MONTANA-DAKOTA UTILITIES CO. SOUTH DAKOTA PUBLIC UTILITIES COMMISION 1ST SET OF DATA REQUESTS ISSUED MARCH 15, 2019 DOCKET NO. EL19-009

Question 1-1

Provide a description of any transmission projects along with all new and previously included regionally cost-allocated projects included for recovery in this TCR and provide justification as to how each project meets the TCR requirements as set forth in 49-34A-25.1.

Response:

By the virtue of taking service in MISO, Montana-Dakota is required to pay Schedule 26 and 26a charges. These charges are associated with regionally cost allocated transmission projects of 115 kV and above that have been deemed by MISO to have benefits to Montana-Dakota on a regional or systemwide basis. There are numerous projects that make up the total charges for each schedule and each project's associated revenue requirement becomes a component of the total charges under the respective schedule.

Montana-Dakota also takes transmission service in SPP. Similar to MISO, SPP's regionally cost allocated projects are included in Schedule 11 and the Company receives facility credits for its owned assets used to provide service in SPP's footprint.

Each schedule is described in further detail on pages 9 through 11 of Attachment B of the Company's filing. In addition, the regionally cost allocated transmission projects provide Montana-Dakota's customers the benefit of access to available, low cost energy.

The Company also proposed to include two projects in the Transmission Rider as identified on pages 2 and 3 of the filing. The Leola Transmission Project includes the installation of 45 miles of 115 kV line as well as an associated 115 kV transmission substation. The project is further described on page 3 of the filing.

The Bowdle East Transmission Substation project replaces an existing substation that has been inundated from surrounding water sources with a 115/41.6 kV transmission substation along with the routing of all existing area transmission lines to this new substation. The project is further described on pages 2 and 3 of the filing.

Upon further review of the Bowdle project, it was discovered that the project should have been accounted for in two separate components: the 41.6 kV portion of the substation should remain a direct South Dakota project similar to the existing substation. The substation currently provides direct support to the towns of Eureka, Hillsview, Hosmer, Bowdle, Java, Roscoe, Ipswitch, Hoven, Tolstoy, Onaka, and surrounding areas including the areas served by the local cooperatives. The 115 kV portion of the substation will provide additional support and reliability for the Company's integrated electrical system. As filed, the entire cost was considered part of the integrated system allocable to customers in South Dakota, Montana and North Dakota and the revenue requirement was

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calculated as such. This is incorrect, as the 41.6 kV portion of the project (determined to be 45% of the project) should be directly assigned to South Dakota. A revised Attachment A and Attachment C have been included as Response No. 1-1-Attachment A that corrects the revenue requirement calculation to reflect the Bowdle substation and lines as properly allocated.

The Bowdle project is similar to the Leola substation that will be completed in two phases. The first phase, directly assigned to South Dakota, was completed and placed in service in the fall of 2018 and included in the Company's TCJA filing, and the integrated system allocable portion that is included in this filing.

Montana-Dakota asserts that the projects included in this filing, both those included in the MISO and SPP schedules and the two projects described above, meet the TCR requirements as set forth in 49-34A-25.1. Each of the projects has a design capacity that exceeds thirty-four and one-half kilovolts and is greater than or supports transmission facilities of greater than five miles in length. The projects are designed to enhance reliability and resiliency of Montana-Dakota's electric system directly and provide access to low costs energy.

The Company will resubmit the updated schedules into the docket upon completion of the Staff's review of the filing.

