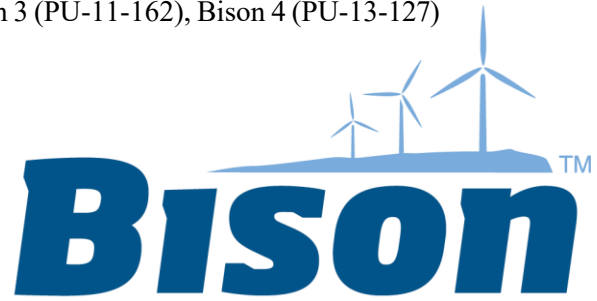


Minnesota Power 2024 Wildlife Impact Report For the Bison 1, 2, 3 & 4 Wind Facilities

Bison 1 (PU-09-151), Bison 2 (PU-11-57), Bison 3 (PU-11-162), Bison 4 (PU-13-127)



229 PU-09-151 Filed 01/31/2025 Pages: 22
2024 Bison Annual Wildlife Impact Report

Allete, Inc.

168 PU-11-57 Filed 01/31/2025 Pages: 22
2024 Bison Annual Wildlife Impact Report

Allete, Inc.

157 PU-11-162 Filed 01/31/2025 Pages: 22
2024 Bison Annual Wildlife Impact Report

Allete, Inc.

195 PU-13-127 Filed 01/31/2025 Pages: 22
2024 Bison Annual Wildlife Impact Report

Allete, Inc.



Minnesota Power 2024 Wildlife Impact Report

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Minnesota Power 2024 Wildlife Incident Report. Pages 2-4

Figure 1-3 - Bison 1, 2, 3 & 4 Project Area

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Introduction

Throughout 2024 Minnesota Power (an operating division of ALLETE, Inc.) has been operating wind energy conversion facilities (Facilities) in west central North Dakota. As part of Minnesota Power's commitment to environmental stewardship and continual evaluation of facility impacts, regular wildlife inspections are performed at its Facilities throughout the year. The following is Minnesota Power's 2024 Annual Wildlife Impact Report which summarizes the wildlife inspection results for the Bison 1, 2, 3 and 4 Facilities in North Dakota.

In 2024 Minnesota Power's Bison 1 (81.8 MW), Bison 2 (105 MW), Bison 3 (105 MW) and Bison 4 (201.6 MW) Facilities were all operational. The four Facilities combine for a total of 164 turbines. A Bison 1, 2, 3 & 4 Facility (Bison) map is included as Figure 1-3. This annual Wildlife Impact Report covers all Bison Facility turbines and associated infrastructure.

This report has been developed for Minnesota Power's use and is distributed to personnel or agencies outlined in this report. The Minnesota Power 2024 Wildlife Impact Report is reviewed by Minnesota Power environmental staff, Bison Facility personnel and management. It is used to analyze potential avian or bat impacts to determine if adaptive management measures are required for either the entire Facility or individual Facility structures.

Minnesota Power provides copies of this report to the North Dakota Public Service Commission under each project Docket Number to be incorporated into their records. A Wildlife Impact Report is generated by January 31st of each year for the operational life of Minnesota Power's Bison Facilities.

Inspections/Data Collection

This 2024 Wildlife Impact Report includes data collected from all 164 operational turbines at the Bison Facility, as well as data collected from the Bison Operations and Maintenance (O&M) facility, the Bison and Tri-County Substations (substations) and four permanent meteorological (met) towers. Each turbine, O&M facility and substation are inspected for avian and bat mortality by ALLETE personnel or contractors, at a frequency of at least once per month. Some structures, such as the substations and O&M facility, were inspected at a higher frequency. When a carcass is found it is left at its location, photographed and a Bison Wildlife Impact Form is completed.

Each Bison Wildlife Impact Report Form and associated photos were entered into Minnesota Power's 2024 Wildlife Incident Database. Those results are summarized in this report. Individual fatality information can be found in the Bison Wildlife Impact Report Forms located in Appendix A. In addition, monthly inspection cycle results for 2024 are included in the Wildlife Inspection Table (Appendix B).

Minnesota Power 2024 Wildlife Impact Report

The total wildlife fatalities for 2024, totaled ten. Two bat fatalities were recorded, and eight avian fatalities were recorded. Specific data for each incident and species can be found in the Bison Wildlife Impact Reports (Appendix A).

