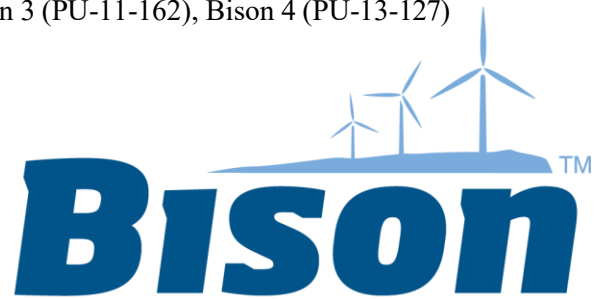


Minnesota Power 2023 Wildlife Impact Report **For the Bison 1, 2, 3 & 4 Wind Facilities**

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



- 228 PU-09-151 Filed 01/25/2024 Pages: 23
2023 Bison Annual Wildlife Impact Report
Allete, Inc.
- 167 PU-11-57 Filed 01/25/2024 Pages: 23
2023 Bison Annual Wildlife Impact Report
Allete, Inc.
- 156 PU-11-162 Filed 01/25/2024 Pages: 23
2023 Bison Annual Wildlife Impact Report
Allete, Inc.
- 193 PU-13-127 Filed 01/25/2024 Pages: 23
2023 Bison Annual Wildlife Impact Report
Allete, Inc.



Minnesota Power 2023 Wildlife Impact Report

Contents

Minnesota Power 2023 Wildlife Incident Report. Pages 2-4

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

Appendix A- Wildlife Impact Reports

Appendix B- Wildlife Inspection Table

Minnesota Power 2023 Wildlife Impact Report

Introduction

Throughout 2023 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 2023 Annual Wildlife Impact Report which summarizes the wildlife inspection results for the Bison 1, 2, 3 and 4 Facilities in North Dakota.

In 2023 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. 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 2023 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 2023 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 2023 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 2023 are included in the Wildlife Inspection Table (Appendix B).

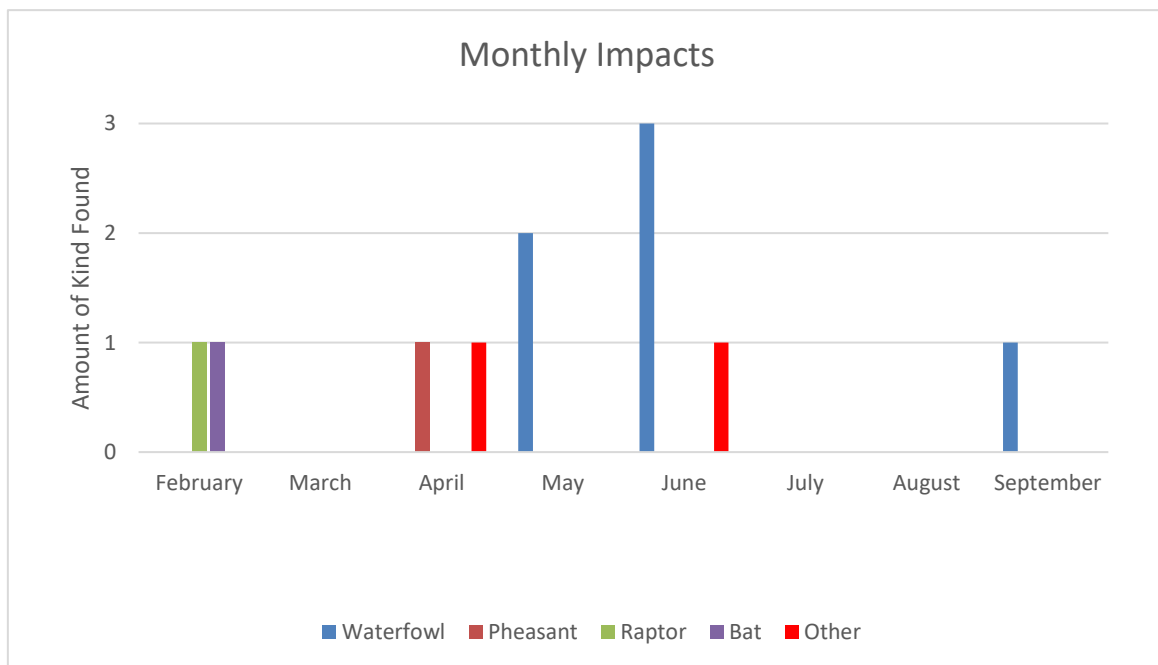
Minnesota Power 2023 Wildlife Impact Report

