | \$2,163,686 | \$2,160,699 | \$2,181,082 |
| Return on Rate Base 4/ | \$13,534 | \$13,502 | \$13,472 | \$13,443 | \$13,416 | \$13,389 | \$13,364 | \$13,341 | \$13,318 | \$13,297 | \$13,278 | \$13,259 | \$160,613 |
| Expenses | | | | | | | | | | | | | Year End |
| Depreciation 1/ | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$2,980 | \$35,760 |
| Taxes Other Than Income 3/ | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 768 | 765 | 9,213 |
| Total Expenses | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,748 | \$3,745 | \$44,973 |
| Income before Taxes | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,748) | (\$3,745) | (\$44,973) |
| Interest Expense 4/ | 4,326 | 4,316 | 4,307 | 4,297 | 4,288 | 4,280 | 4,272 | 4,265 | 4,257 | 4,251 | 4,244 | 4,239 | 51,342 |
| Taxable income | (\$8,074) | (\$8,064) | (\$8,055) | (\$8,045) | (\$8,036) | (\$8,028) | (\$8,020) | (\$8,013) | (\$8,005) | (\$7,999) | (\$7,992) | (\$7,984) | (\$96,315) |
| Income Taxes 5/ | (\$1,970) | (\$1,968) | (\$1,966) | (\$1,963) | (\$1,961) | (\$1,959) | (\$1,957) | (\$1,956) | (\$1,954) | (\$1,952) | (\$1,950) | (\$1,948) | (\$23,504) |
| Operating Income | (\$1,778) | (\$1,780) | (\$1,782) | (\$1,785) | (\$1,787) | (\$1,789) | (\$1,791) | (\$1,792) | (\$1,794) | (\$1,796) | (\$1,798) | (\$1,797) | (\$21,469) |
| Revenue Requirement | \$20,255 | \$20,216 | \$20,179 | \$20,144 | \$20,111 | \$20,078 | \$20,048 | \$20,019 | \$19,991 | \$19,966 | \$19,943 | \$19,917 | \$240,867 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Bowdle Substation & Lines
Projected 2020**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Depreciation:

| | | | |
|----------------------|-------------|----------------------|----------|
| Plant (ND Alloc.): | \$2,189,141 | Plant (ND Alloc.): | \$57,950 |
| Depreciation Rate: | 1.58% | Depreciation Rate: | 2.03% |
| Annual Depreciation: | \$34,588 | Annual Depreciation: | \$1,176 |
| Monthly: | \$2,882 | Monthly: | \$98 |

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|-------------|
| 2020 year end plant balance: | \$2,247,091 |
| Tax Depreciation Rate: | 7.219% |
| Tax Depreciation: | 162,217 |
| Book Depreciation: | 35,760 |
| Remainder: | 126,457 |
| Income Tax Rate: | 24.40% |
| Deferred Income Tax: | 30,862 |
| Monthly: | \$2,572 |

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|--------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 2,361 | 2,163 | 1,945 | 1,734 | 1,515 | 1,303 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 1,085 | 867 | 655 | 437 | 226 | 7 | 14,298 |

3/ Property Tax:

| | |
|----------------------------|-----------------------------------|
| Year End Plant Balance: | \$3,168,257 |
| Effective Rate: | 0.41% (Ad Valorem - Transmission) |
| Property Tax: | 12,990 |
| ND Demand Allocation (15): | 70.925157% |
| Annual Property Tax: | 9,213 |
| Monthly: | \$768 |

4/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | |
|------------------|----------|--------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% |
| Short Term Debt | 4.840% | 2.402% | 0.116% |
| Preferred Equity | 1.084% | 4.579% | 0.050% |
| Common Equity | 51.403% | 9.650% | 4.960% |
| | 100.000% | | 7.364% |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Leola Substation
Projected 2019**

| | Projected | | | | | | | | | | | | Average Balance | |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------------|--------------------|-----------------|
| | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | June 2019 | July 2019 | Aug 2019 | Sept 2019 | Oct 2019 | Nov 2019 | Dec 2019 | | |
| Rate Base | | | | | | | | | | | | | | |
| Plant Balance 1/ | | | | | | | | | | | | \$2,596,883 | | |
| Accumulated Depreciation | | | | | | | | | | | | 0 | | |
| Net Plant in Service | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$2,596,883 | \$216,407 | |
| Accum Def Income Taxes 2/ | \$1,818 | \$3,484 | \$4,982 | \$6,317 | \$7,484 | \$8,488 | \$9,324 | \$9,992 | \$10,497 | \$10,834 | \$11,008 | \$11,013 | | |
| Total Rate Base | (\$1,818) | (\$3,484) | (\$4,982) | (\$6,317) | (\$7,484) | (\$8,488) | (\$9,324) | (\$9,992) | (\$10,497) | (\$10,834) | (\$11,008) | \$2,585,870 | \$208,470 | |
| Return on Rate Base 4/ | (\$11) | (\$21) | (\$31) | (\$39) | (\$46) | (\$52) | (\$57) | (\$61) | (\$64) | (\$66) | (\$68) | \$15,869 | \$15,353 | |
| Expenses | | | | | | | | | | | | | | |
| Depreciation | | | | | | | | | | | | | \$0 | Year End \$0 |
| Taxes Other Than Income 3/ | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 842 | 10,082 | |
| Total Expenses | \$840 | \$840 | \$840 | \$840 | \$840 | \$840 | \$840 | \$840 | \$840 | \$840 | \$840 | \$842 | \$10,082 | |
| Income before Taxes | (\$840) | (\$840) | (\$840) | (\$840) | (\$840) | (\$840) | (\$840) | (\$840) | (\$840) | (\$840) | (\$840) | (\$842) | (\$10,082) | |
| Interest Expense 4/ | (4) | (7) | (10) | (12) | (15) | (17) | (18) | (20) | (21) | (21) | (22) | 5,073 | 4,906 | |
| Taxable income | (\$836) | (\$833) | (\$830) | (\$828) | (\$825) | (\$823) | (\$822) | (\$820) | (\$819) | (\$819) | (\$818) | (\$5,915) | (\$14,988) | |
| Income Taxes 5/ | (\$204) | (\$203) | (\$203) | (\$202) | (\$201) | (\$201) | (\$201) | (\$200) | (\$200) | (\$200) | (\$200) | (\$1,444) | (\$3,659) | |
| Operating Income | (\$636) | (\$637) | (\$637) | (\$638) | (\$639) | (\$639) | (\$639) | (\$640) | (\$640) | (\$640) | (\$640) | \$602 | (\$6,423) | |
| Revenue Requirement | \$827 | \$815 | \$802 | \$792 | \$784 | \$777 | \$770 | \$766 | \$762 | \$759 | \$757 | \$20,196 | \$28,807 | |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Leola Substation
Projected 2019**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Plant in Service, estimated in service date December 2019:

Note: The substation is being built to support both the local Leloa and surrounding areas, and to support the integrated electrical transmission system. 2,500,800 of the substation is being built to support the integrated electrical transmission system, with a total estimated cost of \$5,146,593.

| | |
|----------------------------|--------------------|
| Ellendale Ring Bus: | \$1,138,218 |
| Leola Substation: | 2,500,800 |
| Node: | 22,423 |
| Total: | \$3,661,441 |
| ND Demand Allocation (15): | 70.925157% |
| | \$2,596,883 |

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|-------------|
| 2019 year end plant balance: | \$2,596,883 |
| Tax Depreciation Rate: | 3.75% |
| Tax Depreciation: | 97,383 |
| Book Depreciation: | 0 |
| Remainder: | 97,383 |
| Income Tax Rate: | 24.40% |
| Deferred Income Tax: | 23,766 |
| Monthly: | \$1,981 |

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|--------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 1,818 | 1,666 | 1,498 | 1,335 | 1,167 | 1,004 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 836 | 668 | 505 | 337 | 174 | 5 | 11,013 |

3/ Property Tax:

| | ND | SD |
|----------------------------|-------------|-----------------------------------|
| Year End Plant Balance: | \$1,138,218 | \$2,523,223 |
| Effective Rate: | 0.34% | 0.41% (Ad Valorem - Transmission) |
| Property Tax: | 3,870 | 10,345 |
| ND Demand Allocation (15): | 70.925157% | 70.925157% |
| Annual Property Tax: | 2,745 | 7,337 |
| Monthly: | \$229 | \$611 |

4/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | |
|------------------|----------|--------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% |
| Short Term Debt | 4.840% | 2.402% | 2.354% |
| Preferred Equity | 1.084% | 4.579% | 0.050% |
| Common Equity | 51.403% | 9.650% | 4.960% |
| | 100.000% | 7.364% | |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Leola Substation
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 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 | \$2,596,883 |
| Accumulated Depreciation | 3,419 | 6,838 | 10,257 | 13,676 | 17,095 | 20,514 | 23,933 | 27,352 | 30,771 | 34,190 | 37,609 | 41,028 | |
| Net Plant in Service | \$2,593,464 | \$2,590,045 | \$2,586,626 | \$2,583,207 | \$2,579,788 | \$2,576,369 | \$2,572,950 | \$2,569,531 | \$2,566,112 | \$2,562,693 | \$2,559,274 | \$2,555,855 | \$2,574,660 |
| Accum Def Income Taxes 2/ | \$26,499 | \$29,004 | \$31,256 | \$33,263 | \$35,017 | \$36,526 | \$37,782 | \$38,786 | \$39,545 | \$40,051 | \$40,312 | \$40,320 | |
| Total Rate Base | \$2,566,965 | \$2,561,041 | \$2,555,370 | \$2,549,944 | \$2,544,771 | \$2,539,843 | \$2,535,168 | \$2,530,745 | \$2,526,567 | \$2,522,642 | \$2,518,962 | \$2,515,535 | \$2,538,963 |
| Return on Rate Base 4/ | \$15,753 | \$15,716 | \$15,681 | \$15,648 | \$15,616 | \$15,586 | \$15,557 | \$15,530 | \$15,505 | \$15,481 | \$15,458 | \$15,437 | \$186,968 |
| Expenses | | | | | | | | | | | | | Year End |
| Depreciation 1/ | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$3,419 | \$41,028 |
| Taxes Other Than Income 3/ | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 840 | 842 | 10,082 |
| Total Expenses | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,259 | \$4,261 | \$51,110 |
| Income before Taxes | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,259) | (\$4,261) | (\$51,110) |
| Interest Expense 4/ | 5,036 | 5,024 | 5,013 | 5,002 | 4,992 | 4,982 | 4,973 | 4,964 | 4,956 | 4,949 | 4,941 | 4,935 | 59,767 |
| Taxable income | (\$9,295) | (\$9,283) | (\$9,272) | (\$9,261) | (\$9,251) | (\$9,241) | (\$9,232) | (\$9,223) | (\$9,215) | (\$9,208) | (\$9,200) | (\$9,196) | (\$110,877) |
| Income Taxes 5/ | (\$2,268) | (\$2,266) | (\$2,263) | (\$2,260) | (\$2,258) | (\$2,255) | (\$2,253) | (\$2,251) | (\$2,249) | (\$2,247) | (\$2,245) | (\$2,244) | (\$27,059) |
| Operating Income | (\$1,991) | (\$1,993) | (\$1,996) | (\$1,999) | (\$2,001) | (\$2,004) | (\$2,006) | (\$2,008) | (\$2,010) | (\$2,012) | (\$2,014) | (\$2,017) | (\$24,051) |
| Revenue Requirement | \$23,472 | \$23,426 | \$23,384 | \$23,344 | \$23,304 | \$23,269 | \$23,233 | \$23,200 | \$23,170 | \$23,140 | \$23,113 | \$23,089 | \$279,144 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Leola Substation
Projected 2020**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Depreciation:

| | |
|----------------------|-------------|
| Plant (ND Alloc.): | \$2,596,883 |
| Depreciation Rate: | 1.58% |
| Annual Depreciation: | \$41,031 |

