#### Montana-Dakota Utilities Co. Electric Utility - South Dakota Infrastructure Rider Revenue Requirement 2025 Projected

	Projected											Average	
	Jan 2025	Feb 2025	Mar 2025	Apr 20256	May 2025	June 2025	July 2025	Aug 2025	Sept 2025	Oct 2025	Nov 2025	Dec 2025	Balance
Rate Base													
Plant Balance:													
Cedar Hills - SCADA Controls 5/	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$19,645	\$19,645	\$19,645	
Wishek Substation / Lines 6/ Total Plant Balance	0 \$0	<u>0</u> \$0	<u>0</u> \$0	<u>0</u> \$0	<u>0</u> \$0	0 \$0	22,448 \$22,448	22,448 \$22,448	54,887 \$54,887	102,158 \$121,803	102,158 \$121,803	102,158 \$121,803	\$38,766
Total Plant Balance	<b>\$</b> U	\$0	\$0	\$0	\$0	\$0	\$22,448	\$22,448	\$54,887	\$121,803	\$121,803	\$121,803	\$38,700
Accumulated Depreciation:													
Cedar Hills - SCADA Controls 5/	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$62	\$124	
Wishek Substation / Lines 6/	0	0	0	0	0	0	0	36	72	160	323	487	
Total Accumulated Reserve	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$36	\$72	\$160	\$385	\$611	\$105
Net Plant in Service	\$0	\$0	\$0	\$0	\$0	\$0	\$22,448	\$22,412	\$54,815	\$121,643	\$121,418	\$121,192	\$38,661
Reductions:													
Accum DIT - Cedar Hills - SCADA Controls 1/	\$10	\$19	\$27	\$34	\$40	\$46	\$51	\$55	\$58	\$60	\$61	\$61	
Accum DIT - Wishek Substation / Lines 1/	54	104	149	189	224	254	279	299	314	324	329	329	
Total Rate Base	(\$64)	(\$123)	(\$176)	(\$223)	(\$264)	(\$300)	\$22,118	\$22,058	\$54,443	\$121,259	\$121,028	\$120,802	\$38,380
Return on Rate Base 2/	\$0	(\$1)	(\$1)	(\$1)	(\$2)	(\$2)	\$129	\$129	\$318	\$708	\$707	\$706	\$2,690
Expenses													
Operating Expenses													Total
Commission Expense	\$0	\$0	\$0	\$0	\$1,052	\$0	\$709	\$171	\$0	\$0	\$0	\$0	\$1,932
Depreciation - Cedar Hills - SCADA Controls 5/	0	0	0	0	0	0	0	0	0	0	62	62	124
Depreciation - Wishek / Substation / Lines 6/	0	0	0	0	0	0	0	36	36	88	163	163	486
Taxes Other Than Income 3/	30	30	30	30	30	30	30	30	30	30	30	34	364
Total Expenses	\$30	\$30	\$30	\$30	\$1,082	\$30	\$739	\$237	\$66	\$118	\$255	\$259	\$2,906
Income before Taxes	(\$30)	(\$30)	(\$30)	(\$30)	(\$1,082)	(\$30)	(\$739)	(\$237)	(\$66)	(\$118)	(\$255)	(\$259)	(\$2,906)
Interest Expense	0	0	0	0	0	-1	41	41	102	226	226	225	860
Taxable income	(\$30)	(\$30)	(\$30)	(\$30)	(\$1,082)	(\$29)	(\$780)	(\$278)	(\$168)	(\$344)	(\$481)	(\$484)	(\$3,766)
Income Taxes 4/	(\$6)	(\$6)	(\$6)	(\$6)	(\$227)	(\$6)	(\$164)	(\$58)	(\$35)	(\$72)	(\$101)	(\$102)	(\$789)
Operating Income	(\$24)	(\$24)	(\$24)	(\$24)	(\$855)	(\$24)	(\$575)	(\$179)	(\$31)	(\$46)	(\$154)	(\$157)	(\$2,117)
Increase in Operating Income Required	\$24	\$23	\$23	\$23	\$853	\$22	\$704	\$308	\$349	\$754	\$861	\$863	\$4,807
Gross Revenue Conversion Factor 4/	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	\$30	\$29	\$29	\$29	\$1,080	\$28	\$891	\$390	\$442	\$954	\$1,090	\$1,092	\$6,084
Gross Receipts Tax (.0015)	0	0	0	0	2	0	1	1	1	1	2	2	10
Total Revenue Requirement	\$30	\$29	\$29	\$29	\$1,082	\$28	\$892	\$391	\$443	<b>\$955</b>	\$1,092	\$1,094	\$6,094