Results

After reviewing the inspection/fatalities records, no turbine, structure or location showed an elevated risk for avian or bat mortality when compared to surrounding Bison Facility structures. Mortality appears to be dispersed throughout the Bison Facility. The two bat carcasses were found in August, which coincides with fall migratory activity. Duck carcasses were more prevalent during the summer; however an increase was not observed during fall migration when avian species are typically most vulnerable to collision. The 2024 results are as shown in Figure 1-1 and 1-2 below.

Figure 1-1:
2024 Monthly Distribution of Avian and bat Carcasses

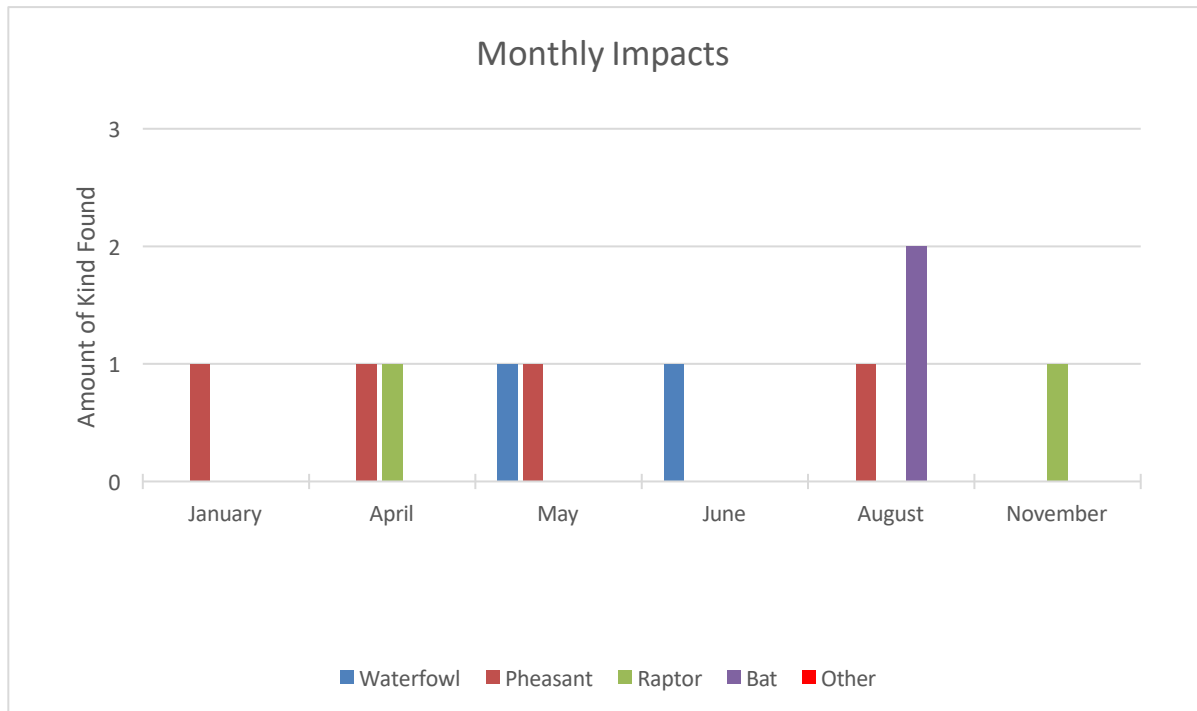


Figure 1-1: This figure illustrates the monthly distribution of avian and bat carcass discoveries. The data is categorized by month, providing a comprehensive overview of the temporal patterns in carcass findings.