Monthly: \$3,419

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|-------------|
| 2020 year end plant balance: | \$2,596,883 |
| Tax Depreciation Rate: | 7.219% |
| Tax Depreciation: | 187,469 |
| Book Depreciation: | 41,028 |
| Remainder: | 146,441 |
| Income Tax Rate: | 24.40% |
| Deferred Income Tax: | 35,739 |
| Monthly: | \$2,978 |

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|--------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 2,733 | 2,505 | 2,252 | 2,007 | 1,754 | 1,509 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 1,256 | 1,004 | 759 | 506 | 261 | 8 | 16,554 |

3/ Property Tax:

| | ND | SD | |
|----------------------------|-------------|-------------|-----------------------------|
| Year End Plant Balance: | \$1,138,218 | \$2,523,223 | |
| Effective Rate: | 0.34% | 0.41% | (Ad Valorem - Transmission) |
| Property Tax: | 3,870 | 10,345 | |
| ND Demand Allocation (15): | 70.925157% | 70.925157% | |
| Annual Property Tax: | 2,745 | 7,337 | |
| Monthly: | \$229 | \$611 | |

4/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | | |
|------------------|----------|--------|--------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% | |
| Short Term Debt | 4.840% | 2.402% | 0.116% | 2.354% |
| Preferred Equity | 1.084% | 4.579% | 0.050% | |
| Common Equity | 51.403% | 9.650% | 4.960% | |
| | 100.000% | | 7.364% | |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Dickinson Breaker & Lines
Projected 2019

| | Projected | | | | | | | | | | | | Average Balance |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|--------------------|
| | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | June 2019 | July 2019 | Aug 2019 | Sept 2019 | Oct 2019 | Nov 2019 | Dec 2019 | |
| Rate Base | | | | | | | | | | | | | |
| Plant Balance 1/ | | | | | | | | | | | | | \$4,184,584 |
| Accumulated Depreciation | | | | | | | | | | | | | 0 |
| Net Plant in Service | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$4,184,584 | \$348,715 |
| Accum Def Income Taxes 2/ | \$2,929 | \$5,613 | \$8,026 | \$10,177 | \$12,056 | \$13,673 | \$15,019 | \$16,094 | \$16,907 | \$17,449 | \$17,729 | \$17,738 | |
| Total Rate Base | (\$2,929) | (\$5,613) | (\$8,026) | (\$10,177) | (\$12,056) | (\$13,673) | (\$15,019) | (\$16,094) | (\$16,907) | (\$17,449) | (\$17,729) | \$4,166,846 | \$335,931 |
| Return on Rate Base 4/ | (\$18) | (\$34) | (\$49) | (\$62) | (\$74) | (\$84) | (\$92) | (\$99) | (\$104) | (\$107) | (\$109) | \$25,571 | \$24,739 |
| Expenses | | | | | | | | | | | | | Year End |
| Depreciation | | | | | | | | | | | | | \$0 |
| Taxes Other Than Income 3/ | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,182 | 14,228 |
| Total Expenses | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,186 | \$1,182 | \$14,228 |
| Income before Taxes | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,186) | (\$1,182) | (\$14,228) |
| Interest Expense 4/ | (6) | (11) | (16) | (20) | (24) | (27) | (29) | (32) | (33) | (34) | (35) | 8,174 | 7,907 |
| Taxable income | (\$1,180) | (\$1,175) | (\$1,170) | (\$1,166) | (\$1,162) | (\$1,159) | (\$1,157) | (\$1,154) | (\$1,153) | (\$1,152) | (\$1,151) | (\$9,356) | (\$22,135) |
| Income Taxes 5/ | (\$288) | (\$287) | (\$286) | (\$285) | (\$284) | (\$283) | (\$282) | (\$282) | (\$281) | (\$281) | (\$281) | (\$2,283) | (\$5,403) |
| Operating Income | (\$898) | (\$899) | (\$900) | (\$901) | (\$902) | (\$903) | (\$904) | (\$904) | (\$905) | (\$905) | (\$905) | \$1,101 | (\$8,825) |
| Revenue Requirement | \$1,164 | \$1,144 | \$1,126 | \$1,110 | \$1,095 | \$1,083 | \$1,074 | \$1,065 | \$1,060 | \$1,056 | \$1,053 | \$32,370 | \$44,400 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Dickinson Breaker & Lines
Projected 2019**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Plant in Service, estimated in service date December 2019:

| | | | |
|----------------------------|-------------------|----------------------------|-------------------|
| 115KV Breakers (Loop): | \$2,700,000 | Lines: | \$3,200,000 |
| ND Demand Allocation (15): | <u>70.925157%</u> | ND Demand Allocation (15): | <u>70.925157%</u> |
| Total: | \$1,914,979 | Total: | \$2,269,605 |

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|---------------|
| 2019 year end plant balance: | \$4,184,584 |
| Tax Depreciation Rate: | <u>3.75%</u> |
| Tax Depreciation: | 156,922 |
| Book Depreciation: | <u>0</u> |
| Remainder: | 156,922 |
| Income Tax Rate: | <u>24.40%</u> |
| Deferred Income Tax: | 38,297 |
| Monthly: | \$3,191 |

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|--------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 2,929 | 2,684 | 2,413 | 2,151 | 1,879 | 1,617 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 1,346 | 1,075 | 813 | 542 | 280 | 9 | 17,738 |

3/ Property Tax:

| | |
|----------------------------|--|
| Year End Plant Balance: | \$5,900,000 |
| Effective Rate: | <u>0.34%</u> (Ad Valorem - Transmission) |
| Property Tax: | 20,060 |
| ND Demand Allocation (15): | <u>70.925157%</u> |
| Annual Property Tax: | 14,228 |
| Monthly: | \$1,186 |

4/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | |
|------------------|----------------|---------------|---------------|
| Long Term Debt | 42.673% | 5.245% | 2.238% |
| Short Term Debt | 4.840% | 2.402% | 0.116% |
| Preferred Equity | 1.084% | 4.579% | 0.050% |
| Common Equity | <u>51.403%</u> | <u>9.650%</u> | <u>4.960%</u> |
| | 100.000% | | 7.364% |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Dickinson Breaker & Lines
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 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 | \$4,184,584 |
| Accumulated Depreciation | 6,360 | 12,720 | 19,080 | 25,440 | 31,800 | 38,160 | 44,520 | 50,880 | 57,240 | 63,600 | 69,960 | 76,320 | |
| Net Plant in Service | \$4,178,224 | \$4,171,864 | \$4,165,504 | \$4,159,144 | \$4,152,784 | \$4,146,424 | \$4,140,064 | \$4,133,704 | \$4,127,344 | \$4,120,984 | \$4,114,624 | \$4,108,264 | \$4,143,244 |
| Accum Def Income Taxes 2/ | \$42,512 | \$46,374 | \$49,846 | \$52,941 | \$55,646 | \$57,973 | \$59,910 | \$61,458 | \$62,628 | \$63,408 | \$63,811 | \$63,823 | |
| Total Rate Base | \$4,135,712 | \$4,125,490 | \$4,115,658 | \$4,106,203 | \$4,097,138 | \$4,088,451 | \$4,080,154 | \$4,072,246 | \$4,064,716 | \$4,057,576 | \$4,050,813 | \$4,044,441 | \$4,086,550 |
| Return on Rate Base 4/ | \$25,379 | \$25,317 | \$25,256 | \$25,198 | \$25,143 | \$25,089 | \$25,039 | \$24,990 | \$24,944 | \$24,900 | \$24,858 | \$24,819 | \$300,932 |
| Expenses | | | | | | | | | | | | | Year End |
| Depreciation 1/ | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$6,360 | \$76,320 |
| Taxes Other Than Income 3/ | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,186 | 1,182 | 14,228 |
| Total Expenses | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,546 | \$7,542 | \$90,548 |
| Income before Taxes | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,546) | (\$7,542) | (\$90,548) |
| Interest Expense 4/ | 8,113 | 8,093 | 8,074 | 8,055 | 8,037 | 8,020 | 8,004 | 7,988 | 7,974 | 7,960 | 7,946 | 7,934 | 96,198 |
| Taxable income | (\$15,659) | (\$15,639) | (\$15,620) | (\$15,601) | (\$15,583) | (\$15,566) | (\$15,550) | (\$15,534) | (\$15,520) | (\$15,506) | (\$15,492) | (\$15,476) | (\$186,746) |
| Income Taxes 5/ | (\$3,822) | (\$3,817) | (\$3,812) | (\$3,807) | (\$3,803) | (\$3,799) | (\$3,795) | (\$3,791) | (\$3,788) | (\$3,784) | (\$3,781) | (\$3,777) | (\$45,576) |
| Operating Income | (\$3,724) | (\$3,729) | (\$3,734) | (\$3,739) | (\$3,743) | (\$3,747) | (\$3,751) | (\$3,755) | (\$3,758) | (\$3,762) | (\$3,765) | (\$3,765) | (\$44,972) |
| Revenue Requirement | \$38,499 | \$38,423 | \$38,349 | \$38,279 | \$38,212 | \$38,145 | \$38,085 | \$38,025 | \$37,968 | \$37,915 | \$37,864 | \$37,812 | \$457,576 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Dickinson Breaker & Lines
Projected 2020**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Depreciation:

| | |
|---------------------------------|---------------------------------|
| Plant (ND Alloc.): \$1,914,979 | Plant (ND Alloc.): \$2,269,605 |
| Depreciation Rate: <u>1.58%</u> | Depreciation Rate: <u>2.03%</u> |
| Annual Depreciation: \$30,257 | Annual Depreciation: \$46,073 |
| Monthly: \$2,521 | Monthly: \$3,839 |