MONTANA-DAKOTA UTILITIES CO.
SOUTH DAKOTA PUBLIC UTILITIES COMMISION
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Response No. 1-1 Attachment A

Montana-Dakota Utilities Co. Electric Utility - South Dakota Transmission Cost Recovery Rider Rate Proposed Rate to be Effective May 1, 2019

	Total
Projected 2019 Costs to be Recovered Net Expense Transmission Projects' Revenue Requirement Total Projected 2019 Costs to be Recovered	\$798,386 1/ 239,639 2/ \$1,038,025
(Over) Recovery as of December 31, 2018 True-Up of Schedule 26A Return Credit - 2017 True-Up of Other O&M Revenue Credit - 2017 Net (Over) Recovery as of December 31, 2018	(52,182) 3/ 42 4/ 105 5/ (52,035)
Projected 2019 Credits Other O&M Revenue Credit Schedule 26A Return Credit	(862) 5/ (462) 6/
Net SD Allocated Transmission Costs	\$984,666
Projected Kwh	151,203,000
Projected \$/Kwh Current \$/Kwh 7/ \$ Change	\$0.00651 0.00545 0.00106
y Change	0.00100

- 1/ Attachment B, Page 2.
- 2/ Attachment C.
- 3/ Attachment F.
- 4/ Attachment E, Page 1.
- 5/ Attachment E, Page 3
- 6/ Attachment E, Page 2.
- 7/ Rate effective May 1, 2018.

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

						F	Projected						Average
	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Balance
Rate Base Plant Balance 1/ Accumulated Depreciation					\$2,955,680	\$2,955,680 3,977	\$2,955,680 7,954	\$2,955,680 11,931	\$2,955,680 15,908	\$2,955,680 19,885	\$2,955,680 23,862	\$2,955,680 27,839	
Net Plant in Service	\$0	\$0	\$0	\$0	\$2,955,680	\$2,951,703	\$2,947,726	\$2,943,749	\$2,939,772	\$2,935,795	\$2,931,818	\$2,927,841	\$1,961,174
Accum Def Income Taxes 3/	\$1,334	\$2,556	\$3,655	\$4,634	\$5,490	\$6,226	\$6,839	\$7,329	\$7,699	\$7,946	\$8,073	\$8,077	**
Total Rate Base	(\$1,334)	(\$2,556)	(\$3,655)	(\$4,634)	\$2,950,190	\$2,945,477	\$2,940,887	\$2,936,420	\$2,932,073	\$2,927,849	\$2,923,745	\$2,919,764	\$1,955,352
Return on Rate Base 5/	(\$8)	(\$15)	(\$22)	(\$28)	\$17,740	\$17,712	\$17,685	\$17,658	\$17,632	\$17,606	\$17,581	\$17,558	\$141,099
Expenses													Year End
Depreciation 2/						\$3,977	\$3,977	\$3,977	\$3,977	\$3,977	\$3,977	\$3,977	\$27,839
Taxes Other Than Income 4/	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,010	1,008	12,118
Total Expenses	\$1,010	\$1,010	\$1,010	\$1,010	\$1,010	\$4,987	\$4,987	\$4,987	\$4,987	\$4,987	\$4,987	\$4,985	\$39,957
Income before Taxes	(\$1,010)	(\$1,010)	(\$1,010)	(\$1,010)	(\$1,010)	(\$4,987)	(\$4,987)	(\$4,987)	(\$4,987)	(\$4,987)	(\$4,987)	(\$4,985)	(\$39,957)
Interest Expense	(3)	(5)	(8)	(10)	6,340	6,330	6,320	6,311	6,302	6,292	6,284	6,275	50,428
Taxable income	(\$1,007)	(\$1,005)	(\$1,002)	(\$1,000)	(\$7,350)	(\$11,317)	(\$11,307)	(\$11,298)	(\$11,289)	(\$11,279)	(\$11,271)	(\$11,260)	(\$90,385)
Income Taxes 6/	(\$211)	(\$211)	(\$210)	(\$210)	(\$1,544)	(\$2,377)	(\$2,374)	(\$2,373)	(\$2,371)	(\$2,369)	(\$2,367)	(\$2,365)	(\$18,982)
Operating Income	(\$799)	(\$799)	(\$800)	(\$800)	\$534	(\$2,610)	(\$2,613)	(\$2,614)	(\$2,616)	(\$2,618)	(\$2,620)	(\$2,620)	(\$20,975)
Increase in Operating Income Required	\$791	\$784	\$778	\$772	\$17,206	\$20,322	\$20,298	\$20,272	\$20,248	\$20,224	\$20,201	\$20.178	\$162,074
Gross Revenue Conversion Factor 6/	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582	1.26582
Revenue Increase	\$1,001	\$992	\$985	\$977	\$21,780	\$25,724	\$25,694	\$25,661	\$25,630	\$25,600	\$25,571	\$25,542	\$205,157
Gross Receipts Tax 7/	2	1	1	1	33	39	39	38	38	38	38	38	306
Required Revenue Increase	\$1,003	\$993	\$986	\$978	\$21,813	\$25,763	\$25,733	\$25,699	\$25,668	\$25,638	\$25,609	\$25,580	\$205,463