Figure 1-2:
2024 Total Avian and bat Carcasses

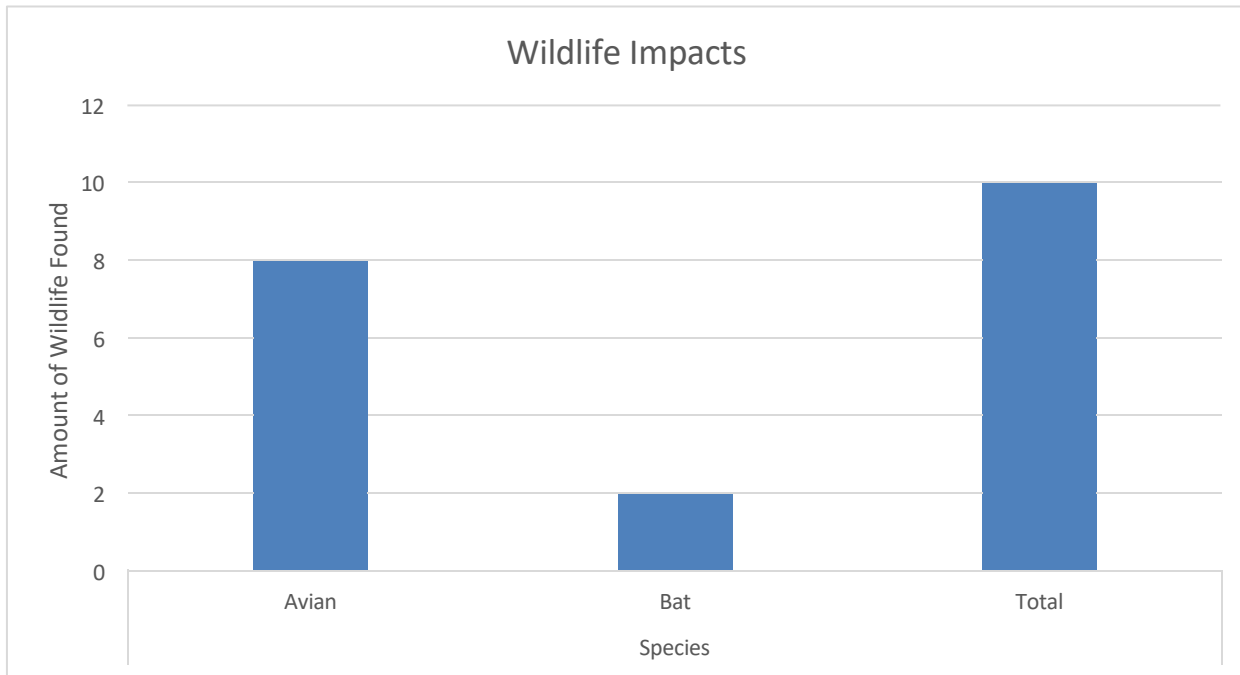


Figure 1-2: This figure presents the total number of avian and bat carcass discoveries.




Based on the data available for Minnesota Power’s Bison Facilities, there is no evidence that would indicate additional adaptive management activities should occur. It appears, from the data provided, that the Bison Facility poses a low risk to surrounding and migrating avian and bat populations.

Figure 1-3

-Bison 1, 2, 3 & 4 Project Area

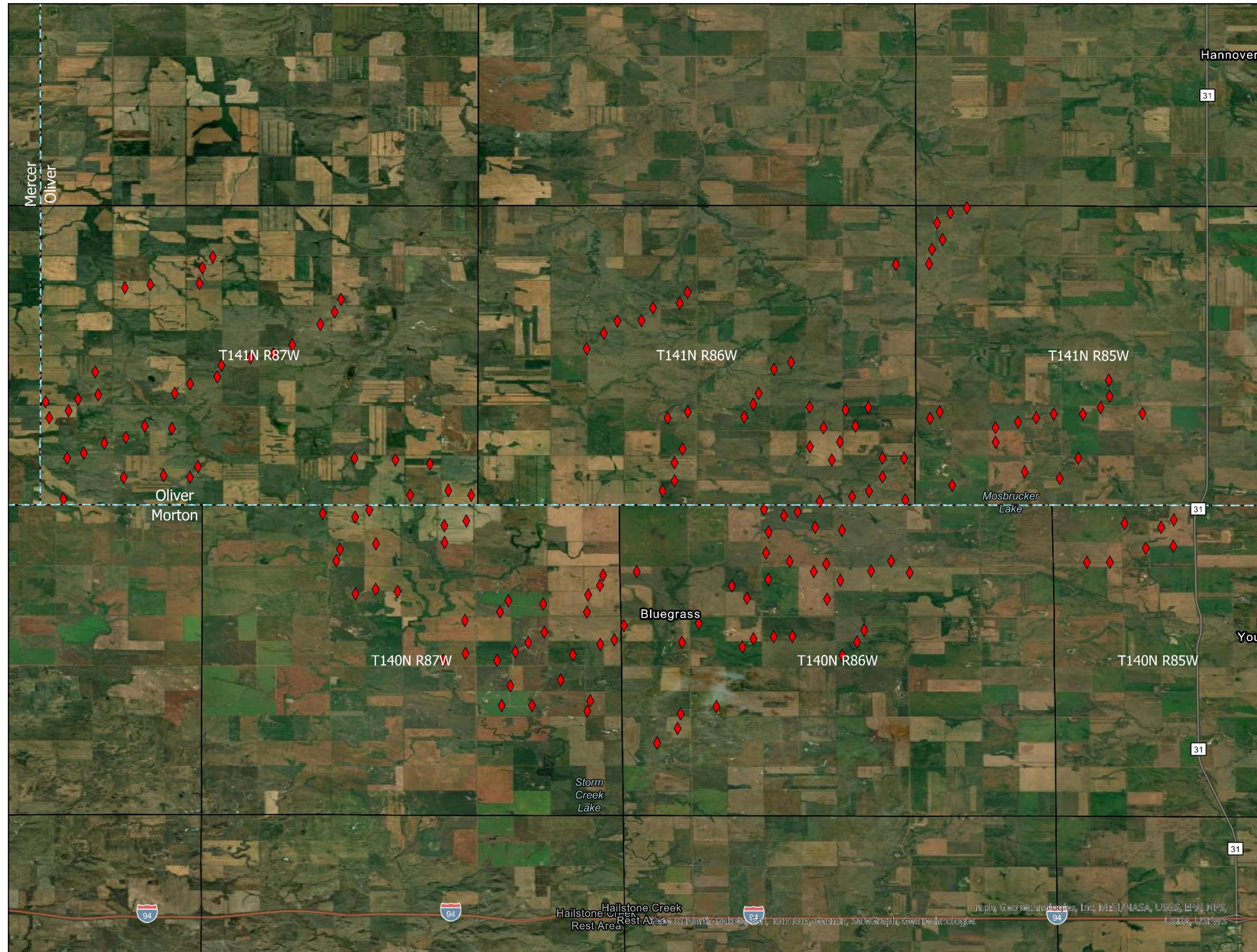
Minnesota Power Bison 1, 2, 3 & 4 Project Area