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|---------------|
| 2020 year end plant balance: | \$4,184,584 |
| Tax Depreciation Rate: | <u>7.219%</u> |
| Tax Depreciation: | 302,085 |
| Book Depreciation: | <u>76,320</u> |
| Remainder: | 225,765 |
| Income Tax Rate: | <u>24.40%</u> |
| Deferred Income Tax: | 55,098 |
| Monthly: | \$4,592 |

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|--------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 4,215 | 3,862 | 3,472 | 3,095 | 2,705 | 2,327 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 1,937 | 1,548 | 1,170 | 780 | 403 | 12 | 25,526 |

3/ Property Tax:

| | |
|----------------------------|--|
| Year End Plant Balance: | \$5,900,000 |
| Effective Rate: | <u>0.34%</u> (Ad Valorem - Transmission) |
| Property Tax: | 20,060 |
| ND Demand Allocation (15): | <u>70.925157%</u> |
| Annual Property Tax: | 14,228 |
| Monthly: | \$1,186 |

4/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | | |
|------------------|----------|--------|--------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% | |
| Short Term Debt | 4.840% | 2.402% | 0.116% | 2.354% |
| Preferred Equity | 1.084% | 4.579% | 0.050% | |
| Common Equity | 51.403% | 9.650% | 4.960% | |
| | 100.000% | | 7.364% | |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Watford City Substation & Lines
Projected 2019

| | Projected | | | | | | | | | | | | Average Balance | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|-----------------|-----------------|--------------------|------------|
| | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | June 2019 | July 2019 | Aug 2019 | Sept 2019 | Oct 2019 | Nov 2019 | Dec 2019 | | |
| Rate Base | | | | | | | | | | | | | | |
| Plant Balance 1/ | | | | | | | | | | | | \$9,436,949 | \$9,436,949 | |
| Accumulated Depreciation ** | | | | | | | | | | | | 30,999 | 45,094 | |
| Net Plant in Service | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$9,405,950 | \$9,391,855 | \$1,566,484 | |
| Accum Def Income Taxes 3/ | \$6,343 | \$12,156 | \$17,382 | \$22,040 | \$26,111 | \$29,613 | \$32,529 | \$34,858 | \$36,619 | \$37,793 | \$38,399 | \$38,418 | | |
| Total Rate Base | (\$6,343) | (\$12,156) | (\$17,382) | (\$22,040) | (\$26,111) | (\$29,613) | (\$32,529) | (\$34,858) | (\$36,619) | (\$37,793) | \$9,367,551 | \$9,353,437 | \$1,538,795 | |
| Return on Rate Base 5/ | (\$39) | (\$75) | (\$107) | (\$135) | (\$160) | (\$182) | (\$200) | (\$214) | (\$225) | (\$232) | \$57,486 | \$57,399 | \$113,316 | |
| Expenses | | | | | | | | | | | | | Year End | |
| Depreciation 2/ | | | | | | | | | | | | | \$14,095 | \$14,095 |
| Taxes Other Than Income 4/ | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,672 | 32,086 |
| Total Expenses | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$2,674 | \$16,767 | \$46,181 |
| Income before Taxes | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$2,674) | (\$16,767) | (\$46,181) |
| Interest Expense 5/ | (12) | (24) | (34) | (43) | (51) | (58) | (64) | (68) | (72) | (74) | 18,376 | 18,348 | 36,224 | |
| Taxable income | (\$2,662) | (\$2,650) | (\$2,640) | (\$2,631) | (\$2,623) | (\$2,616) | (\$2,610) | (\$2,606) | (\$2,602) | (\$2,600) | (\$21,050) | (\$35,115) | (\$82,405) | |
| Income Taxes 6/ | (\$650) | (\$647) | (\$644) | (\$642) | (\$640) | (\$638) | (\$637) | (\$636) | (\$635) | (\$635) | (\$5,137) | (\$8,570) | (\$20,111) | |
| Operating Income | (\$2,024) | (\$2,027) | (\$2,030) | (\$2,032) | (\$2,034) | (\$2,036) | (\$2,037) | (\$2,038) | (\$2,039) | (\$2,039) | \$2,463 | (\$8,197) | (\$26,070) | |
| Revenue Requirement | \$2,626 | \$2,582 | \$2,544 | \$2,509 | \$2,479 | \$2,453 | \$2,430 | \$2,413 | \$2,400 | \$2,390 | \$72,787 | \$86,773 | \$184,386 | |

** November accumulated depreciation balance is the projected balance for the 230 kV interconnection project.

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Watford City Substation & Lines
Projected 2019**

Direct to North Dakota

1/ Plant in Service, estimated in service date November 2019:

| | | | |
|----------------------------------|-------------|----------------------------|----------------|
| Substation: | \$6,395,894 | 34.5KV Line WAPA - NW Sub: | \$1,300,000 |
| | | TL175-1 to WAPA WC Sub: | <u>389,502</u> |
| 230 kV Interconnection Upgrades: | \$1,351,553 | Total: | \$1,689,502 |

Note: To support an interconnection between WAPAs substation and the Montana-Dakota substation, WAPA was required to make upgrades. Montana-Dakota paid for the upgrades to support the interconnect. The interconnect was placed in-service when the upgrades were completed and WAPA was paid by Montana-Dakota in October 2018.

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

| | Substation | | Lines | | Interconnect |
|----------------------|------------------|----------------------|-----------------|----------------------|-----------------|
| Plant: | \$6,395,894 | Plant: | \$1,689,502 | Plant: | \$1,351,553 |
| Depreciation Rate: | 1.58% | Depreciation Rate: | 2.03% | Depreciation Rate: | 2.50% |
| Annual Depreciation: | <u>\$101,055</u> | Annual Depreciation: | <u>\$34,297</u> | Annual Depreciation: | <u>\$33,789</u> |
| Monthly: | \$8,421 | Monthly: | \$2,858 | Monthly: | \$2,816 |

3/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|---------------|
| 2019 year end plant balance: | \$9,436,949 |
| Tax Depreciation Rate: | <u>3.75%</u> |
| Tax Depreciation: | 353,886 |
| Book Depreciation: | <u>14,095</u> |
| Remainder: | 339,791 |
| Income Tax Rate: | <u>24.40%</u> |
| Deferred Income Tax: | 82,926 |
| Monthly: | \$6,911 |

Proration of Monthly DIT:

| | January | February | March | April | May | June | |
|--|---------|----------|-----------|---------|----------|----------|--------|
| | 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| | 6,343 | 5,813 | 5,226 | 4,658 | 4,071 | 3,502 | |
| | <hr/> | | | | | | |
| | July | August | September | October | November | December | Total |
| | 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| | 2,916 | 2,329 | 1,761 | 1,174 | 606 | 19 | 38,418 |

4/ Property Tax:

| | |
|-------------------------|--|
| Year End Plant Balance: | \$9,436,949 |
| Effective Rate: | <u>0.34%</u> (Ad Valorem - Transmission) |
| Annual Property Tax: | 32,086 |
| Monthly: | \$2,674 |

5/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | | |
|------------------|----------------|---------------|---------------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% | |
| Short Term Debt | 4.840% | 2.402% | 0.116% | 2.354% |
| Preferred Equity | 1.084% | 4.579% | 0.050% | |
| Common Equity | <u>51.403%</u> | <u>9.650%</u> | <u>4.960%</u> | |
| | 100.000% | | 7.364% | |

| | |
|---------------------------------|--|
| 6/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Watford City Substation & Lines
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 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | \$9,436,949 | |
| Accumulated Depreciation | 56,373 | 67,652 | 78,931 | 90,210 | 101,489 | 112,768 | 124,047 | 135,326 | 146,605 | 157,884 | 169,163 | 180,442 | | |
| Net Plant in Service | \$9,380,576 | \$9,369,297 | \$9,358,018 | \$9,346,739 | \$9,335,460 | \$9,324,181 | \$9,312,902 | \$9,301,623 | \$9,290,344 | \$9,279,065 | \$9,267,786 | \$9,256,507 | \$9,318,542 | |
| Accum Def Income Taxes 2/ | \$93,115 | \$102,453 | \$110,848 | \$118,331 | \$124,870 | \$130,496 | \$135,180 | \$138,921 | \$141,750 | \$143,636 | \$144,610 | \$144,640 | | |
| Total Rate Base | \$9,287,461 | \$9,266,844 | \$9,247,170 | \$9,228,408 | \$9,210,590 | \$9,193,685 | \$9,177,722 | \$9,162,702 | \$9,148,594 | \$9,135,429 | \$9,123,176 | \$9,111,867 | \$9,191,137 | |
| Return on Rate Base 4/ | \$56,994 | \$56,868 | \$56,747 | \$56,632 | \$56,522 | \$56,419 | \$56,321 | \$56,228 | \$56,142 | \$56,061 | \$55,986 | \$55,916 | \$676,836 | |
| Expenses | | | | | | | | | | | | | Year End | |
| Depreciation 1/ | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$11,279 | \$135,348 |
| Taxes Other Than Income 3/ | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,674 | 2,672 | 32,086 |
| Total Expenses | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,953 | \$13,951 | \$167,434 |
| Income before Taxes | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,953) | (\$13,951) | (\$167,434) |
| Interest Expense 4/ | 18,219 | 18,178 | 18,140 | 18,103 | 18,068 | 18,035 | 18,004 | 17,974 | 17,946 | 17,921 | 17,897 | 17,874 | 17,874 | 216,359 |
| Taxable income | (\$32,172) | (\$32,131) | (\$32,093) | (\$32,056) | (\$32,021) | (\$31,988) | (\$31,957) | (\$31,927) | (\$31,899) | (\$31,874) | (\$31,850) | (\$31,825) | (\$31,825) | (\$383,793) |
| Income Taxes 5/ | (\$7,852) | (\$7,842) | (\$7,832) | (\$7,823) | (\$7,815) | (\$7,807) | (\$7,799) | (\$7,792) | (\$7,785) | (\$7,779) | (\$7,773) | (\$7,767) | (\$7,767) | (\$93,666) |
| Operating Income | (\$6,101) | (\$6,111) | (\$6,121) | (\$6,130) | (\$6,138) | (\$6,146) | (\$6,154) | (\$6,161) | (\$6,168) | (\$6,174) | (\$6,180) | (\$6,184) | (\$6,184) | (\$73,768) |
| Revenue Requirement | \$83,465 | \$83,311 | \$83,164 | \$83,024 | \$82,889 | \$82,763 | \$82,644 | \$82,531 | \$82,426 | \$82,327 | \$82,236 | \$82,148 | \$992,928 | |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Watford City Substation & Lines
Projected 2020**

