

A Subsidiary of MDU Resources Group, Inc.

400 North Fourth Street Bismarck, ND 58501 701-222-7900 www.montana-dakota.com

February 27, 2025

Mr. Will Rosquist Utility Division Montana Public Service Commission 1701 Prospect Avenue Helena, MT 59620

RE: Docket No. 2025.01.002

Annual Electric Reliability Report – 2024

ARM 38.5.8619

Dear Mr. Rosquist:

Montana-Dakota Utilities Co. (Montana-Dakota) herewith electronically submits its Annual Report of Montana Electric Reliability Indices pursuant to ARM 38.5.8619.

The Reliability Indices provided in this report include the System Average Interruption Frequency Index (SAIFI), the System Average Interruption Duration Index (SAIDI) and the Customer Average Interruption Duration Index (CAIDI) for the state of Montana and by major district served by Montana-Dakota in Montana for calendar year 2024. Historical data for calendar years 2023 and 2022 is also included. All indices in this report include outage data for both the distribution system and the transmission system and the SAIDI and CAIDI indices are reported in minutes.

A categorization of the causes associated with service interruptions in 2022 through 2024 is provided in Attachment A, page 1 with a graphical presentation of the SAIFI, SAIDI and CAIDI indices for 2022-2024 shown on Attachment A, pages 2 and 3. Please refer to Attachment B for the index data for Montana and the Company's Glendive and Wolf Point Districts. Overall, the total number of outages increased in 2024 by 21 percent compared to the previous year.

In 2024, Montana-Dakota implemented an Outage Management System (OMS) for managing the Company's electric outage information with the overall goal to increase service reliability and safety for both the Company's customers and employees throughout Montana-Dakota's service territory. The OMS provides the ability for real time tracking of outages under the IEEE definitions including that of a Major Event Day (MED), a catastrophic event which exceeds reasonable design or operational limits of the electric power system and during which at least 10% of the customers within an operating area experience a sustained interruption during a 24-hour period.

Prior to 2024, Montana-Dakota's electric outage information was compiled and analyzed manually with a major storm event determined when 10% or more circuits in multiple substations sustained an outage or 10% of a region's substation circuits sustained an outage at the same time. Additionally, the Company identified a storm event as an outage resulting from weather but that did not require significant resources to restore the outage.

In calendar year 2024, there were two MED events that occurred on Montana-Dakota's Integrated System:

- 1) June 27, 2024 Thurnderstorm with lighting and high winds passed through the Glendive, Dickinson, Bismarck, and Mobridge districts.
- 2) July 13, 2024 Thurnderstorm with lighting and high winds passed through the Glendive, Dickinson, and Williston districts.

Please contact me at (701) 222-7855 or <u>travis.jacobson@mdu.com</u> with any questions regarding this filing.

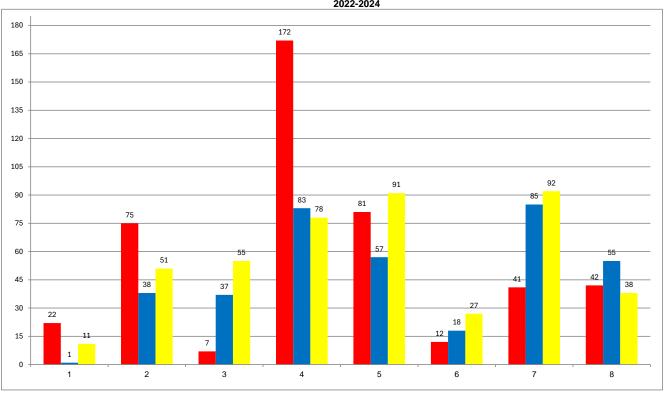
Sincerely,

/s/Travis R. Jacobson

Travis R. Jacobson Vice President of Regulatory Affairs

Attachment(s)

MONTANA-DAKOTA UTILITIES CO. ELECTRIC UTILITY MONTANA OUTAGES BY CAUSE 2022-2024

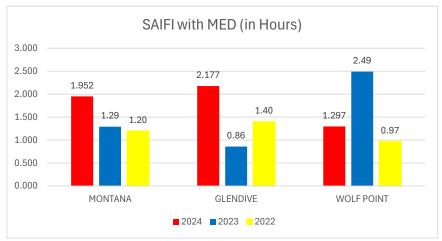


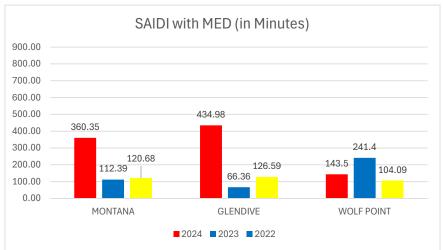
Distribution and Transmission Outages:

