

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

February 29, 2024

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

RE: Docket No. 2024.01.002
Annual Electric Reliability Report – 2023
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 2023. Historical data for calendar years 2022 and 2021 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 2021 through 2023 is provided in Attachment A, page 1 with a graphical presentation of the SAIFI, SAIDI and CAIDI indices for 2021-2023 shown on Attachment A, pages 2 and 3. Please refer to Attachment B, page 1 for the index data. Overall, the total number of outages decreased in 2023 by 16 percent compared to the previous year.

In calendar year 2023, Montana-Dakota did not have an outage on the distribution or transmission system that was classified as a major storm event where more than 10 percent of a major town's circuits were affected.

An explanation of storm related outages not classified as major storm events is provided in Attachment B, page 2.

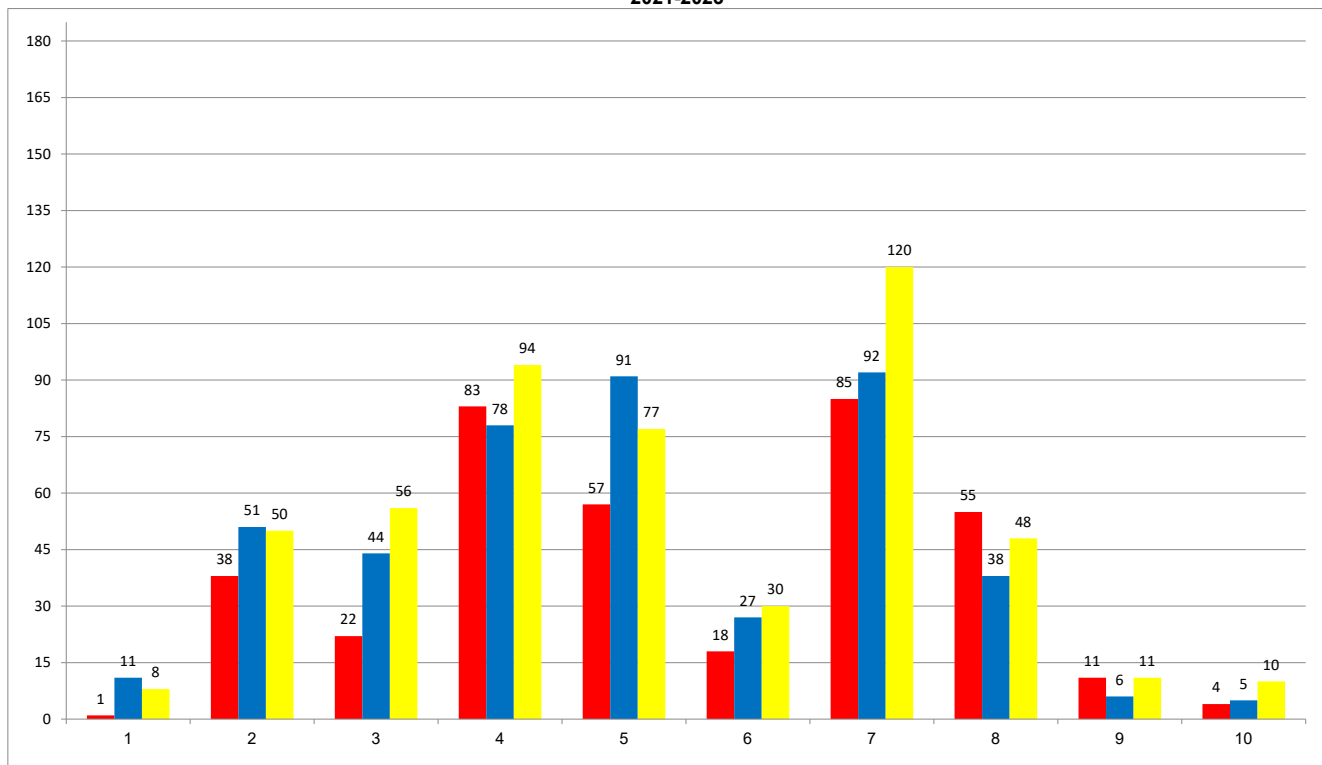
Please contact me at (701) 222-7855 or travis.jacobson@mdu.com with any questions regarding this filing.