Direct to North Dakota

1/ Depreciation:

| | |
|---|--|
| Plant: \$6,395,894 Depreciation Rate: <u>1.58%</u> Annual Depreciation: \$101,055 Monthly: \$8,421 | Plant: \$1,689,502 Depreciation Rate: <u>2.03%</u> Annual Depreciation: \$34,297 Monthly: \$2,858 |
|---|--|

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|----------------|
| 2020 year end plant balance: | \$9,436,949 |
| Tax Depreciation Rate: | <u>7.219%</u> |
| Tax Depreciation: | 681,253 |
| Book Depreciation: | <u>135,348</u> |
| Remainder: | 545,905 |
| Income Tax Rate: | <u>24.40%</u> |
| Deferred Income Tax: | 133,228 |
| Monthly: | \$11,102 |

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|--------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 10,189 | 9,338 | 8,395 | 7,483 | 6,539 | 5,626 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 4,684 | 3,741 | 2,829 | 1,886 | 974 | 30 | 61,714 |

3/ Property Tax:

| | |
|-------------------------|--|
| Year End Plant Balance: | \$9,436,949 |
| Effective Rate: | <u>0.34%</u> (Ad Valorem - Transmission) |
| Annual Property Tax: | 32,086 |
| Monthly: | \$2,674 |

4/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | |
|------------------|----------|--------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% |
| Short Term Debt | 4.840% | 2.402% | 0.116% |
| Preferred Equity | 1.084% | 4.579% | 0.050% |
| Common Equity | 51.403% | 9.650% | 4.960% |
| | 100.000% | | 7.364% |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

Montana-Dakota Utilities Co.
 Electric Utility - North Dakota
 Transmission Rider
 Revenue Requirement - Richland to WAPA Reconductor Circuit
 Projected 2019

| | Projected | | | | | | | | | | | | Average Balance | |
|-------------------------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|----------------|--------------------|---------|
| | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | June 2019 | July 2019 | Aug 2019 | Sept 2019 | Oct 2019 | Nov 2019 | Dec 2019 | | |
| Rate Base | | | | | | | | | | | | | | |
| Plant Balance 1/ | | | | | | | | | | \$796,019 | \$796,019 | \$796,019 | | |
| Accumulated Depreciation | | | | | | | | | | | 1,015 | 2,030 | | |
| Net Plant in Service | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$796,019 | \$795,004 | \$793,989 | \$198,751 | |
| Accum Def Income Taxes 3/ | \$519 | \$995 | \$1,423 | \$1,804 | \$2,137 | \$2,424 | \$2,663 | \$2,854 | \$2,998 | \$3,094 | \$3,144 | \$3,146 | | |
| Total Rate Base | (\$519) | (\$995) | (\$1,423) | (\$1,804) | (\$2,137) | (\$2,424) | (\$2,663) | (\$2,854) | (\$2,998) | \$792,925 | \$791,860 | \$790,843 | \$196,484 | |
| Return on Rate Base 5/ | (\$3) | (\$6) | (\$9) | (\$11) | (\$13) | (\$15) | (\$16) | (\$18) | (\$18) | \$4,866 | \$4,859 | \$4,853 | \$14,469 | |
| Expenses | | | | | | | | | | | | | Year End | |
| Depreciation 2/ | | | | | | | | | | | | \$1,015 | \$1,015 | \$2,030 |
| Taxes Other Than Income 4/ | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,700 | 20,378 | |
| Total Expenses | \$1,698 | \$1,698 | \$1,698 | \$1,698 | \$1,698 | \$1,698 | \$1,698 | \$1,698 | \$1,698 | \$1,698 | \$2,713 | \$2,715 | \$22,408 | |
| Income before Taxes | (\$1,698) | (\$1,698) | (\$1,698) | (\$1,698) | (\$1,698) | (\$1,698) | (\$1,698) | (\$1,698) | (\$1,698) | (\$1,698) | (\$2,713) | (\$2,715) | (\$22,408) | |
| Interest Expense 5/ | (1) | (2) | (3) | (4) | (4) | (5) | (5) | (6) | (6) | 1,555 | 1,553 | 1,551 | 4,623 | |
| Taxable income | (\$1,697) | (\$1,696) | (\$1,695) | (\$1,694) | (\$1,694) | (\$1,693) | (\$1,693) | (\$1,692) | (\$1,692) | (\$3,253) | (\$4,266) | (\$4,266) | (\$27,031) | |
| Income Taxes 6/ | (\$414) | (\$414) | (\$414) | (\$413) | (\$413) | (\$413) | (\$413) | (\$413) | (\$413) | (\$794) | (\$1,041) | (\$1,041) | (\$6,596) | |
| Operating Income | (\$1,284) | (\$1,284) | (\$1,284) | (\$1,285) | (\$1,285) | (\$1,285) | (\$1,285) | (\$1,285) | (\$1,285) | (\$904) | (\$1,672) | (\$1,674) | (\$15,812) | |
| Revenue Requirement | \$1,695 | \$1,691 | \$1,687 | \$1,685 | \$1,683 | \$1,680 | \$1,679 | \$1,676 | \$1,676 | \$7,633 | \$8,639 | \$8,634 | \$40,058 | |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Richland to WAPA Reconductor Circuit
Projected 2019**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Plant in Service, estimated in service date October 2019:

Conductor: \$1,122,337
ND Demand Allocation (15): 70.925157%
\$796,019

2/ Depreciation: (Depreciation booked on prior month plant balance, starts booking in November)

Plant (ND Alloc.): \$796,019
Depreciation Rate: 1.53%
Annual Depreciation: \$12,179
Monthly: \$1,015

3/ Deferred income tax, based on Half Year Convention, 20-year asset:

2019 year end plant balance: \$796,019
Tax Depreciation Rate: 3.75%
Tax Depreciation: 29,851
Book Depreciation: 2,030
Remainder: 27,821
Income Tax Rate: 24.40%
Deferred Income Tax: 6,790
Monthly: \$566

Proration of Monthly DIT:

| January | February | March | April | May | June | | |
|---------|----------|-----------|---------|----------|----------|-------|--|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | | |
| 519 | 476 | 428 | 381 | 333 | 287 | | |
| | | | | | | | |
| July | August | September | October | November | December | Total | |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | 3,146 | |
| 239 | 191 | 144 | 96 | 50 | 2 | | |

4/ Property Tax:

Year End Plant Balance: \$1,122,337
Effective Rate: 2.56% (Ad Valorem - Transmission)
Property Tax: 28,732
ND Demand Allocation (15): 70.925157%
Annual Property Tax: 20,378
Monthly: \$1,698

5/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | | |
|------------------|-----------------|--------|---------------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% | |
| Short Term Debt | 4.840% | 2.402% | 0.116% | 2.354% |
| Preferred Equity | 1.084% | 4.579% | 0.050% | |
| Common Equity | 51.403% | 9.650% | 4.960% | |
| | <u>100.000%</u> | | <u>7.364%</u> | |

6/ Tax Rate 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%)
1- tax rate 75.60%
Gross Revenue Conversion Factor 1.32284

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Richland to WAPA Reconductor Circuit
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 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 | \$796,019 |
| Accumulated Depreciation | 3,045 | 4,060 | 5,075 | 6,090 | 7,105 | 8,120 | 9,135 | 10,150 | 11,165 | 12,180 | 13,195 | 14,210 | |
| Net Plant in Service | \$792,974 | \$791,959 | \$790,944 | \$789,929 | \$788,914 | \$787,899 | \$786,884 | \$785,869 | \$784,854 | \$783,839 | \$782,824 | \$781,809 | \$787,392 |
| Accum Def Income Taxes 2/ | \$7,635 | \$8,410 | \$9,106 | \$9,727 | \$10,269 | \$10,736 | \$11,125 | \$11,435 | \$11,670 | \$11,826 | \$11,907 | \$11,909 | |
| Total Rate Base | \$785,339 | \$783,549 | \$781,838 | \$780,202 | \$778,645 | \$777,163 | \$775,759 | \$774,434 | \$773,184 | \$772,013 | \$770,917 | \$769,900 | \$776,912 |
| Return on Rate Base 4/ | \$4,819 | \$4,808 | \$4,798 | \$4,788 | \$4,778 | \$4,769 | \$4,761 | \$4,752 | \$4,745 | \$4,738 | \$4,731 | \$4,725 | \$57,212 |
| Expenses | | | | | | | | | | | | | Year End |
| Depreciation 1/ | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$1,015 | \$12,180 |
| Taxes Other Than Income 3/ | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,698 | 1,700 | 20,378 |
| Total Expenses | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,713 | \$2,715 | \$32,558 |
| Income before Taxes | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,713) | (\$2,715) | (\$32,558) |
| Interest Expense 4/ | 1,541 | 1,537 | 1,534 | 1,530 | 1,527 | 1,525 | 1,522 | 1,519 | 1,517 | 1,514 | 1,512 | 1,510 | 18,288 |
| Taxable income | (\$4,254) | (\$4,250) | (\$4,247) | (\$4,243) | (\$4,240) | (\$4,238) | (\$4,235) | (\$4,232) | (\$4,230) | (\$4,227) | (\$4,225) | (\$4,225) | (\$50,846) |
| Income Taxes 5/ | (\$1,038) | (\$1,037) | (\$1,036) | (\$1,035) | (\$1,035) | (\$1,034) | (\$1,034) | (\$1,033) | (\$1,032) | (\$1,032) | (\$1,031) | (\$1,031) | (\$12,408) |
| Operating Income | (\$1,675) | (\$1,676) | (\$1,677) | (\$1,678) | (\$1,678) | (\$1,679) | (\$1,679) | (\$1,680) | (\$1,681) | (\$1,681) | (\$1,682) | (\$1,684) | (\$20,150) |
| Revenue Requirement | \$8,591 | \$8,577 | \$8,565 | \$8,553 | \$8,540 | \$8,530 | \$8,519 | \$8,509 | \$8,501 | \$8,491 | \$8,483 | \$8,478 | \$102,337 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Richland to WAPA Reconductor Circuit
Projected 2020**

