

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

February 18, 2021

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

RE: Annual Electric Reliability Report – 2020
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 2020. Historical data for calendar years 2019 and 2018 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 graphical presentation of the SAIFI, SAIDI and CAIDI indices for 2018-2020 is provided in Attachment A, pages 1 and 2 with a categorization of the causes associated with service interruptions in 2018 through 2020 shown on Attachment A, page 3. Overall, outages have increased from 2019 but remains lower than 2018 outages. Please refer to Attachment B, page 1 for the index data.

In calendar year 2020, 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% of a major town's circuits were affected. However, storms did impact the system. An explanation of storm related outages not classified as major storm events is provided in Attachment B, page 2.

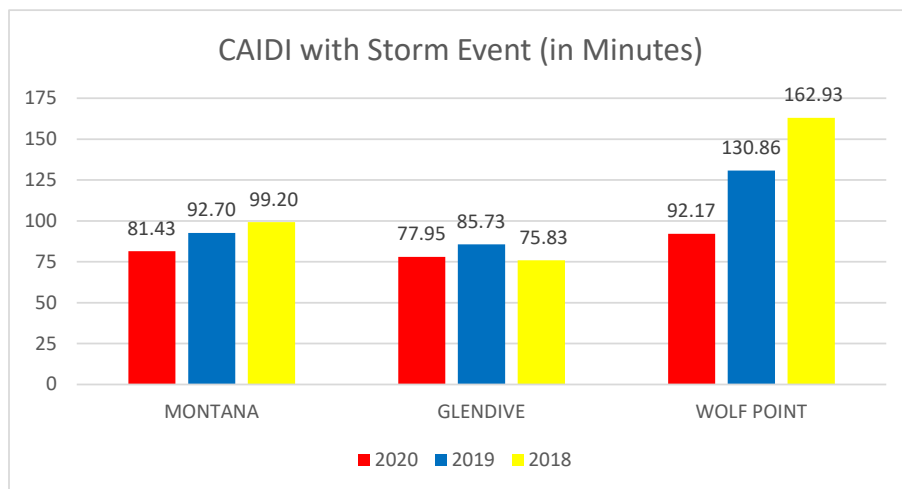
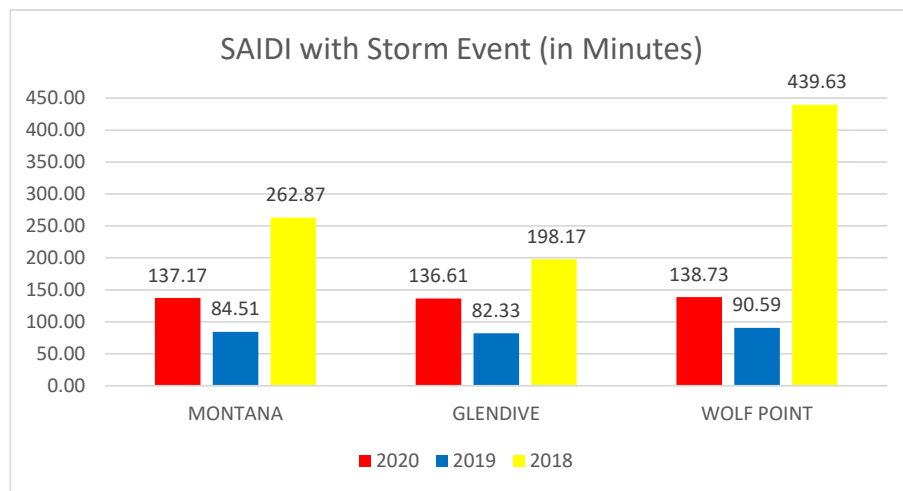
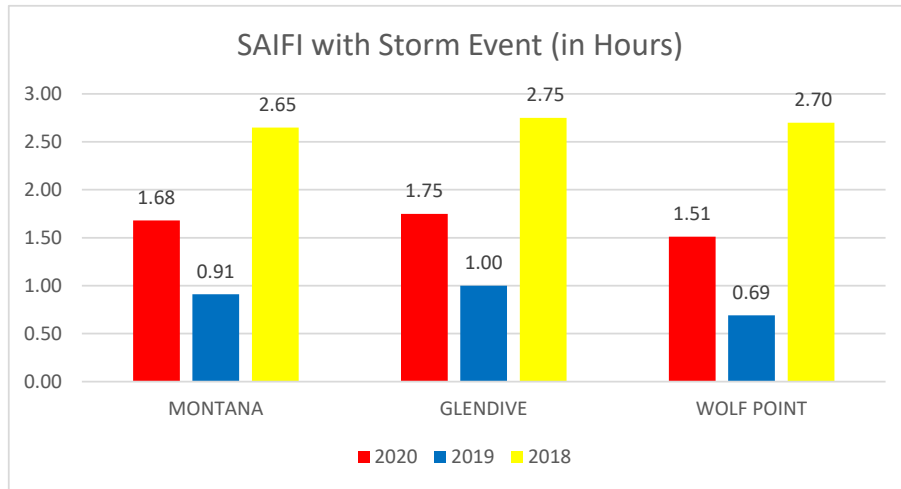
Please contact me with any questions regarding this report