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

South Dakota Factor #15: 5.292291%

1/ Plant in Service, estimated in service date May 2019. 45% of the project is direct to South Dakota, 55% is

for the integrated system:

Direct SD Integrated Substation: \$2,562,182 Substation: \$3,131,555 Lines: 213,929 Lines: 261,468 2,776,111 Total: \$3,393,023 SD Factor #15: 5.292291% Total Integrated: \$179,569 Total Direct SD: 2,776,111

Total Plant to SD: \$2,955,680

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

Substation Lines Plant (SD Direct & Alloc.): \$2,727,913 Plant (SD Direct & Alloc.): \$227,767 Depreciation Rate: Depreciation Rate: 1.58% 2.03% Annual Depreciation: Annual Depreciation: \$43,101 \$4,624

> Monthly: \$3,592 Monthly: \$385

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

2019 year end plant balance: 2,955,680

Tax Depreciation Rate: 3.75% Tax Depreciation: 110,838 **Book Depreciation:** 27,839 Remainder: 82.999 21.00% Income Tax Rate:

Deferred Income Tax: 17,430 Monthly: 1,453

Proration of Monthly DIT:

January	February	March	April	May	June
91.78%	84.11%	75.62%	67.40%	58.90%	50.68%
1,334	1,222	1,099	979	856	736

July	August	September	October	November	December	Total	
42.19%	33.70%	25.48%	16.99%	8.77%	0.27%		_
613	490	370	247	127	4	8,077	

4/ Property Tax:

Year End Plant Balance: 2.955.680

South Dakota Effective Rate 0.41% (Ad Valorem - Transmission)

> Annual Property Tax: 12,118

> > Monthly: 1,010

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

6/ Tax Rate 21.0000% (Federal Tax Rate = 21%, SD State Tax Rate = 0%)

1- tax rate 79.0000% Gross Revenue Conversion Factor 1.26582

7/ Gross Receipts tax - 2019 0.0015

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

		Projected									Average		
	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Balance
Rate Base Plant Balance 1/ Accumulated Depreciation								\$115,870	\$115,870 153	\$115,870 306	\$115,870 459	\$115,870 612	
Net Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$115,870	\$115,717	\$115,564	\$115,411	\$115,258	\$48,152
Accum Def Income Taxes 3/	\$60	\$115	\$164	\$208	\$246	\$279	\$306	\$328	\$345	\$356	\$362	\$362	
Total Rate Base	(\$60)	(\$115)	(\$164)	(\$208)	(\$246)	(\$279)	(\$306)	\$115,542	\$115,372	\$115,208	\$115,049	\$114,896	\$47,891
Return on Rate Base 5/	\$0	(\$1)	(\$1)	(\$1)	(\$1)	(\$2)	(\$2)	\$695	\$694	\$693	\$692	\$691	\$3,457
Expenses													Year End
Depreciation 2/									\$153	\$153	\$153	\$153	\$612
Taxes Other Than Income 4/	40	40	40	40	40	40	40	40	40	40	40	35	475
Total Expenses	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$40	\$193	\$193	\$193	\$188	\$1,087
Income before Taxes	(\$40)	(\$40)	(\$40)	(\$40)	(\$40)	(\$40)	(\$40)	(\$40)	(\$193)	(\$193)	(\$193)	(\$188)	(\$1,087)
Interest Expense	0	0	0	0	(1)	(1)	(1)	248	248	248	247	247	1,235
Taxable income	(\$40)	(\$40)	(\$40)	(\$40)	(\$39)	(\$39)	(\$39)	(\$288)	(\$441)	(\$441)	(\$440)	(\$435)	(\$2,322)
Income Taxes 6/	(\$8)	(\$8)	(\$8)	(\$8)	(\$8)	(\$8)	(\$8)	(\$60)	(\$93)	(\$93)	(\$92)	(\$91)	(\$485)
Operating Income	(\$32)	(\$32)	(\$32)	(\$32)	(\$32)	(\$32)	(\$32)	\$20	(\$100)	(\$100)	(\$101)	(\$97)	(\$602)
Increase in Operating Income Required Gross Revenue Conversion Factor 6/	\$32 1.26582	\$31 1.26582	\$31 1.26582	\$31 1.26582	\$31 1.26582	\$30 1.26582	\$30 1.26582	\$675 1.26582	\$794 1.26582	\$793 1.26582	\$793 1.26582	\$788 1.26582	\$4,059 1.26582
Revenue Increase	\$41	\$39	\$39	\$39	\$39	\$38	\$38	\$854	\$1,005	\$1,004	\$1,004	\$997	\$5,137
Gross Receipts Tax 7/	0	0	0	0	0	0	0	1	2	2	2	1	φο, τον
Required Revenue Increase	\$41	\$39	\$39	\$39	\$39	\$38	\$38	\$855	\$1,007	\$1.006	\$1.006	\$998	\$5,145
required revenue increase	- 41	403	403	403	403	430	430	4000	ψ1,007	ψ1,000	Ψ1,000	4930	ψυ, 1 4 0

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

South Dakota Factor #15: 5.292291%

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

Substation: \$2,160,427

Node: 28,977 Total: \$2,189,404

SD Factor #15: 5.292291%

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

Plant (SD Alloc.): \$115,870
Depreciation Rate: 1.58%
Annual Depreciation: \$1,831

Monthly: \$153

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

2019 year end plant balance: 115,870

Tax Depreciation Rate: 3.75%
Tax Depreciation: 4,345
Book Depreciation: 612

Remainder: 3,733
Income Tax Rate: 21.00%
Deferred Income Tax: 784

Monthly: 65

Proration of Monthly DIT:

January	February	March	April	May	June
91.78%	84.11%	75.62%	67.40%	58.90%	50.68%
60	55	49	44	38	33

July	August	September	October	November	December	Total
42.19%	33.70%	25.48%	16.99%	8.77%	0.27%	
27	22	17	11	6	0	362

4/ Property Tax:

Year End Plant Balance: 115,870

South Dakota Effective Rate 0.41% (Ad Valorem - Transmission)

Annual Property Tax: 475

Monthly: 40

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

6/ Tax Rate = 21%, SD State Tax Rate = 0%)

1- tax rate 79.0000% Gross Revenue Conversion Factor 1.26582

7/ Gross Receipts tax - 2019 0.0015

Montana-Dakota Utilities Co. Electric Utility - South Dakota Transmission Rider Revenue Requirement - Leola Lines Projected 2019