Integrated System Project

ND Demand Allocation (15): 70.925157%

1/ Depreciation:

| | |
|----------------------|-----------|
| Plant (ND Alloc.): | \$796,019 |
| Depreciation Rate: | 1.53% |
| Annual Depreciation: | \$12,179 |
| Monthly: | \$1,015 |

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|-----------|
| 2020 year end plant balance: | \$796,019 |
| Tax Depreciation Rate: | 7.219% |
| Tax Depreciation: | 57,465 |
| Book Depreciation: | 12,180 |
| Remainder: | 45,285 |
| Income Tax Rate: | 24.40% |
| Deferred Income Tax: | 11,052 |
| Monthly: | \$921 |

Proration of Monthly DIT:

| January | February | March | April | May | June | |
|---------|----------|-----------|---------|----------|----------|-------|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | |
| 845 | 775 | 696 | 621 | 542 | 467 | |
| July | August | September | October | November | December | Total |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | |
| 389 | 310 | 235 | 156 | 81 | 2 | 5,119 |

3/ Property Tax:

| | |
|----------------------------|-----------------------------------|
| Year End Plant Balance: | \$1,122,337 |
| Effective Rate: | 2.56% (Ad Valorem - Transmission) |
| Property Tax: | 28,732 |
| ND Demand Allocation (15): | 70.925157% |
| Annual Property Tax: | 20,378 |
| Monthly: | \$1,698 |

4/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | |
|------------------|----------|--------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% |
| Short Term Debt | 4.840% | 2.402% | 0.116% |
| Preferred Equity | 1.084% | 4.579% | 0.050% |
| Common Equity | 51.403% | 9.650% | 4.960% |
| | 100.000% | | 7.364% |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Lightning Protection
Projected 2019

| | Projected | | | | | | | | | | | | Average Balance | |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|--------------------|---------|
| | Jan 2019 | Feb 2019 | Mar 2019 | Apr 2019 | May 2019 | June 2019 | July 2019 | Aug 2019 | Sept 2019 | Oct 2019 | Nov 2019 | Dec 2019 | | |
| Rate Base | | | | | | | | | | | | | | |
| Plant Balance 1/ | | | | | | | | | \$418,068 | \$418,068 | \$418,068 | \$418,068 | | |
| Accumulated Depreciation | | | | | | | | | | 533 | 1,066 | 1,599 | | |
| Net Plant in Service | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 | \$418,068 | \$417,535 | \$417,002 | \$416,469 | \$139,090 | |
| Accum Def Income Taxes 3/ | \$262 | \$503 | \$719 | \$912 | \$1,080 | \$1,225 | \$1,346 | \$1,442 | \$1,515 | \$1,564 | \$1,589 | \$1,590 | | |
| Total Rate Base | (\$262) | (\$503) | (\$719) | (\$912) | (\$1,080) | (\$1,225) | (\$1,346) | (\$1,442) | \$416,553 | \$415,971 | \$415,413 | \$414,879 | \$137,944 | |
| Return on Rate Base 5/ | (\$2) | (\$3) | (\$4) | (\$6) | (\$7) | (\$8) | (\$8) | (\$9) | \$2,556 | \$2,553 | \$2,549 | \$2,546 | \$10,157 | |
| Expenses | | | | | | | | | | | | | Year End | |
| Depreciation 2/ | | | | | | | | | | | \$533 | \$533 | \$533 | \$1,599 |
| Taxes Other Than Income 4/ | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 123 | 1,421 | |
| Total Expenses | \$118 | \$118 | \$118 | \$118 | \$118 | \$118 | \$118 | \$118 | \$118 | \$651 | \$651 | \$656 | \$3,020 | |
| Income before Taxes | (\$118) | (\$118) | (\$118) | (\$118) | (\$118) | (\$118) | (\$118) | (\$118) | (\$118) | (\$651) | (\$651) | (\$656) | (\$3,020) | |
| Interest Expense 5/ | (1) | (1) | (1) | (2) | (2) | (2) | (3) | (3) | 817 | 816 | 815 | 814 | 3,247 | |
| Taxable income | (\$117) | (\$117) | (\$117) | (\$116) | (\$116) | (\$116) | (\$115) | (\$115) | (\$935) | (\$1,467) | (\$1,466) | (\$1,470) | (\$6,267) | |
| Income Taxes 6/ | (\$29) | (\$29) | (\$29) | (\$28) | (\$28) | (\$28) | (\$28) | (\$28) | (\$228) | (\$358) | (\$358) | (\$359) | (\$1,530) | |
| Operating Income | (\$89) | (\$89) | (\$89) | (\$90) | (\$90) | (\$90) | (\$90) | (\$90) | \$110 | (\$293) | (\$293) | (\$297) | (\$1,490) | |
| Revenue Requirement | \$115 | \$114 | \$112 | \$111 | \$110 | \$108 | \$108 | \$107 | \$3,236 | \$3,765 | \$3,760 | \$3,761 | \$15,407 | |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Lightning Protection
Projected 2019**

Direct to North Dakota

1/ Plant in Service, estimated in service date September 2019:

Lightning Arresters: \$418,068

2/ Depreciation: (Depreciation booked on prior month plant balance, starts booking in October)

Plant: \$418,068
Depreciation Rate: 1.53%
Annual Depreciation: \$6,396
Monthly: \$533

3/ Deferred income tax, based on Half Year Convention, 20-year asset:

2019 year end plant balance: \$418,068
Tax Depreciation Rate: 3.75%
Tax Depreciation: 15,678
Book Depreciation: 1,599
Remainder: 14,079
Income Tax Rate: 24.40%
Deferred Income Tax: 3,436
Monthly: \$286

Proration of Monthly DIT:

| January | February | March | April | May | June | | |
|---------|----------|-----------|---------|----------|----------|-------|--|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | | |
| 262 | 241 | 216 | 193 | 168 | 145 | | |
| | | | | | | | |
| July | August | September | October | November | December | Total | |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | | |
| 121 | 96 | 73 | 49 | 25 | 1 | 1,590 | |

4/ Property Tax:

Year End Plant Balance: \$418,068
Effective Rate: 0.34% (Ad Valorem - Transmission)
Annual Property Tax: 1,421
Monthly: \$118

5/ Authorized cost of capital - Case No. PU-16-666:

| | Ratio | Cost | | |
|------------------|----------|--------|--------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% | |
| Short Term Debt | 4.840% | 2.402% | 0.116% | 2.354% |
| Preferred Equity | 1.084% | 4.579% | 0.050% | |
| Common Equity | 51.403% | 9.650% | 4.960% | |
| | 100.000% | | 7.364% | |

6/ Tax Rate 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%)
 1- tax rate 75.60%
 Gross Revenue Conversion Factor 1.32284

Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Lightning Protection
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 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 | \$418,068 |
| Accumulated Depreciation | 2,132 | 2,665 | 3,198 | 3,731 | 4,264 | 4,797 | 5,330 | 5,863 | 6,396 | 6,929 | 7,462 | 7,995 | |
| Net Plant in Service | \$415,936 | \$415,403 | \$414,870 | \$414,337 | \$413,804 | \$413,271 | \$412,738 | \$412,205 | \$411,672 | \$411,139 | \$410,606 | \$410,073 | \$413,005 |
| Accum Def Income Taxes 2/ | \$3,880 | \$4,287 | \$4,653 | \$4,979 | \$5,264 | \$5,509 | \$5,713 | \$5,876 | \$5,999 | \$6,081 | \$6,123 | \$6,124 | |
| Total Rate Base | \$412,056 | \$411,116 | \$410,217 | \$409,358 | \$408,540 | \$407,762 | \$407,025 | \$406,329 | \$405,673 | \$405,058 | \$404,483 | \$403,949 | \$407,631 |
| Return on Rate Base 4/ | \$2,529 | \$2,523 | \$2,517 | \$2,512 | \$2,507 | \$2,502 | \$2,498 | \$2,494 | \$2,489 | \$2,486 | \$2,482 | \$2,479 | \$30,018 |
| Expenses | | | | | | | | | | | | | Year End |
| Depreciation 1/ | \$533 | \$533 | \$533 | \$533 | \$533 | \$533 | \$533 | \$533 | \$533 | \$533 | \$533 | \$533 | \$6,396 |
| Taxes Other Than Income 3/ | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 118 | 123 | 1,421 |
| Total Expenses | \$651 | \$651 | \$651 | \$651 | \$651 | \$651 | \$651 | \$651 | \$651 | \$651 | \$651 | \$656 | \$7,817 |
| Income before Taxes | (\$651) | (\$651) | (\$651) | (\$651) | (\$651) | (\$651) | (\$651) | (\$651) | (\$651) | (\$651) | (\$651) | (\$656) | (\$7,817) |
| Interest Expense 4/ | 808 | 806 | 805 | 803 | 801 | 800 | 798 | 797 | 796 | 795 | 793 | 792 | 9,594 |
| Taxable income | (\$1,459) | (\$1,457) | (\$1,456) | (\$1,454) | (\$1,452) | (\$1,451) | (\$1,449) | (\$1,448) | (\$1,447) | (\$1,446) | (\$1,444) | (\$1,448) | (\$17,411) |
| Income Taxes 5/ | (\$356) | (\$356) | (\$355) | (\$355) | (\$354) | (\$354) | (\$354) | (\$353) | (\$353) | (\$353) | (\$352) | (\$353) | (\$4,248) |
| Operating Income | (\$295) | (\$295) | (\$296) | (\$296) | (\$297) | (\$297) | (\$297) | (\$298) | (\$298) | (\$298) | (\$299) | (\$303) | (\$3,569) |
| Revenue Requirement | \$3,736 | \$3,728 | \$3,721 | \$3,715 | \$3,709 | \$3,703 | \$3,697 | \$3,693 | \$3,687 | \$3,683 | \$3,679 | \$3,680 | \$44,431 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Rider
Revenue Requirement - Lightning Protection
Projected 2020**

Direct to North Dakota

1/ Depreciation:

| | |
|----------------------|--------------|
| Plant: | \$418,068 |
| Depreciation Rate: | <u>1.53%</u> |
| Annual Depreciation: | \$6,396 |
| Monthly: | \$533 |

2/ Deferred income tax, based on Half Year Convention, 20-year asset:

| | |
|------------------------------|---------------|
| 2020 year end plant balance: | \$418,068 |
| Tax Depreciation Rate: | <u>7.219%</u> |
| Tax Depreciation: | 30,180 |
| Book Depreciation: | <u>6,396</u> |
| Remainder: | 23,784 |
| Income Tax Rate: | <u>24.40%</u> |
| Deferred Income Tax: | 5,804 |
| Monthly: | \$484 |