The total wildlife fatalities for 2023, totaled 11. One bat fatality was recorded, and 10 avian fatalities were recorded. Specific data for each incident and species can be found in the Bison Wildlife Impact Reports (Appendix A).

Results

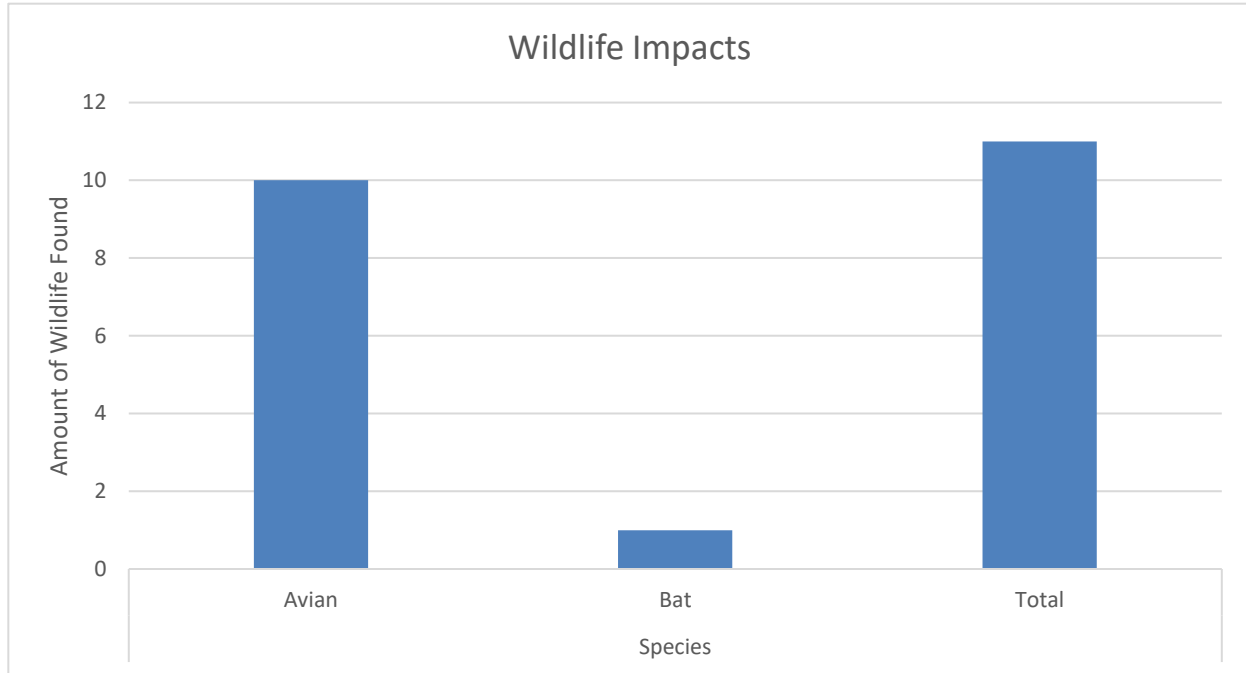
After reviewing the inspection/fatalities records, no turbine, structure or location showed an elevated risk for avian or bat mortality when compared to surrounding Bison Facility structures. Mortality appears to be dispersed throughout the Bison Facility. The one bat carcass was found in February, which coincides with spring 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 2023 results are as shown in Table 1-1 and 1-2 below.

Table 1-1:
2023 Avian and bat Carcasses Found at Minnesota Power’s Bison Facility



Minnesota Power 2023 Wildlife Impact Report

Table 1-2:

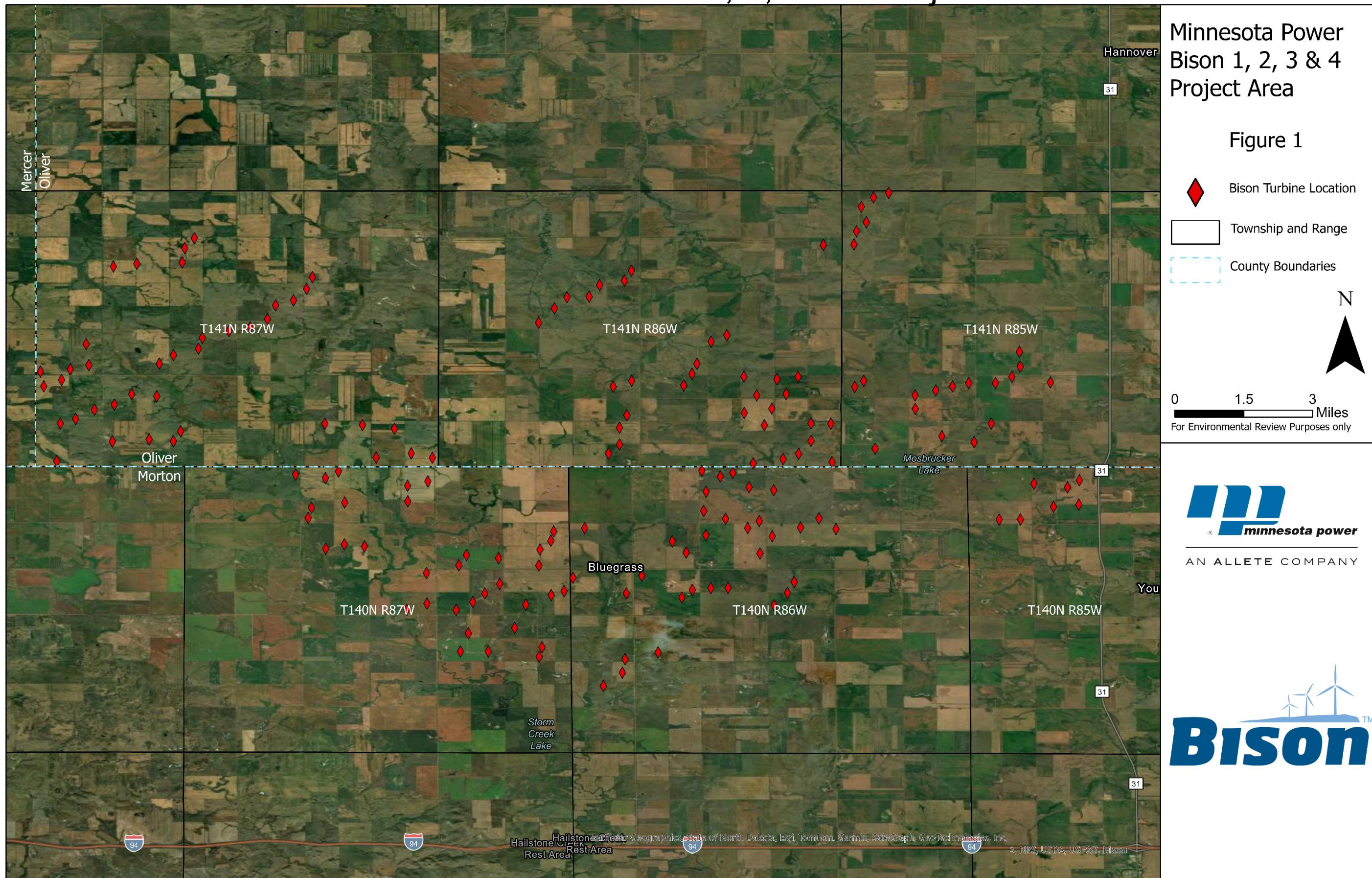


Based on the data available for Minnesota Power’s Bison Facilities, there is no evidence that would indicate additional adaptive management activities should occur. It appears, from the data provided, that the Bison Facility poses a low risk to surrounding and migrating avian and bat populations.

Figure 1

-Bison 1, 2, 3 & 4 Project Area

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



Appendix A

-Wildlife Impact Reports



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 2-2023(1)	<u>Date:</u> 2/2/2023	<u>Time of Day</u> 1400	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 2/2/2023	<u>Structure #</u> 22	<u>Latitude/Longitude</u> 46.9539400459 / -101.536386198
<u>Location Remarks:</u> Found on south side of turbine near base bolts.			
<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> Brian Houle
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 2/2/2023	<u>Perillon Entry Date:</u> 2/6/2023	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Unidentifiable Bat (decomposition)	<u>Threatened or Endangered:</u> Unknown – presumed no	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> None	<u>Other Notes:</u>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 2-2023(2)	<u>Date:</u> 2/2/2023	<u>Time of Day</u> 1445	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 2/2/2023	<u>Structure #</u> 211	<u>Latitude/Longitude</u> 46.943094955 / -101.546448995
<u>Location Remarks:</u> Found SE of tower approx. 10 ft.			
<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> Brian Houle
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 2/2/2023	<u>Perillon Entry Date:</u> 2/6/2023	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Unidentifiable Raptor (decomposition)	<u>Threatened or Endangered:</u> Unknown – presumed no	<u>Agencies contacted:</u> None
<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>			
<u>Entry Number</u> 4/2023(1)	<u>Date:</u> 4/18/2023	<u>Time of Day</u> 1230	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 4/18/2023	<u>Structure #</u> O&M	<u>Latitude/Longitude</u> 46.979973 -101.554693
<u>Location Remarks:</u> Found NE corner of O&M yard			
<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> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 4-19-2023	<u>Perillon Entry Date:</u> 4-19-2023	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Gray Partridge	<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>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 4/2023(2)	<u>Date:</u> 4/24/2023	<u>Time of Day</u> 1105	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 4/24/2023	<u>Structure #</u> T-25	<u>Latitude/Longitude</u> 47.009553 -101.524428
<u>Location Remarks:</u> SE side of Turbine base 2 – 5 feet away.			
<u>Physical Condition:</u> Rigor has set in	<u>Estimated Time Since Death:</u> 1 Days	<u>Estimated Date of Injury:</u> 4/23/2023	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 4/24/2023	<u>Perillon Entry Date:</u> 4/24/2023	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Ring-necked pheasant	<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>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 5-2023(1)	<u>Date:</u> 5/4/2023	<u>Time of Day</u> 1000	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 5/4/2023	<u>Structure #</u> 458	<u>Latitude/Longitude</u> 46.99483678/-101.756695317
<u>Location Remarks:</u> 60 Ft West of Tower			
<u>Physical Condition:</u> Freshly Deceased	<u>Estimated Time Since Death:</u> 1 day	<u>Estimated Date of Injury:</u> 5/3/23	<u>Name of Respondent:</u> Jake Hegel (ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date: 5/4/2023</u>	<u>Perillon Entry Date: 5/4/2023</u>	<u>Responding ELM staff:</u> Zach Golkowski
<u>Species Confirmation:</u> Mallard	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> None
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> None	<u>Other Notes:</u>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 5-2023(2)	<u>Date:</u> 5/31/2023	<u>Time of Day</u> 1000	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/31/2021	<u>Structure #</u> 202	<u>Latitude/Longitude</u> 47.008219 -101.503740
<u>Location Remarks:</u> 60 Ft South of Tower			
<u>Physical Condition:</u> Freshly Deceased	<u>Estimated Time Since Death:</u> 1 day	<u>Estimated Date of Injury:</u> 5/30/23	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u> Cut in two			

ELM Follow up/Confirmation

<u>Date:</u> 6-1-23	<u>Perillon Entry Date:</u> 6-1-23	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Wigeon	<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>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 6-2023(1)	<u>Date:</u> 6/1/2023	<u>Time of Day</u> 1100	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/1/2023	<u>Structure #</u> 10	<u>Latitude/Longitude</u> 46.989370 / -101.520339
<u>Location Remarks:</u> 60 Ft West of Tower			
<u>Physical Condition:</u> Freshly Deceased	<u>Estimated Time Since Death:</u> 1 day	<u>Estimated Date of Injury:</u> 6/1/2023	<u>Name of Respondent:</u> Jake Hegel (ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 6-1-23	<u>Perillon Entry Date:</u> 6-1-23	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Sharp-tailed grouse	<u>Threatened or Endangered:</u> No	<u>Agencies contacted:</u> No
<u>Action Items:</u> No	<u>Carcass Preservation actions:</u> No	<u>Other Notes:</u>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 6-2023(2)	<u>Date:</u> 6/12/2023	<u>Time of Day</u> 0930	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/12/2023	<u>Structure #</u> 8	<u>Latitude/Longitude</u> 46.959668 -101.553421
<u>Location Remarks:</u> 150' East of 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> Philip Miller (ARR)
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 6/13/2023	<u>Perillon Entry Date:</u> 6/13/2023	<u>Responding ELM staff:</u> Drew Janke & Alex Luman
<u>Species Confirmation:</u> Hen 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>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 6-2023(3)	<u>Date:</u> 6/16/2023	<u>Time of Day</u> 1030	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/16/2023	<u>Structure #</u> 210	<u>Latitude/Longitude</u> 46.937596 -101.531946
<u>Location Remarks:</u> 75 feet NW of tower			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 2 week	<u>Estimated Date of Injury:</u> 2 week	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 6-16-23	<u>Perillon Entry Date:</u> 6-16-23	<u>Responding ELM staff:</u> Alexander Luman
<u>Species Confirmation:</u> Mallard	<u>Threatened or Endangered:</u> Not Endangered	<u>Agencies contacted:</u> None
<u>Action Items:</u>	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 6-2023(4)	<u>Date:</u> 6/16/2023	<u>Time of Day</u> 1030	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/16/2023	<u>Structure #</u> 210	<u>Latitude/Longitude</u> 46.937596 -101.531946
<u>Location Remarks:</u> 60 feet W of tower			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 2 week	<u>Estimated Date of Injury:</u> 2 week	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 6-16-23	<u>Perillon Entry Date:</u> 6-16-23	<u>Responding ELM staff:</u> Alexander Luman
<u>Species Confirmation:</u> Mallard	<u>Threatened or Endangered:</u> Not Endangered	<u>Agencies contacted:</u> None
<u>Action Items:</u>	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 9-2023(1)	<u>Date:</u> 9/19/2023	<u>Time of Day</u> 1530	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 9/14/2023	<u>Structure #</u> 416	<u>Latitude/Longitude</u> 46.988234 -101.580611
<u>Location Remarks:</u> 60 feet W of 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> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 9/19/2023	<u>Perillon Entry Date:</u> 9/20/2023	<u>Responding ELM staff:</u> Alex Luman
<u>Species Confirmation:</u> Blue Winged Teal	<u>Threatened or Endangered:</u> N/A	<u>Agencies contacted:</u> None
<u>Action Items:</u> No action items taken	<u>Carcass Preservation actions:</u> N/A	<u>Other Notes:</u>

Pictures and attachments

Appendix B

-Wildlife Inspection Table