						Proje	cted						Average
	Jan 2019	Feb 2019	Mar 2019	Apr 2019	May 2019	June 2019	July 2019	Aug 2019	Sept 2019	Oct 2019	Nov 2019	Dec 2019	Balance
Rate Base Plant Balance 1/ Accumulated Depreciation								\$633,403	\$633,403 1,072	\$633,403 2,144	\$633,403 3,216	\$633,403 4,288	
Net Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$633,403	\$632,331	\$631,259	\$630,187	\$629,115	\$263,025
Accum Def Income Taxes 3/	\$313	\$600	\$858	\$1,088	\$1,289	\$1,462	\$1,606	\$1,721	\$1,808	\$1,866	\$1,896	\$1,897	
Total Rate Base	(\$313)	(\$600)	(\$858)	(\$1,088)	(\$1,289)	(\$1,462)	(\$1,606)	\$631,682	\$630,523	\$629,393	\$628,291	\$627,218	\$261,658
Return on Rate Base 5/	(\$2)	(\$4)	(\$5)	(\$7)	(\$8)	(\$9)	(\$10)	\$3,799	\$3,792	\$3,785	\$3,778	\$3,772	\$18,881
Expenses													Year End
Depreciation 2/									\$1,072	\$1,072	\$1,072	\$1,072	\$4,288
Taxes Other Than Income 4/	216	216	216	216	216	216	216	216	216	216	216	221	2,597
Total Expenses	\$216	\$216	\$216	\$216	\$216	\$216	\$216	\$216	\$1,288	\$1,288	\$1,288	\$1,293	\$6,885
Income before Taxes	(\$216)	(\$216)	(\$216)	(\$216)	(\$216)	(\$216)	(\$216)	(\$216)	(\$1,288)	(\$1,288)	(\$1,288)	(\$1,293)	(\$6,885)
Interest Expense	(1)	(1)	(2)	(2)	(3)	(3)	(3)	1,358	1,355	1,353	1,350	1,348	6,749
Taxable income	(\$215)	(\$215)	(\$214)	(\$214)	(\$213)	(\$213)	(\$213)	(\$1,574)	(\$2,643)	(\$2,641)	(\$2,638)	(\$2,641)	(\$13,634)
Income Taxes 6/	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$45)	(\$331)	(\$555)	(\$555)	(\$554)	(\$555)	(\$2,865)
Operating Income	(\$171)	(\$171)	(\$171)	(\$171)	(\$171)	(\$171)	(\$171)	\$115	(\$733)	(\$733)	(\$734)	(\$738)	(\$4,020)
Increase in Operating Income Required Gross Revenue Conversion Factor 6/	\$169 1.26582	\$167 1.26582	\$166 1.26582	\$164 1.26582	\$163 1.26582	\$162 1.26582	\$161 1.26582	\$3,684 1.26582	\$4,525 1.26582	\$4,518 1.26582	\$4,512 1.26582	\$4,510 1.26582	\$22,901 1.26582
Revenue Increase	\$214	\$211	\$210	\$208	\$206	\$205	\$204	\$4,663	\$5,728	\$5,719	\$5,711	\$5,709	\$28,988
Gross Receipts Tax 7/	0	0	0	0	0	0	0	7	9	9	9	9	43
Required Revenue Increase	\$214	\$211	\$210	\$208	\$206	\$205	\$204	\$4,670	\$5,737	\$5,728	\$5,720	\$5,718	\$29,031

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

South Dakota Factor #15: 5.292291%

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

Lines 11,968,410 SD Factor #15: 5.292291% \$633,403

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

Plant (SD Alloc.): \$633,403 Depreciation Rate: 2.03% Annual Depreciation: \$12,858

> Monthly: \$1,072

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

2019 year end plant balance: 633,403

Tax Depreciation Rate: 3.75% Tax Depreciation: 23,753 Book Depreciation: 4,288 Remainder: 19,465

Income Tax Rate: 21.00% Deferred Income Tax: 4,088

Monthly: 341

Proration of Monthly DIT:

January	February	March	April	May	June	
91.78%	84.11%	75.62%	67.40%	58.90%	50.68%	۰
313	287	258	230	201	173	

July	August	September	October	November	December	Total
42.19%	33.70%	25.48%	16.99%	8.77%	0.27%	
144	115	87	58	30	1	1,897

4/ Property Tax:

Year End Plant Balance: 633,403

South Dakota Effective Rate 0.41% (Ad Valorem - Transmission)

Annual Property Tax: 2,597

> Monthly: 216

5/ Authorized ROR per Docket No. EL15-024. <u>7.216</u>%

6/ Tax Rate 21.0000% (Federal Tax Rate = 21%, SD State Tax Rate = 0%)

79.0000% 1- tax rate Gross Revenue Conversion Factor 1.26582

7/ Gross Receipts tax - 2019 0.0015