Proration of Monthly DIT:

| January | February | March | April | May | June | | |
|---------|----------|-----------|---------|----------|----------|-------|--|
| 91.78% | 84.11% | 75.62% | 67.40% | 58.90% | 50.68% | | |
| 444 | 407 | 366 | 326 | 285 | 245 | | |
| | | | | | | | |
| July | August | September | October | November | December | Total | |
| 42.19% | 33.70% | 25.48% | 16.99% | 8.77% | 0.27% | | |
| 204 | 163 | 123 | 82 | 42 | 1 | 2,688 | |

3/ Property Tax:

| | |
|-------------------------|--|
| Year End Plant Balance: | \$418,068 |
| Effective Rate: | <u>0.34%</u> (Ad Valorem - Transmission) |
| Annual Property Tax: | 1,421 |
| Monthly: | \$118 |

4/ Authorized cost of capital - Case No. PU-16-666:

| | <u>Ratio</u> | <u>Cost</u> | | |
|------------------|----------------|---------------|---------------|--------|
| Long Term Debt | 42.673% | 5.245% | 2.238% | |
| Short Term Debt | 4.840% | 2.402% | 0.116% | 2.354% |
| Preferred Equity | 1.084% | 4.579% | 0.050% | |
| Common Equity | <u>51.403%</u> | <u>9.650%</u> | <u>4.960%</u> | |
| | 100.000% | | 7.364% | |

| | |
|---------------------------------|--|
| 5/ Tax Rate | 24.40% (Federal Tax Rate = 21%, ND State Tax Rate = 4.31%) |
| 1- tax rate | 75.60% |
| Gross Revenue Conversion Factor | 1.32284 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Cost Recovery Rider
Balancing Account and Carry Charge Calculation**

| | Cumulative | | | | | | | | | |
|----------------|----------------------|-----------------------------|-------------------------------|----------------------|----------------------|-----------------------------|----------------|---------|-----------------------|---|
| | Beginning Balance | Less: | Add: | Less: | Ending Balance 4/ | Carrying Charge Calculation | | | Carrying Charge 5/ | Grand Total (Over)/Under Collection |
| | | Amortization Recovery 1/ | Current Year Over/Under 2/ | Non-plant EDIT 3/ | | Deferred Income Tax | Net Balance | Rate 5/ | | |
| September 2018 | | | | | 1,112,094 6/ | 271,405 | 840,689 | 2.1300% | | 1,164,170 6/ |
| October | 1,112,094 | 157,953 | 115,622 | 9,490 | 1,060,273 | 258,759 | 801,514 | 2.2500% | 1,576 | 1,113,925 |
| November | 1,060,273 | 153,279 | 188,522 | 9,490 | 1,086,026 | 265,044 | 820,982 | 2.3300% | 1,556 | 1,141,234 |
| December | 1,086,026 | 187,717 | (119,241) | 9,491 | 769,577 | 187,814 | 581,763 | 2.3700% | 1,621 | 826,406 |
| January 2019 | 769,577 | 213,033 | (113,187) | | 443,357 | 108,201 | 335,156 | 2.3700% | 1,149 | 501,335 |
| February | 443,357 | 204,406 | (193,639) | | 45,312 | 11,058 | 34,254 | 2.3900% | 668 | 103,958 |
| March | 45,312 | 146,035 | (75,661) | | (176,384) | - | (176,384) | 2.4000% | 69 | (117,669) |
| April | (176,384) | 31,653 | (171,948) | | (379,985) | - | (379,985) | 2.3800% | (350) | (321,620) |
| May | (379,985) | 27,244 | 2,916 | | (404,313) | - | (404,313) | 2.3500% | (744) | (346,692) |
| June - Est. | (404,313) | 28,825 | (63,965) | | (497,103) | - | (497,103) | 2.3500% | (792) | (440,274) |
| Total | | \$1,150,145 | (\$430,581) | \$28,471 | | | | | \$4,753 | |

1/ Deferred revenue collected on actual sales volume through June 2019 at the approved amortization rates authorized in Case No. PU-16-666, and updated amortization rates effective March 1, 2019 authorized in Case No. PU-18-379.

2/ Net of current year monthly revenue requirement (Exhibit 4, pages 2-3) and recovery of current revenue based on the approved revenue requirement rate.

| | Revenue Requirement | Current Revenue | (Over)/Under Collection | Cumulative (Over)/Under |
|--------------|------------------------|--------------------|----------------------------|----------------------------|
| October 2018 | \$658,501 | \$542,879 | \$115,622 | \$115,622 |
| November | 717,665 | 529,143 | 188,522 | 304,144 |
| December | 534,981 | 654,222 | (119,241) | 184,903 |
| January 2019 | 628,690 | 741,877 | (\$113,187) | 71,716 |
| February | 518,930 | 712,569 | (193,639) | (121,923) |
| March | 681,679 | 757,340 | (75,661) | (197,584) |
| April | 461,796 | 633,744 | (171,948) | (369,532) |
| May | 543,764 | 540,848 | 2,916 | (366,616) |
| June - Est. | 543,764 | 607,729 | (63,965) | (430,581) |
| Total | \$5,289,770 | \$5,720,351 | | |

3/ Pursuant to settlement in Commission Order in Docket No. PU-18-89, balance reduced by non-plant excess deferred taxes credit. Per the Settlement, non-plant excess deferred taxes (EDIT) credit applied to the deferred balance of the Environmental and Generation riders 2018, and any remainder is applied to the Transmission rider. At the end of 2018, a total of \$828,364 EDIT is remaining to be applied to the Transmission deferred balance. In Docket no. PU-18-379, \$799,893 was applied to the January - September 2018 balance. The remaining \$28,471 will be applied to the October - December 2018 months equally.

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

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

6/ Balance as of September 30, 2018 per Docket No. PU-18-379, Exhibit 4, page 1.

Montana-Dakota Utilities Co.
 Electric Utility - North Dakota
 Transmission Cost Recovery Rider
 Summary of Revenue and Expenses Allocated to North Dakota
 Twelve Months Ended June 30, 2019

| | Per Books | | | | | | | | | | | Projected | Total |
|----------------------------|-----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|-----------|-----------|
| | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Nov-18 | Dec-18 | Jan-19 | Feb-19 | Mar-19 | Apr-19 | May-19 | Jun-19 | |
| Facility Sharing Agreement | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 20,337 | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | \$244,000 |
| MISO | | | | | | | | | | | | | |
| Revenue/Credits | | | | | | | | | | | | | |
| Schedule 1 | 2,946 | 2,959 | 2,820 | 2,980 | 2,843 | 2,869 | 3,221 | 2,951 | 2,983 | 2,750 | 2,815 | 2,815 | 34,952 |
| Schedule 2 | 26,874 | 27,115 | 26,572 | 26,585 | 26,916 | 29,498 | 33,301 | 28,475 | 28,979 | 26,954 | 25,733 | 25,733 | 332,735 |
| Schedule 7 | 117,391 | 118,021 | 113,203 | 118,083 | 103,010 | 106,716 | 102,004 | 92,128 | 102,447 | 98,675 | 107,141 | 107,141 | 1,285,960 |
| Schedule 8 | 1,872 | 1,611 | 1,712 | 4,116 | 4,133 | 1,696 | 1,463 | 3,909 | 3,253 | 2,178 | 2,327 | 2,327 | 30,597 |
| Schedule 9 | 290,323 | 297,786 | 301,675 | 279,813 | 312,088 | 380,562 | 472,846 | 372,282 | 340,977 | 302,020 | 246,442 | 246,442 | 3,843,256 |
| Sch. 9 Pay to Basin | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (61,876) | (742,512) |
| Schedule 24 | 63,587 | 73,644 | 60,368 | 61,955 | 74,977 | 61,924 | 71,283 | 111,554 | 8,809 | 59,478 | 76,502 | 76,502 | 800,583 |
| Schedule 26 | 98,370 | 96,054 | 90,650 | 75,718 | 69,970 | 73,310 | 89,604 | 77,111 | 85,233 | 72,191 | 79,020 | 79,020 | 986,251 |
| Schedule 37 | 857 | 857 | 857 | 857 | 873 | 859 | 962 | 962 | 962 | 962 | 962 | 962 | 10,932 |
| Schedule 38 | 1,051 | 1,051 | 1,051 | 1,051 | 1,074 | 1,053 | 1,139 | 1,139 | 1,139 | 1,139 | 1,139 | 1,139 | 13,165 |
| | 541,395 | 557,222 | 537,032 | 509,282 | 534,008 | 596,611 | 713,947 | 628,635 | 512,906 | 504,471 | 480,205 | 480,205 | 6,595,919 |
| Charges | | | | | | | | | | | | | |
| Schedule 10 | | | | | | | | | | | | | |
| Energy | 47,513 | 43,538 | 37,012 | 42,745 | 42,003 | 49,950 | 59,151 | 49,391 | 64,711 | 46,802 | 43,068 | 43,068 | 568,952 |
| Demand | 3,461 | 3,172 | 2,696 | 3,114 | 3,060 | 3,637 | 4,309 | 3,598 | 4,714 | 3,409 | 3,137 | 3,137 | 41,444 |
| FERC | 18,050 | 18,000 | 11,392 | 10,530 | 13,498 | 14,712 | 14,873 | 15,430 | 17,203 | 16,382 | (46,907) | (46,907) | 56,256 |
| | 69,024 | 64,710 | 51,100 | 56,389 | 58,561 | 68,299 | 78,333 | 68,419 | 86,628 | 66,593 | (702) | (702) | 666,652 |
| Schedule 11 - Misc | 296 | (1) | 0 | 0 | (3,198) | 2,262 | 0 | 86 | 0 | (203,704) | 0 | 0 | (204,259) |
| Schedule 26 | 170,217 | 172,048 | 124,272 | 119,734 | 139,398 | 149,057 | 165,376 | 164,310 | 182,851 | 126,147 | 130,754 | 130,754 | 1,774,918 |
| Schedule 26A | 366,548 | 342,404 | 285,629 | 331,263 | 382,728 | 287,379 | 498,702 | 427,113 | 433,151 | 370,091 | 372,166 | 372,166 | 4,469,340 |
| Total MISO Charges | 606,085 | 579,161 | 461,001 | 507,386 | 577,489 | 506,997 | 742,411 | 659,928 | 702,630 | 359,127 | 502,218 | 502,218 | 6,706,651 |

**Montana-Dakota Utilities Co.
Electric Utility - North Dakota
Transmission Cost Recovery Rider
Summary of Revenue and Expenses Allocated to North Dakota
Twelve Months Ended June 30, 2019**

| | Per Books | | | | | | | | | | | Projected | Total |
|-------------------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|--------------------|
| | Jul-18 | Aug-18 | Sep-18 | Oct-18 | Nov-18 | Dec-18 | Jan-19 | Feb-19 | Mar-19 | Apr-19 | May-19 | Jun-19 | |
| SPP | | | | | | | | | | | | | |
| Revenue/Credits | | | | | | | | | | | | | |
| Facility Credits | 854,291 | 854,291 | 854,291 | 854,291 | 854,291 | 854,290 | 854,291 | 865,702 | 859,997 | 859,997 | 859,996 | 859,996 | 10,285,724 |
| Charges | | | | | | | | | | | | | |
| Schedule 1 | (1,459) | 133,109 | 48,779 | 14,466 | 41,601 | 36,079 | 59,444 | 72,991 | 60,193 | 55,115 | 32,054 | 32,054 | 584,426 |
| Schedule 1a | 8,399 | 178,516 | 95,031 | 88,900 | 98,138 | 89,124 | 97,794 | 74,761 | 68,270 | 92,373 | 79,237 | 79,237 | 1,049,780 |
| Schedule 2 | 47,608 | (47,608) | 223 | (112) | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 111 |
| Schedule 8 | 90,750 | (91,966) | 0 | 0 | 612 | (303) | (2) | 0 | 5,259 | (2,630) | 0 | 0 | 1,720 |
| Schedule 9 | 1,426,737 | 1,454,473 | 1,459,839 | 1,455,282 | 1,453,462 | 1,422,596 | 1,437,999 | 1,303,252 | 1,368,798 | 1,370,058 | 1,358,383 | 1,358,383 | 16,869,262 |
| Schedule 11 | 108,918 | 198,254 | 265,829 | 235,417 | 234,048 | 154,068 | 121,363 | 118,758 | 132,833 | 134,215 | 218,831 | 218,831 | 2,141,365 |
| Schedule 12 | (239) | 29,234 | 11,886 | 9,485 | 13,480 | 15,726 | 15,974 | 16,638 | 16,377 | 27,646 | (63,516) | (63,516) | 29,175 |
| Total SPP Charges | 1,680,714 | 1,854,012 | 1,881,587 | 1,803,438 | 1,841,341 | 1,717,290 | 1,732,572 | 1,586,400 | 1,651,730 | 1,676,777 | 1,624,989 | 1,624,989 | 20,675,839 |
| Total Revenue/Credits: | | | | | | | | | | | | | |
| Facility Sharing | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 20,337 | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 20,333 | 244,000 |
| MISO | 541,395 | 557,222 | 537,032 | 509,282 | 534,008 | 596,611 | 713,947 | 628,635 | 512,906 | 504,471 | 480,205 | 480,205 | 6,595,919 |
| SPP | 854,291 | 854,291 | 854,291 | 854,291 | 854,291 | 854,290 | 854,291 | 865,702 | 859,997 | 859,997 | 859,996 | 859,996 | 10,285,724 |
| | 1,416,019 | 1,431,846 | 1,411,656 | 1,383,906 | 1,408,632 | 1,471,238 | 1,588,571 | 1,514,670 | 1,393,236 | 1,384,801 | 1,360,534 | 1,360,534 | 17,125,643 |
| Allocated to ND 1/ | 1,005,968 | 1,017,212 | 1,002,869 | 983,155 | 1,000,721 | 1,045,197 | 1,126,696 | 1,074,282 | 988,155 | 982,172 | 964,961 | 964,961 | 12,156,349 |
| Total Charges: | | | | | | | | | | | | | |
| MISO | 606,085 | 579,161 | 461,001 | 507,386 | 577,489 | 506,997 | 742,411 | 659,928 | 702,630 | 359,127 | 502,218 | 502,218 | 6,706,651 |
| SPP | 1,680,714 | 1,854,012 | 1,881,587 | 1,803,438 | 1,841,341 | 1,717,290 | 1,732,572 | 1,586,400 | 1,651,730 | 1,676,777 | 1,624,989 | 1,624,989 | 20,675,839 |
| | 2,286,799 | 2,433,173 | 2,342,588 | 2,310,824 | 2,418,830 | 2,224,287 | 2,474,983 | 2,246,328 | 2,354,360 | 2,035,904 | 2,127,207 | 2,127,207 | 27,382,490 |
| Allocated to ND 1/ | 1,624,588 | 1,728,575 | 1,664,222 | 1,641,656 | 1,718,386 | 1,580,178 | 1,755,386 | 1,593,212 | 1,669,834 | 1,443,968 | 1,508,725 | 1,508,725 | 19,437,455 |
| Net Expense - ND | \$618,620 | \$711,363 | \$661,353 | \$658,501 | \$717,665 | \$534,981 | \$628,690 | \$518,930 | \$681,679 | \$461,796 | \$543,764 | \$543,764 | \$7,281,106 |

1/ Allocated to ND on Factor 15 Integrated System 12 Month Peak Demand: 2018 2019
71.042017% 70.925157%

Summary of MISO and SPP Revenues, Credits, and Charges

Revenue or Credits Received by Montana-Dakota

| | |
|-----------------------------|---|
| Facility Sharing Agreement: | Revenue received from Basin Electric Power Cooperative (BEPC) for the use of Montana-Dakota's facilities to serve BEPC member cooperative loads |
| MISO Schedule 1: | Revenue received for Montana-Dakota's scheduling and administration of moving power through MISO |
| MISO Schedule 2: | Revenue received for Montana-Dakota's maintenance of voltage on the system |
| MISO Schedule 7: | Revenue received by Montana-Dakota for Firm Point to Point Transmission Service |
| MISO Schedule 8: | Revenue received by Montana-Dakota for Non-Firm Point to Point Transmission Service |
| MISO Schedule 9: | Revenue received by Montana-Dakota for Network Integration Transmission Service (NITS). This revenue is then offset to reflect the revenue requirements of BEPC member cooperatives received by Montana-Dakota from MISO for transmission service in Montana-Dakota's pricing zone that are in turn paid to BEPC. |
| MISO Schedule 24: | Revenue received by Montana-Dakota as a Load Balancing Authority which it receives for services provided to others in MISO. |
| MISO Schedule 26: | <p>Reflects Montana-Dakota's projected 2019 MISO Attachment GG revenue requirement for MISO Transmission Expansion Plan (MTEP) project 1355 (Heskett Substation). The Heskett Substation was deemed a baseline reliability projected under MISO's 2009 MTEP.</p> <p>Montana-Dakota does not include the projected revenue for MISO Schedules 37 and 38 as MISO does not provide a separate forecast for those revenues. The revenues received under these schedules represent Montana-Dakota's share of the Schedule 26 cost allocation assigned to former MISO transmission owners that have withdrawn from MISO but have an obligation to pay for MISO Schedule 26 projects due to their prior MISO membership. The actual revenues received by</p> |

| | |
|--|--|
| | Montana-Dakota for MISO Schedules 37 and 38 are identified as such and therefore are included separately in Exhibit 5, page 3. |
|--|--|

Expenses Paid by Montana-Dakota

| | |
|--------------------|--|
| MISO Schedule 10: | Charges paid by Montana-Dakota for MISO Schedule 10 charges and direct FERC assessments. As transmission providers, both MISO, on behalf of Montana-Dakota, and Montana-Dakota are assessed annual charges by the FERC in accordance with FERC regulations. |
| MISO Schedule 26: | Reflects MISO's 2019 and 2020 indicative charges for Pricing Zone for Approved Baseline Reliability Projects, Generation Interconnection Projects, and Market Efficiency Projects. The Schedule 26 charges reflect Montana-Dakota's share of costs for projects that qualify for regional cost allocation under the MISO tariff. |
| MISO Schedule 26A: | Reflect Montana-Dakota's forecasted load at the indicative charge with Montana-Dakota's share of the Big Stone South to Ellendale (BSSE) retail revenue requirement stated separately. Montana-Dakota's share of the BSSE retail revenue requirement reflects the estimated retail portion of the BSSE project using Montana-Dakota's load share within the MISO footprint and the Company's projected MISO Attachment MM revenue requirement for MTEP Project 2220 (BSSE MVP Project). The BSSE MVP project is one of seventeen MVPs approved by MISO as part of the MTEP 2011 report. Schedule 26A is charged equally to all MISO load for recovery of MISO's MVP portfolio. |
| SPP Schedule 1: | Charges paid by Montana-Dakota to SPP for the scheduling and administration of power through SPP. |
| SPP Schedule 1a: | Charges paid by Montana-Dakota to SPP for SPP's administration of the market and transmission system. |
| SPP Schedule 9: | Charges paid by Montana-Dakota for Network Integration Transmission Service. Also reflected are the payments (SPP Section 30.9 Facility Credits) made for SPP's use of Montana-Dakota's transmission facilities. |

| | |
|------------------|---|
| SPP Schedule 11: | Charges paid by Montana-Dakota associated with Highway Byway cost allocated network upgrades. A network customer's firm network transmission charge is a combination of Schedules 9 and 11. |
| SPP Schedule 12: | The FERC assessments to SPP associated with Montana-Dakota's loads on the SPP system, similar to MISO's Schedule 10 charges. |

Montana-Dakota Utilities Co.
Electric Utility
MISO Revenue Schedules 1, 2, 7, 8, and 24
Projected Twelve Months Ending June 2020

| | <u>Schedule 1 1/</u> | <u>Schedule 2 1/</u> | <u>Schedule 7 1/</u> | <u>Schedule 8 1/</u> | <u>Schedule 24 1/</u> |
|--------------|----------------------|----------------------|----------------------|----------------------|-----------------------|
| July 2019 | \$2,921 | \$27,819 | \$107,817 | \$2,458 | \$65,569 |
| August | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| September | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| October | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| November | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| December | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| January 2020 | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| February | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| March | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| April | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| May | 2,921 | 27,819 | 107,817 | 2,458 | 65,569 |
| June | 2,919 | 27,816 | 107,822 | 2,459 | 65,571 |
| | <u>\$35,050</u> | <u>\$333,825</u> | <u>\$1,293,809</u> | <u>\$29,497</u> | <u>\$786,830</u> |

1/ Reflects twelve months ended May 31, 2019 per books.