Sincerely,

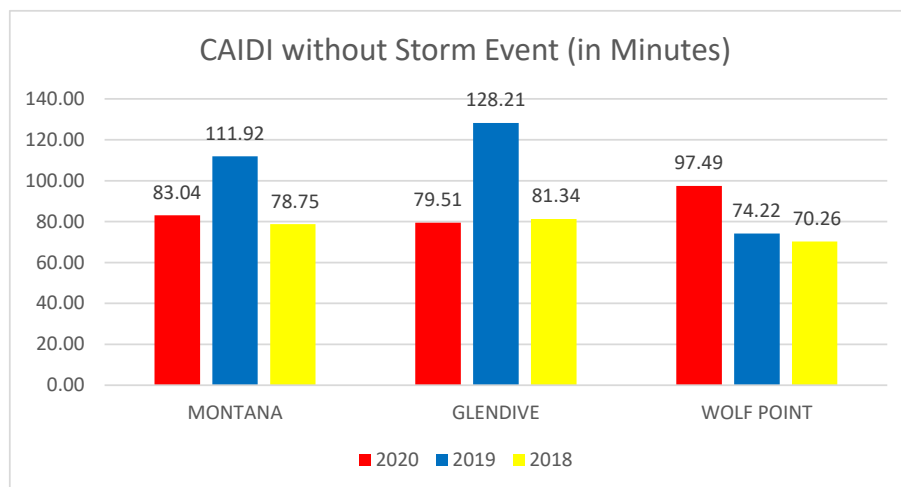
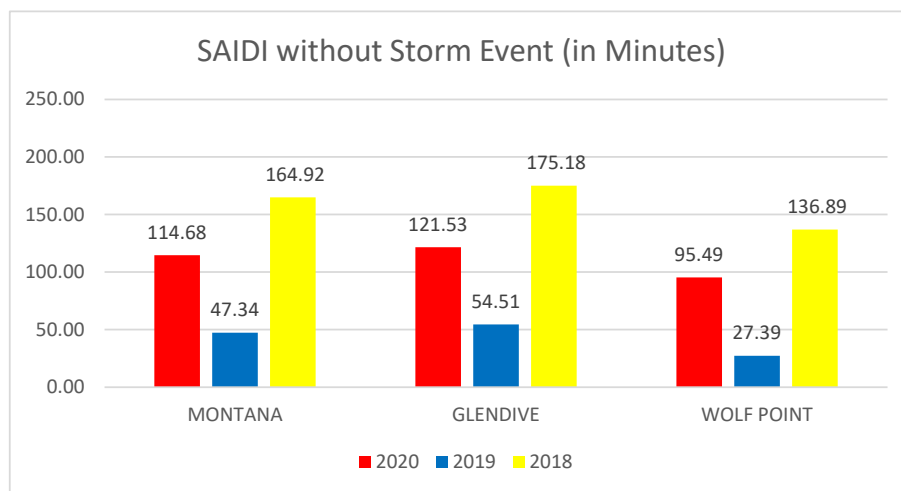
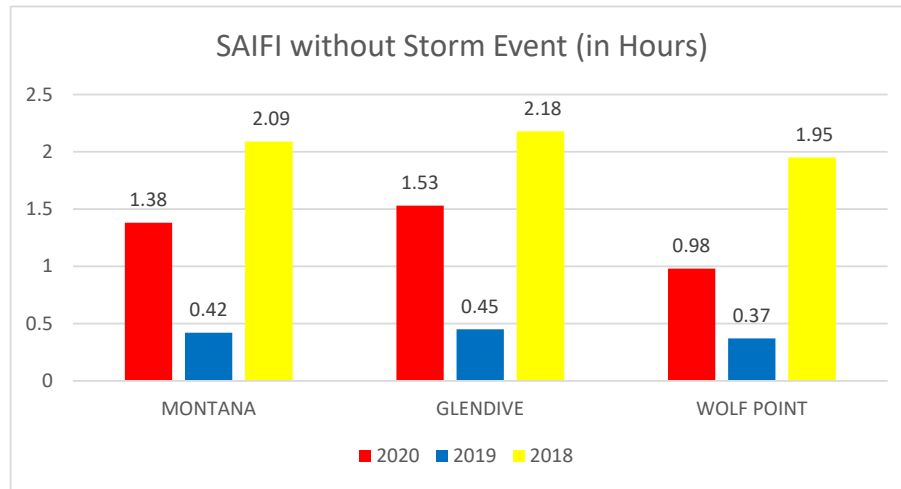
/s/ Travis R. Jacobson