Sincerely,

/s/ Travis R. Jacobson

Travis R. Jacobson
Director of Regulatory Affairs

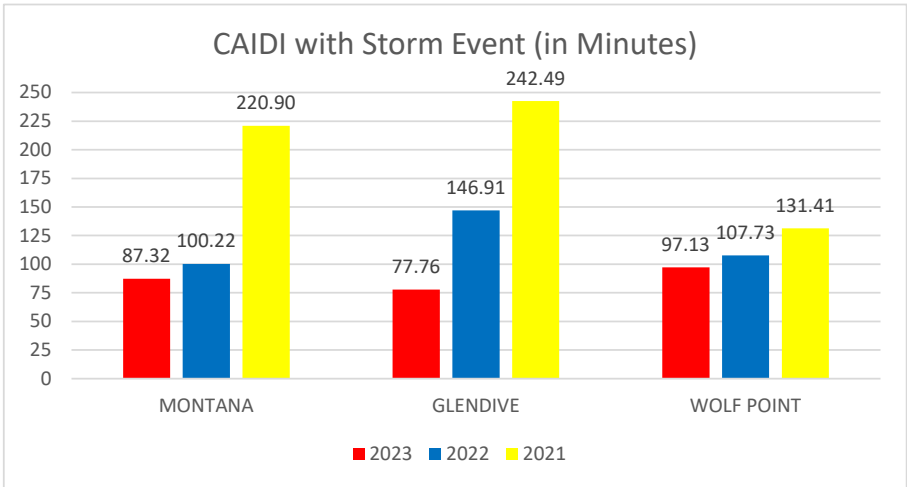
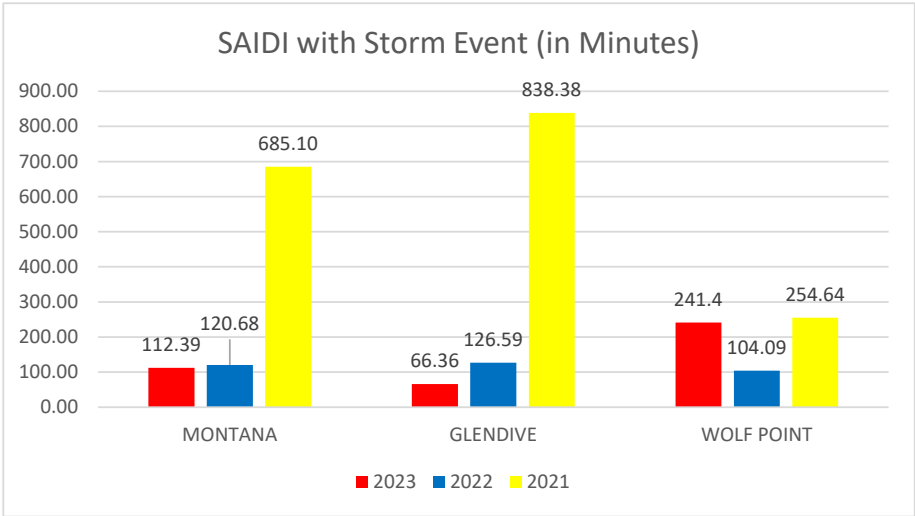
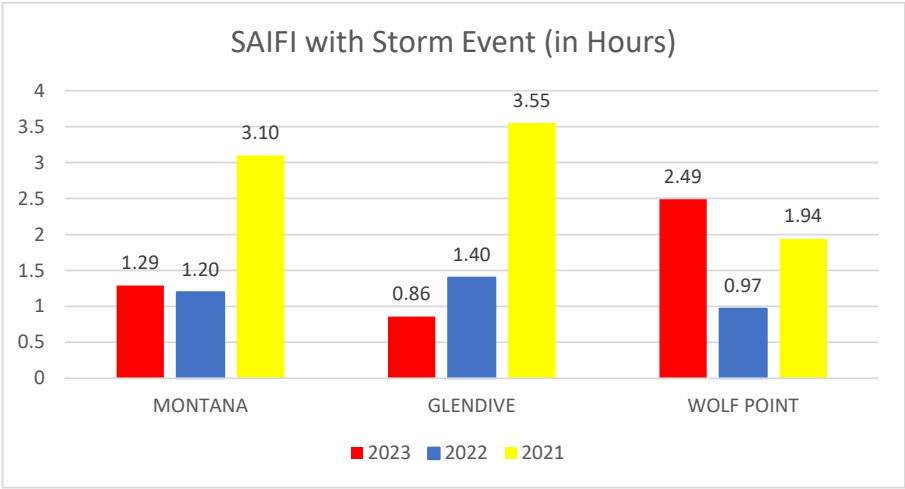
MONTANA-DAKOTA UTILITIES CO.
ELECTRIC UTILITY MONTANA
OUTAGES BY CAUSE
2021-2023