#### Montana-Dakota Utilities Co. Electric Utility - South Dakota Infrastructure Rider Revenue Requirement 2025 Projected

#### 2025 Footnotes:

Factor #15 - Int. Sys. 12 Month Peak Demand: 4.789628% Factor #271 - Integrated Peak and Energy: 4.619759%

1/ Monthly Deferred Income Tax activity is 1/12 of 2025 DIT activity. Monthly activity prorated based on DIT proration methodology.

_	Wishek	_	Cedar Hills
2025 DIT activity:	\$14,657	2025 DIT activity:	\$2,792
SD Factor #15:	4.789628%	SD Factor #271:	4.619759%
SD DIT Activity:	\$702	SD DIT Activity:	\$129
Monthly Activity:	\$59	Monthly Activity:	\$11

	January	February	March	April	May	June	July	August	September	October	November	December
_	91.78%	84.11%	75.62%	67.40%	58.90%	50.68%	42.19%	33.70%	25.48%	16.99%	8.77%	0.27%
Wishek Substation / Lines:	54	50	45	40	35	30	25	20	15	10	5	0
Cedar Hills - SCADA Controls:	10	9	8	7	6	6	5	4	3	2	1	0

2/ Authroized ROR per Docket No. EL23-020. 7.0100%

3/ Taxes Other Than Income:

	Infrastructure
	Projects
2025 Property Tax:	7,595
SD Factor. #15:	4.789628%
South Dakota:	\$364
Monthly:	\$30

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

1- tax rate 79.0000% Gross Revenue Conversion Factor 1.26582

5/ Projected addition to Plant in Service. See Attachment B, page 3 for details.

6/ Projected addition to Plant in Service. See Attachment B, pages 4-7 for details.

Montana-Dakota Utilites Co. Electric Utility - South Dakota Infrastructure Rider Cedar Hills Additions Projected Year 2025

### FP-325902 Replace SCADA Controls

Plant Additions: \$425,242

Plant in Service: \$425,242 SD Fac. #271: 4.619759% SD Plant: \$19,645 1/

Depreciation rate: 3.81%

Annual SD Depreciation: \$748

Monthly Depreciation: \$62 1/

1/ Plant balance estimated in service October 2025.

Depreciation expense begins November 2025.

Montana-Dakota Utilities Co. Electric Utility - South Dakota Inrastructure Rider Wishek Rebuild Projected 2025

### Wishek Substation Rebuild:

### FP-323216 - TL040-1 Wishek-Linton 115kV

Plant Additions: \$677,280

Plant in Service: \$677,280
SD Fac. #15: 4.789628%
SD Plant: \$32,439 1/
Depreciation rate: 1.92%
Annual SD Depreciation: \$623
Monthly Depreciation: \$52 1/

1/ Plant balance estimated in service September 2025. Depreciation expense begins October 2025.

### FP-323218 - TL041-1 Wishek-Ashley 46kV

Plant Additions: \$592,262

Plant in Service: \$592,262

SD Fac. #50: 3.540000%

SD Plant: \$20,966 1/

Depreciation rate: 1.92%

Annual SD Depreciation: \$403

Monthly Depreciation: \$34 1/

1/ Plant balance estimated in service October 2025.Depreciation expense begins November 2025.OutputDescription

### FP-323254 - KEM REC 46kV

Plant Additions: \$495,672

Plant in Service: \$495,672

SD Fac. #39: 5.306767%

SD Plant: \$26,304 1/

Depreciation rate: 1.92%

Annual SD Depreciation: \$505

Monthly Depreciation: \$42 1/

1/ Plant balance estimated in service October 2025.
Depreciation expense begins November 2025.

# FP-324145 - TL089-1 Wishek-Napoleon 230kV

Plant Additions: \$468,685

Plant in Service: \$468,685

SD Fac. #15: 4.789628%

SD Plant: \$22,448 1/

Depreciation rate: 1.92%

Annual SD Depreciation: \$431

Monthly Depreciation: \$36 1/

1/ Plant balance estimated in service July 2025. Depreciation expense begins August 2025.