Montana-Dakota Utilities Co.
Electric Utility
MISO Schedule 10 Expenses
Projected Twelve Months Ending June 2020

| | Schedule 10 1/ | | | |
|--------------|----------------------|----------------------|----------------------|------------------|
| | <u>MISO - Energy</u> | <u>MISO - Demand</u> | <u>FERC - Direct</u> | <u>Total</u> |
| July 2019 | \$47,093 | \$3,485 | \$9,868 | \$60,446 |
| August | 47,093 | 3,485 | 9,868 | 60,446 |
| September | 47,093 | 3,485 | 9,868 | 60,446 |
| October | 47,093 | 3,485 | 9,868 | 60,446 |
| November | 47,093 | 3,485 | 9,868 | 60,446 |
| December | 47,093 | 3,485 | 9,868 | 60,446 |
| January 2020 | 47,093 | 3,485 | 9,868 | 60,446 |
| February | 47,093 | 3,485 | 9,868 | 60,446 |
| March | 47,093 | 3,485 | 9,868 | 60,446 |
| April | 47,093 | 3,485 | 9,868 | 60,446 |
| May | 47,093 | 3,485 | 9,868 | 60,446 |
| June | 47,093 | 3,479 | 9,862 | 60,434 |
| | <u>\$565,116</u> | <u>\$41,814</u> | <u>\$118,410</u> | <u>\$725,340</u> |

1/ Reflects twelve months ended May 31, 2019 per books.

Montana-Dakota Utilities Co.
Electric Utility
MISO Schedule 26 Expense
Projected Twelve Months Ending June 2020

| | <u>Charges 1/</u> | <u>Revenue 2/</u> |
|--------------|---------------------------|---------------------------|
| July 2019 | \$214,898 | \$96,024 |
| August | 214,898 | 96,024 |
| September | 214,898 | 96,024 |
| October | 214,898 | 96,024 |
| November | 214,898 | 96,024 |
| December | 214,898 | 96,027 |
| January 2020 | 212,149 | 96,024 |
| February | 212,149 | 96,024 |
| March | 212,149 | 96,024 |
| April | 212,149 | 96,024 |
| May | 212,149 | 96,024 |
| June | 212,149 | 96,024 |
| Total | <u><u>\$2,562,282</u></u> | <u><u>\$1,152,291</u></u> |

1/ Schedule 26 indicative costs posted by MISO as of October 2, 2018:

| | |
|------------------------|-------------|
| 2019 Indicative Charge | \$2,578,780 |
| 2020 Indicative Charge | \$2,545,786 |

2/ Montana-Dakota's projected 2019 revenue requirement for its MTEP project 1355 (Heskett Substation) recovered under Schedule 26
\$1,152,291

Montana-Dakota Utilities Co.
Electric Utility
MISO Schedule 26A Expenses
Projected Twelve Months Ending June 2020

| | BSSE MVP Project | | All Other MVP Projects | | Total Schedule 26A Expenses | A&G Revenue Credit 5/ |
|--------------|------------------------|---|--------------------------------------|--|-----------------------------|-----------------------|
| | Revenue Requirement 1/ | Integrated System Retail Revenue Requirement 2/ | Total Integrated Requirements MWH 3/ | Total MVP Charges (excl. BSSE Retail Rev. Req.) 4/ | | |
| July 2019 | \$1,208,187 | \$8,941 | 297,623 | \$514,875 | \$523,816 | \$95,593 |
| August | 1,208,187 | 8,941 | 278,785 | 481,721 | 490,662 | 95,593 |
| September | 1,208,187 | 8,941 | 263,326 | 454,513 | 463,454 | 95,593 |
| October | 1,208,187 | 8,941 | 255,011 | 439,878 | 448,819 | 95,593 |
| November | 1,208,187 | 8,941 | 290,263 | 501,922 | 510,863 | 95,593 |
| December | 1,208,187 | 8,941 | 327,210 | 566,949 | 575,890 | 95,593 |
| January 2020 | 1,208,187 | 8,941 | 324,354 | 565,166 | 574,107 | 95,593 |
| February | 1,208,187 | 8,941 | 304,599 | 530,199 | 539,140 | 95,593 |
| March | 1,208,187 | 8,941 | 285,679 | 496,711 | 505,652 | 95,593 |
| April | 1,208,187 | 8,941 | 258,521 | 448,641 | 457,582 | 95,593 |
| May | 1,208,187 | 8,941 | 251,071 | 435,455 | 444,396 | 95,593 |
| June | 1,208,187 | 8,936 | 254,447 | 441,435 | 450,371 | 95,592 |
| Total | <u>\$14,498,244</u> | <u>\$107,287</u> | <u>3,390,889</u> | <u>\$5,877,465</u> | <u>\$5,984,752</u> | <u>\$1,147,115</u> |

1/ Montana-Dakota's Projected 2019 Revenue Requirement (Attachment MM) for the BSSE MVP projected to be recovered under Schedule 26A \$14,498,244

2/ Montana-Dakota's estimated retail portion of its BSSE project based on Montana-Dakota's load ratio share in the MISO footprint:
0.74% 6/

3/ 2019 IRP, Volume II, Attachment A, pages G-1 and G-2.

4/ Montana-Dakota's Indicative Annual MVP Charges for Approved MVPs as of October 2, 2018:

| | | |
|------------------------|--------|----------------------------|
| 2019 Indicative Charge | \$1.76 | July through December 2019 |
| 2020 Indicative Charge | \$1.77 | January through June 2020 |

5/ Revenue credit for administrative and general O&M expenses recovered through MISO Attachment MM

| | |
|--|----------------------|
| Montana-Dakota's Projected 2019 Attachment MM's Other O&M Expense, Line 4b | 0.87% |
| Projected Gross Plant in Service (CWIP) from Attachment MM | <u>\$131,852,246</u> |
| Annual A&G Retail Credit | <u>\$1,147,115</u> |

6/ Montana-Dakota's total MVP charges including the BSSE project.

| | |
|---|-------------|
| MDU Projected 2019 MWh Withdrawals - 10/2/2018 update | 3,349,143 |
| Total MISO MWh Withdrawals | 450,762,577 |
| Montana-Dakota's load share in MISO footprint | 0.74% |

**Montana-Dakota Utilities Co.
Electric Utility
MISO Schedule 9 Revenue, BEPC Payments & Credits, and
Facility Sharing Agreement Revenue
Projected Twelve Months Ending June 2020**

| | MISO Sch 9 Revenue 1/ | Payments to Basin 2/ | Basin Facility Sharing Agreements 3/ |
|--------------|--------------------------|-------------------------|--|
| July 2019 | \$325,163 | (\$55,540) | \$20,333 |
| August | 325,163 | (\$55,540) | 20,333 |
| September | 325,163 | (\$55,540) | 20,333 |
| October | 325,163 | (\$55,540) | 20,333 |
| November | 325,163 | (\$55,540) | 20,333 |
| December | 325,163 | (\$55,540) | 20,337 |
| January 2020 | 325,163 | (\$55,540) | 20,333 |
| February | 325,163 | (\$55,540) | 20,333 |
| March | 325,163 | (\$55,540) | 20,333 |
| April | 325,163 | (\$55,540) | 20,333 |
| May | 325,163 | (\$55,540) | 20,333 |
| June | 325,157 | (\$55,537) | 20,333 |
| | <u>\$3,901,950</u> | <u>(\$666,477)</u> | <u>\$244,000</u> |

1/ Reflects twelve months ended May 31, 2019 per books.

2/ NITS Customer Revenue Requirements.

3/ Annual Facility Sharing Agreement revenue of \$244,000

**Montana-Dakota Utilities Co.
Electric Utility
SPP Revenue and Expenses
Projected Twelve Months Ending June 2020**

| | SPP Sch 1 1/ | SPP Sch 1a 1/ | Sch 9 NITS 1/ | Sch 9 Fac. Credit 2/ | SPP Sch 11 1/ | SPP Sch 12 1/ |
|--------------|-----------------|------------------|-------------------|-------------------------|------------------|------------------|
| July 2019 | \$49,536 | \$89,067 | \$1,412,199 | (\$859,997) | \$169,283 | \$8,629 |
| August | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| September | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| October | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| November | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| December | 49,538 | 89,068 | 1,412,202 | (859,991) | 169,286 | 8,625 |
| January 2020 | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| February | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| March | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| April | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| May | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| June | 49,536 | 89,067 | 1,412,199 | (859,997) | 169,283 | 8,629 |
| | <u>594,434</u> | <u>1,068,805</u> | <u>16,946,391</u> | <u>(10,319,958)</u> | <u>2,031,399</u> | <u>103,544</u> |

1/ Reflects twelve months ended May 31, 2019 per books.

2/ SPP Section 30.9 Facility Credits for 2019

Notice of Annual Update to the Transmission Cost Adjustment Filed with the North Dakota Public Service Commission

On July 19, 2019, Montana-Dakota Utilities Co. (Montana-Dakota) filed an application with the North Dakota Public Service Commission (Commission) to update its Transmission Cost Adjustment (TCA) rates in accordance with the Company's Transmission Cost Adjustment Rate 59 tariff that states the rates will be revised to reflect the current level of costs to be recovered.

The proposed TCA rates include North Dakota's allocation of transmission related net expenses assessed by both the Midcontinent Independent System Operator (MISO) and the Southwest Power Pool (SPP) for transmission-related services currently not being recovered through the Company's electric service rates, the inclusion of specified transmission related capital projects, and a projected over-recovery of the deferred TCA balance.

Montana-Dakota has requested the proposed TCA rates be effective with service rendered on and after November 1, 2019, subject to Commission review and approval. The changes are only being proposed at this time and, if rates are suspended by the Commission, the new rates will not be effective until Commission action has been taken.

If approved, a residential customer using 894 Kwh will see an increase of \$0.25 per month or an increase of \$3.00 annually. The TCA is shown as a separate line item on your bill.

| | Residential & Small General |
|---------------------------|-----------------------------|
| Applicable Rate Schedules | 10, 13, 16, 20, 25, & 40 |
| Current Rate | \$0.00446 per Kwh |
| Proposed Rate | \$0.00474 per Kwh |
| Change | \$0.00028 per Kwh |
| | Large General & Contracts |
| Applicable Rate Schedules | 30, 31, 32, 38, & 48 |
| Current Rate | \$0.00372 per Kwh |
| Proposed Rate | \$0.00390 per Kwh |
| Change | \$0.00018 per Kwh |
| | Lighting |
| Applicable Rate Schedules | 41 & 52 |
| Current Rate | \$0.00209 per Kwh |
| Proposed Rate | \$0.00234 per Kwh |
| Change | \$0.00025 per Kwh |

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