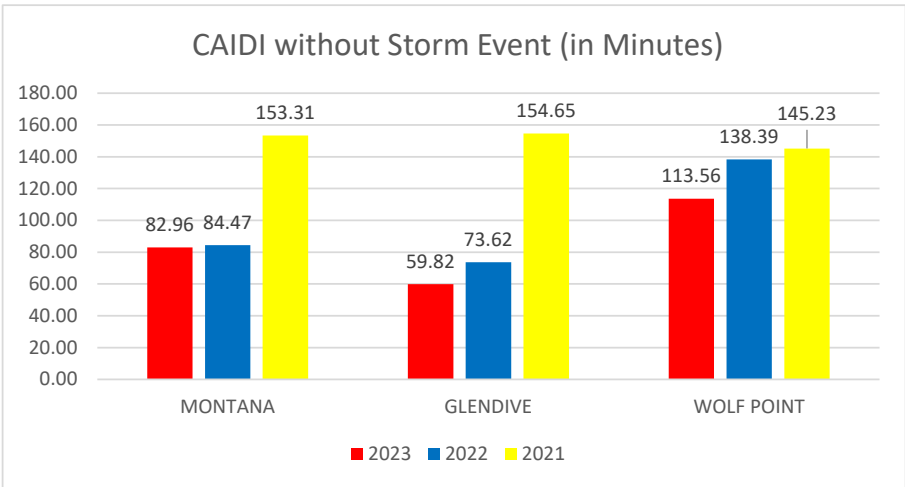
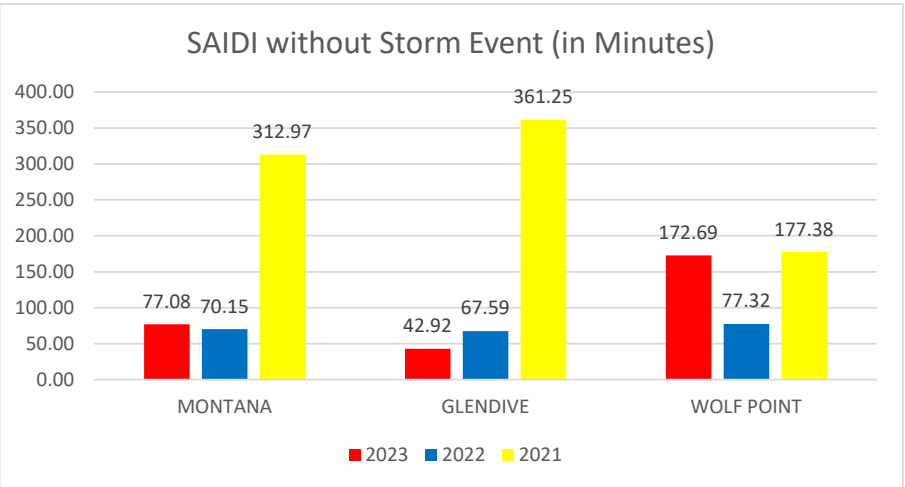
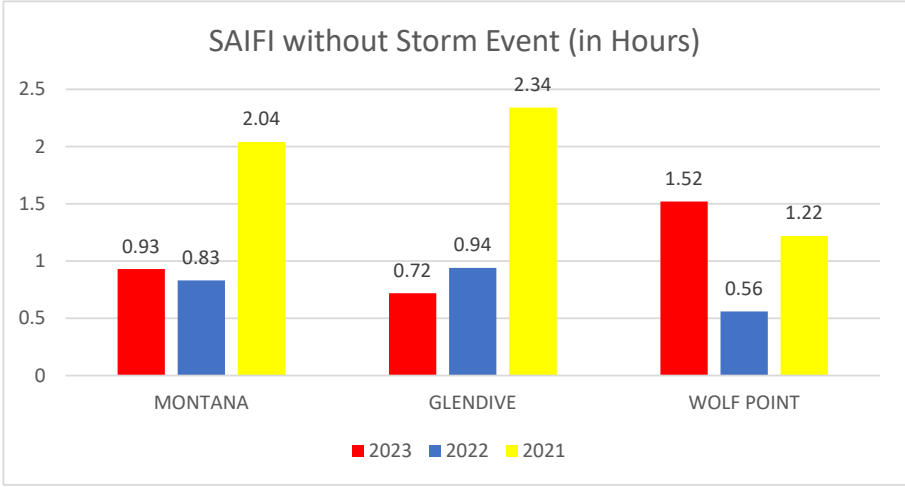
Distribution and Transmission Outages:

	2023	2022	2021
1) Customer	1	11	8
2) Equipment	38	51	50
3) Other	22	44	56
4) Planned	83	78	94
5) Storms	57	91	77
6) Trees/Vegetation	18	27	30
7) Unknown	85	92	120
8) Wildlife	55	38	48
9) Vehicle Collison	11	6	11
10) Improper Construction/Dig In	4	5	10
	<u>374</u>	<u>443</u>	<u>504</u>

**MONTANA-DAKOTA UTILITIES CO.
RELIABILITY INDEX WITH IDENTIFIED STORM EVENT(S)
ELECTRIC UTILITY - MONTANA
2021-2023**



**MONTANA-DAKOTA UTILITIES CO.
RELIABILITY INDEX WITHOUT IDENTIFIED STORM EVENT(S)
ELECTRIC UTILITY - MONTANA
2021-2023**



**MONTANA-DAKOTA UTILITIES CO.
ANNUAL ELECTRIC RELIABILITY REPORT-MONTANA
CALENDAR YEAR 2023
MONTANA RULE 38.5.8619**

	Montana			Glendive District			Wolf Point District		
	2023	2022	2021	2023	2022	2021	2023	2022	2021
* Reliability Index with all Identified Storm Event(s)									
SAIFI (System Average Interruption Frequency Index)	1.29	1.20	3.10	0.86	1.40	3.55	2.49	0.97	1.94
SAIDI (System Average Interruption Duration Index)	112.39	120.68	685.10	66.36	126.59	838.38	241.40	104.09	254.64
CAIDI (Customer Average Interruption Duration Index)	87.32	100.22	220.90	77.76	146.91	242.49	97.13	107.73	131.41
	Montana			Glendive District			Wolf Point District		
	2023	2022	2021	2023	2022	2021	2023	2022	2021
Reliability Index-Without Identified Storm Event(s)									
SAIFI (System Average Interruption Frequency Index)	0.93	0.83	2.04	0.72	0.94	2.34	1.52	0.56	1.22
SAIDI (System Average Interruption Duration Index)	77.04	70.15	312.97	42.92	67.59	361.25	172.69	77.32	177.38
CAIDI (Customer Average Interruption Duration Index)	82.96	84.47	153.31	59.82	73.62	154.65	113.56	138.39	145.23

2023 had no Major Storm Events

**Montana-Dakota Utilities Co.
Electric Utility – Montana
Outage Data Information
2023**

The following storm outages, while not classified as a major storm event by definition, did affect reliability indices in calendar year 2023.

Specific storm related outages on the transmission system not classified as a major storm event affecting distribution substations included:

Storm Related Weather and Wind – Glendive District

- 02/14/2023 – Fletcher, Savage and Savage-WM
- 04/19/2023 – Wibaux and Wibaux-Phil
- 05/09/2023 – Kinsey
- 05/23/2023 – Hathaway-Cenex, Miles City Radar and Miles City Ulmer
- 06/23/2023 – Baker Coral Cr, Baker Little Beaver 1 & 2 and Baker Lookout
- 06/30/2023 – Fairview
- 08/23/2023 – Fallon

Storm Related Weather and Wind – Wolf Point District

- 01/18/2023 – Flaxville, Madoc, Outlook, Plentywood, Redstone, Scobey – South
- 06/30/2023 – Bainville and Culbertson
- 07/23/2023 – Froid, Homestead and Medicine Lake
- 07/30/2023 – Flaxville, Madoc, Outlook, Plentywood, Redstone, Scobey – North & South