# **Project Description:**

The project will rebuild Montana-Dakota's Wishek Transmission Substation due to its age and condition. This rebuild necessitates rerouting the existing transmission lines from the current Wishek Transmission Substation to the new Wishek NW Transmission Substation. The transmission line reroutes involve realigning eight high voltage transmission lines, including (2) 230kV, (1) 115kV, and (5) 41.6kV lines. Each reroute is less than 0.5 mile in length. The new Wishek NW Transmission Substation is currently under construction just north of the existing substation.

# Justification:

The Wishek Transmission Substation and transmission line projects are essential to address several operational challenges, an aging facility, and environmental and community challenges while enhancing the overall performance and reliability of the power grid. The key justifications are shown below:

- 1. Location: Montana-Dakota purchased property adjacent to our existing substation to minimize costs and interference with public and private property.
- Improved Grid Reliability: The new substation and rerouting of these transmission lines will allow for the installation of modern infrastructure in accordance with new design and operational standards. This will help improve system reliability, reduce transmission losses, and provide additional flexibility in managing power flows.
- 3. Enhanced Public Safety: The new substation and rerouted transmission lines will comply with the latest standards to ensure continued public safety.
- 4. Operational Flexibility and Future Expansion: The new transmission substation and related transmission line reroutes will give Montana-Dakota increased reliability and flexibility in serving our customers while planning for future growth.

# **Alternatives:**

The alternatives looked at for this substation rebuild project were the following:

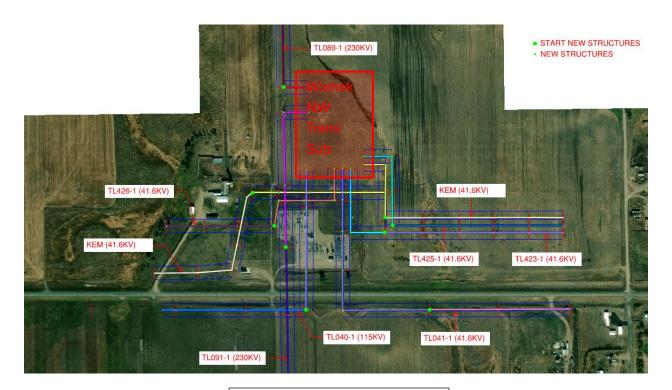
- 1. Do nothing. With the age and condition of the existing Wishek Transmission Substation the "Do Nothing" approach is not an option.
- 2. Rebuild the existing substation in place. Rebuilding a substation in an existing location creates many challenges and safety concerns. All equipment, control cable, structures, control house, and miscellaneous items would need to be replaced in phases while keeping the substation energized. This would require numerous phases, outages, increased costs, and an extended timeframe to maintain safety and customer reliability. The possible benefit would be a reduction in line relocations.

3. Rebuild the substation in a different location. Different designs and locations of the substation were proposed. Ultimately, building directly north of the existing substation was determined as the best plan of action. This allows Montana-Dakota to construct the entire new substation and then reroute the transmission lines while providing safe and reliable power.

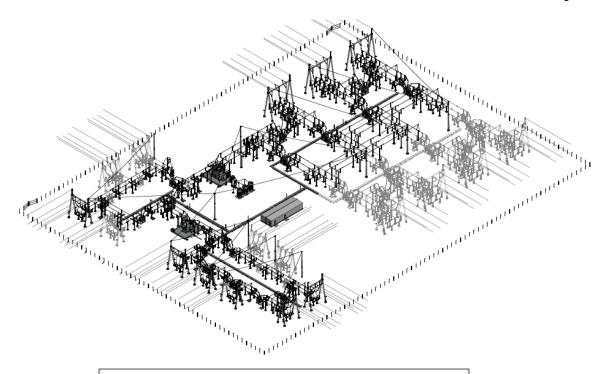
After the location of the new Wishek NW Transmission Substation was determined multiple alternatives for rerouting the (8) high voltage transmission lines were examined. The overall goal for routing the transmission lines was to minimize costs, transmission line crossings, and disruption to customers.

The drawings below show the substation location, transmission line reroutes, and the substation layout.