Travis R. Jacobson
Director of Regulatory Affairs

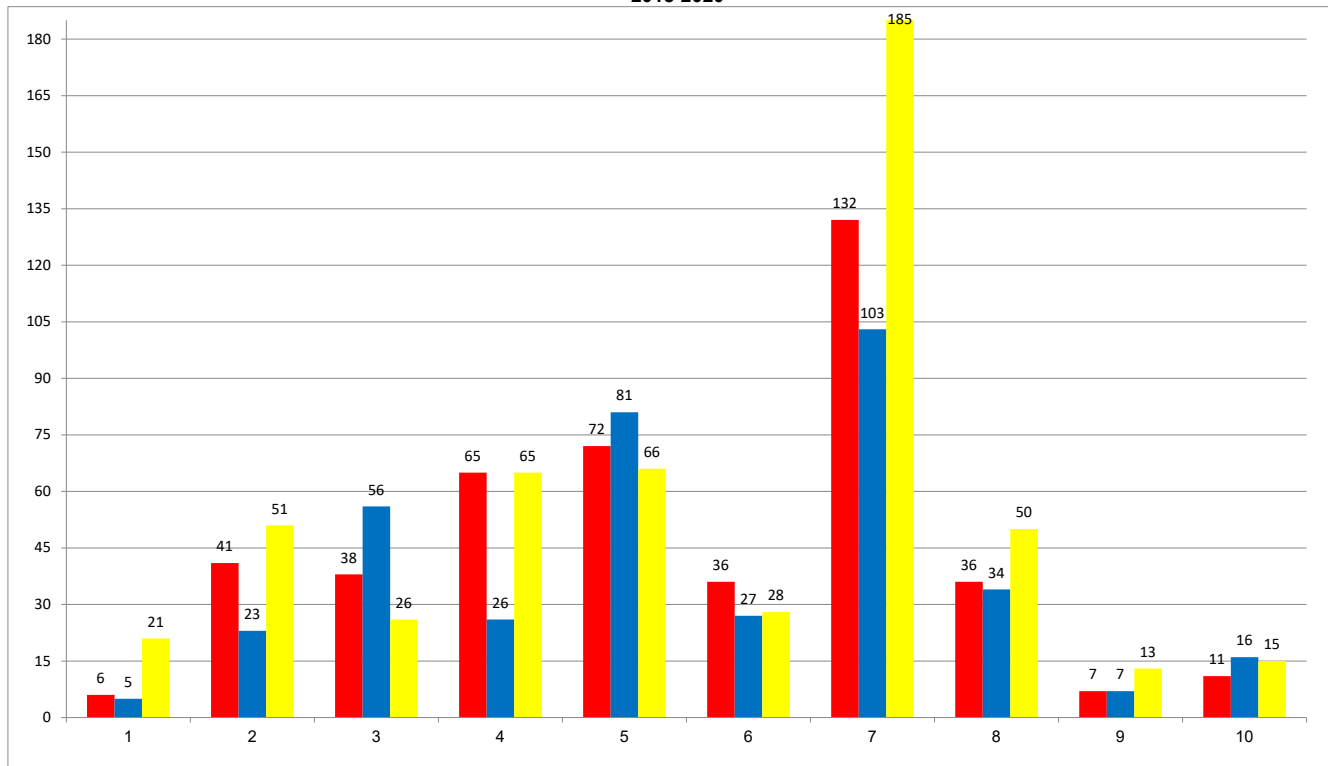
**MONTANA-DAKOTA UTILITIES CO.
RELIABILITY INDEX WITH IDENTIFIED STORM EVENT(S)
ELECTRIC UTILITY - MONTANA
2018-2020**