Figure 1-3

-  Bison Turbine Location
-  Township and Range
-  County Boundaries



0 1.5 3 Miles
For Environmental Review Purposes only



Appendix A

-Wildlife Impact Reports



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison III	
<u>Entry Number</u> 1-2024(1)	<u>Date:</u> 1/02/2024	<u>Time of Day</u> 1000	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 1/08/2024	<u>Structure #</u> 308	<u>Latitude/Longitude</u> 46.936199 -101.647599
<u>Location Remarks:</u> 5ft S of tower			
<u>Physical Condition:</u> deceased	<u>Estimated Time Since Death:</u> 3 days	<u>Estimated Date of Injury:</u> 1/02/2024	<u>Name of Respondent:</u> Joseph Klitzke
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 1/8/2024	<u>Perillon Entry Date:</u> 1/8/2024	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Ring-necked Pheasant	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison II	
<u>Entry Number</u> 4-2024(1)	<u>Date:</u> 4/22/2024	<u>Time of Day</u> 1100	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 4/22/2024	<u>Structure #</u> 234	<u>Latitude/Longitude</u> 46.960882 -101.601328
<u>Location Remarks:</u> 50ft SW of turbine			
<u>Physical Condition:</u> deceased	<u>Estimated Time Since Death:</u> 2 days	<u>Estimated Date of Injury:</u> 4/20/2024	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 4/22/2024	<u>Perillon Entry Date:</u> 4/22/2024	<u>Responding ELM staff:</u> Alexander Luman
<u>Species Confirmation:</u> Ferruginous Hawk	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> N/A
<u>Action Items:</u> N/A	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison I	
<u>Entry Number</u> 4-2024(2)	<u>Date:</u> 4/22/24	<u>Time of Day</u> 1000	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 4/22/24	<u>Structure #</u> 33	<u>Latitude/Longitude</u> 46.9703590028/ -101.647281037
<u>Location Remarks:</u> 10 feet from base of tower			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 3 days	<u>Estimated Date of Injury:</u> 3 days	<u>Name of Respondent:</u> Jake Hegel
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 4/22/2024	<u>Perillon Entry Date:</u> 4/22/2024	<u>Responding ELM staff:</u> Alexander Luman
<u>Species Confirmation:</u> Pheasant	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> N/A
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> None	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison IV	
<u>Entry Number</u> 5-2024(1)	<u>Date:</u> 05/16/2024	<u>Time of Day</u> 0800	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 05/16/2024	<u>Structure #</u> 422	<u>Latitude/Longitude</u> 47.033561/-101.683281
<u>Location Remarks:</u> 10 Ft south of tower			
<u>Physical Condition:</u> Deceased	<u>Estimated Time Since Death:</u> 1 week	<u>Estimated Date of Injury:</u> 1 week	<u>Name of Respondent:</u> Chris Webber(ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 5/16/24	<u>Perillon Entry Date:</u> 5/16/24	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Mallard	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> N/A
<u>Action Items:</u> N/A	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison IV	
<u>Entry Number</u> 5-2024(2)	<u>Date:</u> 5-16-2024	<u>Time of Day</u> 1500	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 5-16-2024	<u>Structure #</u> 447	<u>Latitude/Longitude</u> 47.0136610 -101.7255594
<u>Location Remarks:</u> 5' NW of tower 447			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 2 days	<u>Estimated Date of Injury:</u> 2 days	<u>Name of Respondent:</u> Philip Miller (ARR)(ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 5/16/24	<u>Perillon Entry Date:</u> 5/16/24	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Pheasant	<u>Threatened or Endangered:</u> None	<u>Agencies contacted:</u> N/A
<u>Action Items:</u> N/A	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison III	
<u>Entry Number</u> 6-2024(1)	<u>Date:</u> 6/3/2024	<u>Time of Day</u> 1400	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/5/2024	<u>Structure #</u> 320	<u>Latitude/Longitude</u> 46.956797 -101.667232
<u>Location Remarks:</u> 20 feet from tower next to transformer			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 1 week	<u>Estimated Date of Injury:</u> 1 week	<u>Name of Respondent:</u> Aaron Peltier (ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 6/5/2024	<u>Perillon Entry Date:</u> 6/5/2024	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Mallard	<u>Threatened or Endangered:</u> No	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> None	<u>Other Notes:</u> None