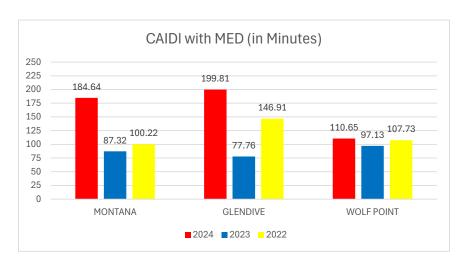
		2024	2023	2022
1)	Customer	22	1	11
2)	Equipment	75	38	51
3)	Other 1/	7	37	55
4)	Planned	172	83	78
5)	Storms	81	57	91
6)	Trees/Vegetation	12	18	27
7)	Unknown	41	85	92
8)	Wildlife	42	55	38
		452	374	443

^{1/} Other now includes the previous outage causes of Vehicle Collision & Improper Construction/Dig In

MONTANA-DAKOTA UTILIITES CO. RELIABILITY INDEX WITH MED ELECTRIC UTILITY - MONTANA 2022-2024 1/

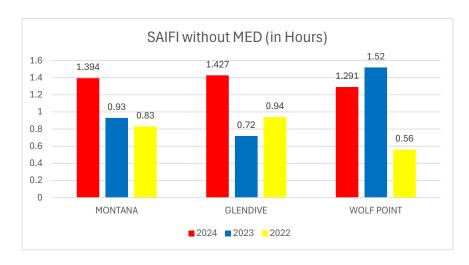


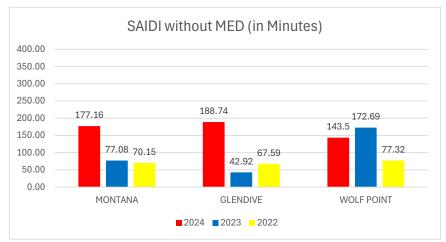


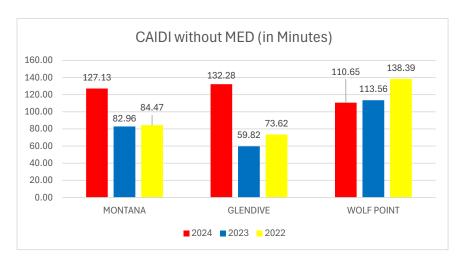


1/ 2024 indices reflect the inclusion of Major Event Day (MED) outages on the Company's Integrated System whereas 2022 and 2023 reflect the inclusion of Storm Events in Montana

MONTANA-DAKOTA UTILIITES CO. RELIABILITY INDEX WITHOUT MED ELECTRIC UTILITY - MONTANA 2022-2024 2/







2/ 2024 indices reflect the exclusion of Major Event Day (MED) outages on the Company's Integrated System whereas 2022 and 2023 reflect the exclusion of Storm Events in Montana

MONTANA-DAKOTA UTILITIES CO. ANNUAL ELECTRIC RELIABILITY REPORT-MONTANA CALENDAR YEAR 2024 MONTANA RULE 38.5.8619

Reliability Index-Without Identified MED Day Event(s)		Montana			
		2023	2022	2021	
System Average Interruption Frequency Index (SAIFI)	1.394	0.930	0.830	2.040	
System Average Interruption Duration Index (SAIDI)		77.04	70.15	312.97	
Customer Average Interruption Duration Index (CAIDI)	127.13	82.94	84.47	153.31	

Glendive District				
2024	2023	2022	2021	
1.427	0.72	0.94	2.34	
188.74	42.92	67.59	361.25	
132.28	60.56	73.62	154.65	

Wolf Point District				
2024	2023	2022	2021	
1.297	1.52	0.56	1.22	
143.50	172.69	77.32	177.38	
110.65	113.56	138.39	145.23	

Reliability Index with Identified MED Day Event(s)		Montana			
		2023	2022	2021	
System Average Interruption Frequency Index (SAIFI)	1.952	1.290	1.200	3.100	
System Average Interruption Duration Index (SAIDI)		112.39	120.68	685.10	
Customer Average Interruption Duration Index (CAIDI)		87.31	100.22	220.90	

Glendive District				
2024	2023	2022	2021	
2.177	0.86	1.40	3.55	
434.98	66.36	126.59	838.38	
199.81	0.86	1.40	242.49	

Wolf Point District				
2024	2023	2022	2021	
1.297	2.49	0.97	1.94	
143.50	241.4	104.09	254.64	
110.65	2.49	0.97	131.41	

SAIDI and CAIDI are in Minutes