**MONTANA-DAKOTA UTILITIES CO.
RELIABILITY INDEX WITHOUT IDENTIFIED STORM EVENT(S)
ELECTRIC UTILITY - MONTANA
2018-2020**



MONTANA-DAKOTA UTILITIES CO.
ELECTRIC UTILITY MONTANA
OUTAGES BY CAUSE
2018-2020



Distribution and Transmission Outages:

	2020	2019	2018
1) Customer	6	5	21
2) Equipment	41	23	51
3) Other	38	56	26
4) Planned	65	26	65
5) Storms	72	81	66
6) Trees/Vegetation	36	27	28
7) Unknown	132	103	185
8) Wildlife	36	34	50
9) Vehicle Collison	7	7	13
10) Improper Construction/Dig In	11	16	15
	<u>444</u>	<u>378</u>	<u>520</u>

**MONTANA-DAKOTA UTILITIES CO.
ANNUAL ELECTRIC RELIABILITY REPORT-MONTANA
CALENDAR YEAR 2020
MONTANA RULE 38.5.8619**

	Montana			Glendive District			Wolf Point District		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
Reliability Index with Identified Storm Event(s)									
SAIFI (System Average Interruption Frequency Index)	1.68	0.91	2.65	1.75	1.00	2.75	1.51	0.69	2.70
SAIDI (System Average Interruption Duration Index)	137.17	84.51	262.87	136.61	82.33	198.17	138.73	90.59	439.63
CAIDI (Customer Average Interruption Duration Index)	81.43	92.70	99.20	77.95	85.73	75.83	92.17	130.86	162.93
	Montana			Glendive District			Wolf Point District		
	2020	2019	2018	2020	2019	2018	2020	2019	2018
Reliability Index-Without Identified Storm Event(s)									
SAIFI (System Average Interruption Frequency Index)	1.38	0.42	2.09	1.53	0.45	2.18	0.98	0.37	1.95
SAIDI (System Average Interruption Duration Index)	114.68	47.34	164.92	121.53	54.51	175.18	95.49	27.39	136.89
CAIDI (Customer Average Interruption Duration Index)	83.04	111.92	78.75	79.51	128.21	81.34	97.49	74.22	70.26

2020 had no Major Storm Events

**Montana-Dakota Utilities Co.
Electric Utility – Montana
Outage Data Information
2020**

The following storm outages, while not classified as a major storm events by definition, did affect reliability indices in calendar year 2020.

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

- 5/20/2020 – Cenex Pumping, Forsyth 4 kV & 12 kV, Hathaway, MC Radar Base, Rosebud & Ulmer
- 6/13/2020 – Cenex Pumping, Hathaway, Rosebud
- 7/10/2020 – Cabin Creek 1
- 7/18/2020 – Encore Air Comp
- 8/27/2020 – Cenex Pumping, Forsyth 4 kV & 12 kV, Hathaway, Rosebud & Ulmer

Storm Related Weather and Wind – Wolf Point District

- 5/20/2020 – Poplar Oil Field
- 07/07/2020 – Froid, Homestead, Medicine Lake
- 07/23/2020 – Flaxville, Outlook, Plentywood, Redstone & Scobey
- 08/27/2020 – Poplar Oil Field
- 9/1/2020 – Poplar Oil Field