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison I	
<u>Entry Number</u> 8-2024(1)	<u>Date:</u> 8/1/2024	<u>Time of Day</u> 1200	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 8/07/2024	<u>Structure #</u> 27	<u>Latitude/Longitude</u> 46.983632561/-101.529142811
<u>Location Remarks:</u> 5 Ft from tower			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 1 week	<u>Estimated Date of Injury:</u> 1 week	<u>Name of Respondent:</u> Joseph Klitzke(ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 8/7/2024	<u>Perillon Entry Date:</u> 8/12/24	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Little Brown Bat	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison I	
<u>Entry Number</u> 8/2024(2)	<u>Date:</u> 8/1/2024	<u>Time of Day</u> 1230	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 8/07/2024	<u>Structure #</u> 30	<u>Latitude/Longitude</u> 46.994772/-101.514095
<u>Location Remarks:</u> 6Ft from tower			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 1 week	<u>Estimated Date of Injury:</u> 1 week	<u>Name of Respondent:</u> Joseph Klitzke(ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 8/7/2024	<u>Perillon Entry Date:</u> 8/12/2024	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Sharp-tailed Grouse	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison IV	
<u>Entry Number</u> 8-2024(3)	<u>Date:</u> 8/1/2024	<u>Time of Day</u> 1300	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 8/07/2024	<u>Structure #</u> 404	<u>Latitude/Longitude</u> 47.0095076849/-101.457113812
<u>Location Remarks:</u> 5 ft tower			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 1 week	<u>Estimated Date of Injury:</u> 1 week	<u>Name of Respondent:</u> Joseph Klitzke(ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 8/7/2024	<u>Perillon Entry Date:</u> 8/12/2024	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Little Brown Bat	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>		Bison I	
<u>Entry Number</u> 11-2024 (1)	<u>Date:</u> 11/5/24	<u>Time of Day</u> 1400	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 11/5/24	<u>Structure #</u> 10	<u>Latitude/Longitude</u> -101.5203296°W 46.9893623°N
<u>Location Remarks:</u>			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 1 week	<u>Estimated Date of Injury:</u> 1 week	<u>Name of Respondent:</u> Jake Hegel
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 11/5/2024	<u>Perillon Entry Date:</u> 11/13/2024	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Prairie Falcon	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>

Appendix B

-Wildlife Inspection Table

Minnesota Power 2024 Wildlife Impact Table

Bison 1, 2, 3, 4 and Associated Facilities

Turbine #	January	February	March	April	May	June	July	August	September	October	November	December
1												
2												
3												
4												
5												
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8												
9												
10											11/5/2024	
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308	1/02/2024											
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317												
318												

Appendix B

O&M												
Met Tower 1												
Met Tower 2												
Met Tower 3												
Met Tower 4												