



UTILITIES CO.

A Division of MDU Resources Group, Inc.

400 North Fourth Street

Bismarck, ND 58501

(701) 222-7900

September 11, 2018

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

Re: Responses to Requests from Informal Hearing Regarding Montana-Dakota's Tax Reform Effects- Electric Rates

Case No. PU18-89

Montana-Dakota Utilities Co. (Montana-Dakota), a Division of MDU Resources Group, Inc., herewith submits responses to requests for information by the North Dakota Public Service Commission (Commission) at the Informal Hearing held in this matter on August 30, 2018.

Request 1 – Provide additional information regarding the underground cable replacement work referenced in the Settlement Agreement submitted by Commission Advocacy Staff and Montana-Dakota on August 9, 2018.

Response:

Following is a more detailed description of why the Company has identified underground cable installed before 1983 as an issue that requires ongoing investment to replace.

- Underground Cable Systems installed before 1983 are all subject to failure. These cables have a long history of cable faults when operated on 12.47KV systems. The Company has been slowly replacing these cables over time, yet there are currently approximately 1.25 million feet of vintage cables on the electric distribution system in North Dakota and about half of those are on 12.47KV systems subject to failures resulting in outages to customers. Construction projects dedicated to these replacements directly affect outage reliability to the customers in North Dakota.
- There were several general manufacturing issues with cables made prior to 1983. The industry as a whole went through a transformation of understanding as to why underground primary cables were not standing up over time. Several manufactures went out of business due to this issue, the others reacted to finding the solutions to what issues there were and for the most part corrected the issues by 1983. The main issue was the insulation medium and it was reformulated over time

due to chemical/physical breakdown concerns. Additionally, several manufacture quality control issues became apparent including contamination of the insulation itself upon manufacture, the uniform quality control of insulation thickness was a large problem, and the control of water inside the conductor stranding was also a large issue. The combination of manufacturers recognizing and reacting to these concerns has produced a very high-quality product for cables manufactured after 1983.

- Natural primary cable faults do not exist on post 1983 cables at Montana-Dakota. The only failures the Company has experienced on post-1983 cables are from other causes such as physical damage pre or post-construction, system failure issues, and excavation dig-ins, etc.
- Montana-Dakota has been replacing cable at a rate to maintain or reduce overall numbers of cable faults, in other words Montana-Dakota has been replacing cables at a rate to provide for a stable or improvement in historic reliability indices caused by the natural cable insulation faults. The Company is currently replacing cables on radial feeds any time one cable in the radial feed fails, and when there are two or more cable failures on a looped cable system. Montana-Dakota will continue to work toward mitigating failure including replacement as necessary to maintain or enhance the reliability of the distribution system.
- Approximately 1,700 customers were affected on average annually over the last three years by underground cable faults.

Request 2 – What are the benefits of amortizing the entire balance of non-plant related excess accumulated deferred income taxes in 2018 versus a 10 year amortization as proposed by the Company?

Response:

The primary benefit to customers regarding the treatment of non-plant related excess accumulated deferred income taxes, is the instant reduction in the Environmental Rider Rate as shown in Response 3 and the reduction in the deferred balances associated with the Generation and Transmission riders that will provide offsets to future rider rates. The affect on rate base is shown below. Again, the benefit to customers is realizing the benefit today rather than over a 10-year period to match the average life of the asset creating the excess deferred tax as originally proposed by the Company to smooth out cash flow changes.

Total Excess Deferred Income Taxes	\$1,778,283	
Items Included on Rate Base	176,114	Represents a reduction to rate base
Not included on Rate Base	\$1,602,169	

Proposed 10- Year Amortization \$177,828

Average Rate Base Balance	Avg Balance	Rev Req.
Year 1	\$167,308	(\$16,896)
Year 2	149,697	(15,117)
Year 3	132,086	(13,339)
Year 4	114,475	(11,560)
Year 5	96,864	(9,782)
Year 6	79,253	(8,003)
Year 7	61,642	(6,225)
Year 8	44,031	(4,446)
Year 9	26,420	(2,668)
Year 10	8,809	(890)

Request 3 – Provide a summary of Residential rate changes based on the Settlement Agreement.

Response:

Following is a summary of the changes in total under the Settlement Agreement:

- Reduction in retail rates of \$8,436,000
- Reduction in Rider Deferred Balances of \$2,352,379
- Refund as of July 31, 2018 estimated at \$4,800,000

Shown below is a comparison of the bill changes for a residential customer using 980 kwh on average per month under the assumption the reduction in electric rates plus the elimination of the Environmental Rider charge are implemented in compliance with a final order in this case. The Environmental Rider is only recovering deferred costs at this time and therefore the entire rate will go to zero. The reductions in the Generation Rider and Transmission Rider deferred accounts are assumed to be reflected in the Rider rates scheduled to be submitted in November as updated to reflect changes in the deferred account and projected expenditure for the next year in those Riders.

The refund, to be issued as a one-time bill credit, is estimated to be \$28 for a residential customer using 980 Kwh considering data through July 31, 2018. This will need to be updated to reflect collections through the end of the month prior to the TCJA rate change.

Assuming Only Base Retail and Environmental Rider Rates Changed *

	Rate 10	Riders				Total Bill
	With Fuel	Environmental	Generation	Transmission	Renewable	
Current Rates	\$1,143.58	\$9.88	\$29.52	\$61.50	\$71.38	\$1,315.86
Proposed TCJA Rates	1,092.53	0.00	29.52	61.50	71.38	1,254.93
Change	(\$51.05)	(\$9.88)	\$0.00	\$0.00	\$0.00	(\$60.93)
Change per month						(\$5.08)
% Change						-4.6%

* The amounts credited to the Generation and Transmission Riders will be reflected in the Rider rate changes to be submitted in November 2018.

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

Sincerely,



Tamie A. Aberle
Director of Regulatory Affairs

Attachments
cc: Karl Liepitz
John Schuh
Victor Schock