## **Layouts:**



**Transmission Line Reroutes** 



Wishek NW Transmission Substation Layout

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

#### Revenue Requirement - Plant Closure Regulatory Assets Recovery Projected 2025

	Projected										Average		
	Jan 2025	Feb 2025	Mar 2025	Apr 2025	May 2025	June 2025	July 2025	Aug 2025	Sept 2025	Oct 2025	Nov 2025	Dec 2025	Balance
Rate Base													
Deferred Depr. Asset - L&C	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	\$2,081,165	
Deferred Depr. Asset - Heksett	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	1,758,362	
Decommissioning	416,022	416,022	416,022	416,022	416,022	416,022	416,022	416,022	416,022	416,022	416,022	416,022	
Excess ADIT Amortization	(266,149)	(266,149)	(266, 149)	(266, 149)	(266,149)	(266,149)	(266,149)	(266,149)	(266,149)	(266,149)	(266,149)	(266,149)	
Accumulated Amortization	(3,269,707)	(3,292,808)	(3,316,035)	(3,345,056)	(3,374,235)	(3,403,573)	(3,433,071)	(3,462,731)	(3,492,552)	(3,522,536)	(3,552,682)	(3,582,994)	
Net Rate Base	\$719,693	\$696,592	\$673,365	\$644,344	\$615,165	\$585,827	\$556,329	\$526,669	\$496,848	\$466,864	\$436,718	\$406,406	\$568,735
Accumulated ADIT	151,136	146,284	141,407	135,312	129,185	123,024	116,829	110,600	104,338	98,041	91,711	85,345	
Total Rate Base	\$568,557	\$550,308	\$531,958	\$509,032	\$485,980	\$462,803	\$439,500	\$416,069	\$392,510	\$368,823	\$345,007	\$321,061	\$449,301
Return on Rate Base 1/	\$3,321	\$3,215	\$3,108	\$2,974	\$2,839	\$2,704	\$2,567	\$2,431	\$2,293	\$2,155	\$2,015	\$1,876	\$31,498
Expenses													
Amortization - Deferred Asset	\$23,101	\$23,227	\$29,021	\$29,179	\$29,338	\$29,498	\$29,660	\$29,821	\$29,984	\$30,146	\$30,312	\$30,476	\$343,763
Amortization - Emp/Other - L&C	0	0	0	0	0	0	0	0	0	0	0	0	0
Amortization - Emp/Other - Heskett	5,668	5,668	0	0	0	0	0	0	0	0	0	0	11,336
Total Expenses	\$28,769	\$28,895	\$29,021	\$29,179	\$29,338	\$29,498	\$29,660	\$29,821	\$29,984	\$30,146	\$30,312	\$30,476	\$355,099
Income before Taxes (EBIT)	(\$28,769)	(\$28,895)	(\$29,021)	(\$29,179)	(\$29,338)	(\$29,498)	(\$29,660)	(\$29,821)	(\$29,984)	(\$30,146)	(\$30,312)	(\$30,476)	(\$355,099)
Interest Expense 1/	1,061	1,027	993	950	907	864	820	777	733	688	644	599	10,063
Taxable income	(\$29,830)	(\$29,922)	(\$30,014)	(\$30,129)	(\$30,245)	(\$30,362)	(\$30,480)	(\$30,598)	(\$30,717)	(\$30,834)	(\$30,956)	(\$31,075)	(\$365,162)
Income Taxes 2/	(\$6,264)	(\$6,284)	(\$6,303)	(\$6,327)	(\$6,351)	(\$6,376)	(\$6,401)	(\$6,426)	(\$6,451)	(\$6,475)	(\$6,501)	(\$6,526)	(\$76,685)
Operating Income	(\$22,505)	(\$22,611)	(\$22,718)	(\$22,852)	(\$22,987)	(\$23,122)	(\$23,259)	(\$23,395)	(\$23,533)	(\$23,671)	(\$23,811)	(\$23,950)	(\$278,414)
Revenue Requirement	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$32,691	\$392,292
Gross Receipts Tax (.0015)	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$49	\$588
Total Revenue Requirement	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$32,740	\$392,880

1/ Authorized ROR Per Docket No. EL23-020: 7.0100% Interest on Debt Per Docket No. EL23-020: 2.2400%

2/ Income Tax Rate - Federal Tax Rate = 21%:

Tax Rate 21.0000% 1- tax rate 79.0000% \$392,292

Total twelve month Regulatory Asset revenue requirement: