

Minnesota Power 2022 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)



A WIND ENERGY INITIATIVE OF MINNESOTA POWER IN NORTH DAKOTA

- 185 PU-13-127 Filed 01/30/2023 Pages: 22
2022 Bison Annual Wildlife Impact Report - Final
Allete, Inc.
- 154 PU-11-162 Filed 01/30/2023 Pages: 22
2022 Bison Annual Wildlife Impact Report - Final
Allete, Inc.
- 165 PU-11-57 Filed 01/30/2023 Pages: 22
2022 Bison Annual Wildlife Impact Report - Final
Allete, Inc.
- 227 PU-09-151 Filed 01/30/2023 Pages: 22
2022 Bison Annual Wildlife Impact Report - Final
Allete, Inc.



Minnesota Power 2022 Wildlife Impact Report

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Introduction

Throughout 2022 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 2022 Annual Wildlife Impact Report which summarizes the wildlife inspection results for the Bison 1, 2, 3 and 4 Facilities in North Dakota.

In 2022 Minnesota Power’s Bison 1 (81.8 MW), Bison 2 (105 MW), Bison 3 (105 MW) and Bison 4 (204.8 MW) Facilities were all operational. The four Facilities combine for a total of 165 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 2022 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 2022 Wildlife Impact Report includes data collected from all 165 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 2022 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 2022 are included in the Wildlife Inspection Table (Appendix B).

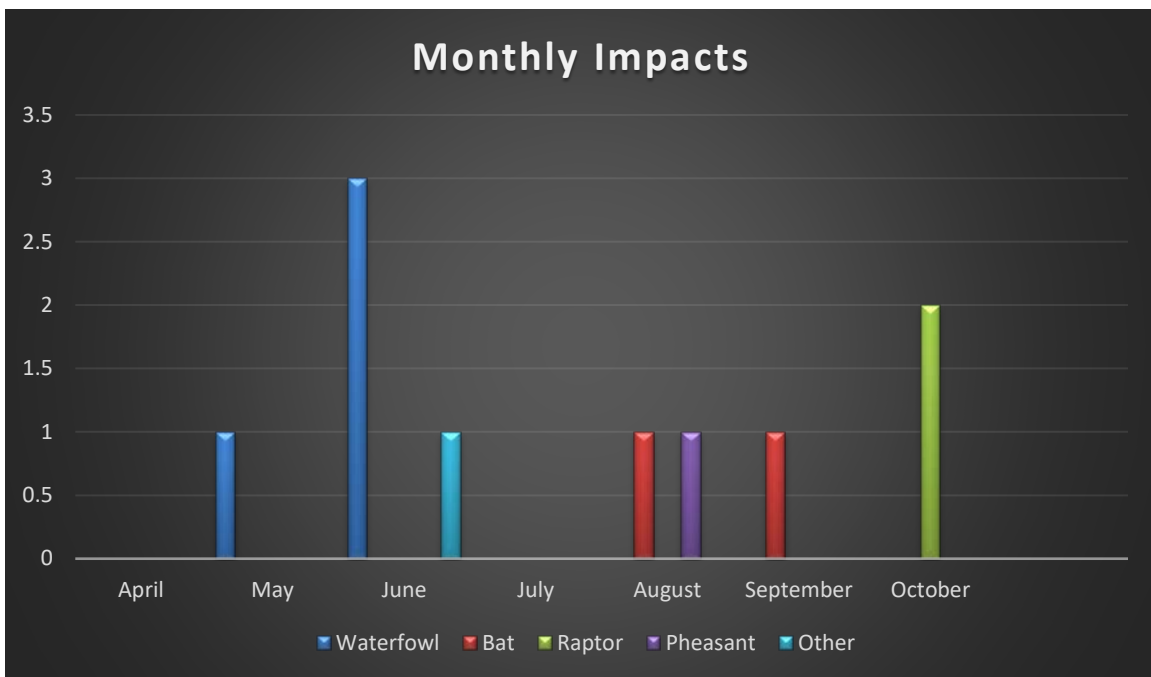
Minnesota Power 2022 Wildlife Impact Report

The total wildlife fatalities for 2022, totaled 10. Two bat fatalities were recorded and 8 avian fatalities recorded. Specific data for each incident and species can be found in the Bison Wildlife Impact Reports (Appendix A).

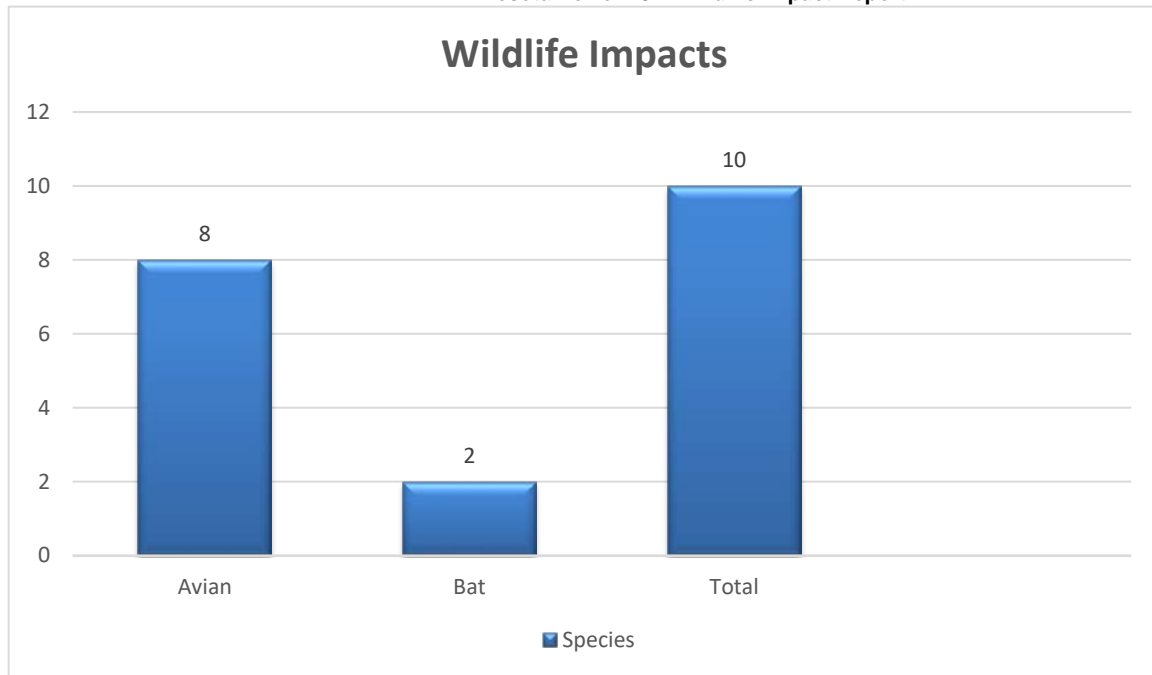
Results

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. One bat carcass was found in August and the other in September, which coincides with spring and fall migratory activity. Duck carcasses were more prevalent during spring migration, however an increase was not observed during fall migration when avian species are typically most vulnerable to collision. The 2022 results are as shown in Table 1-1 below.

Table 1-1:
2022 Avian and bat Carcasses Found at Minnesota Power’s Bison Facility



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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

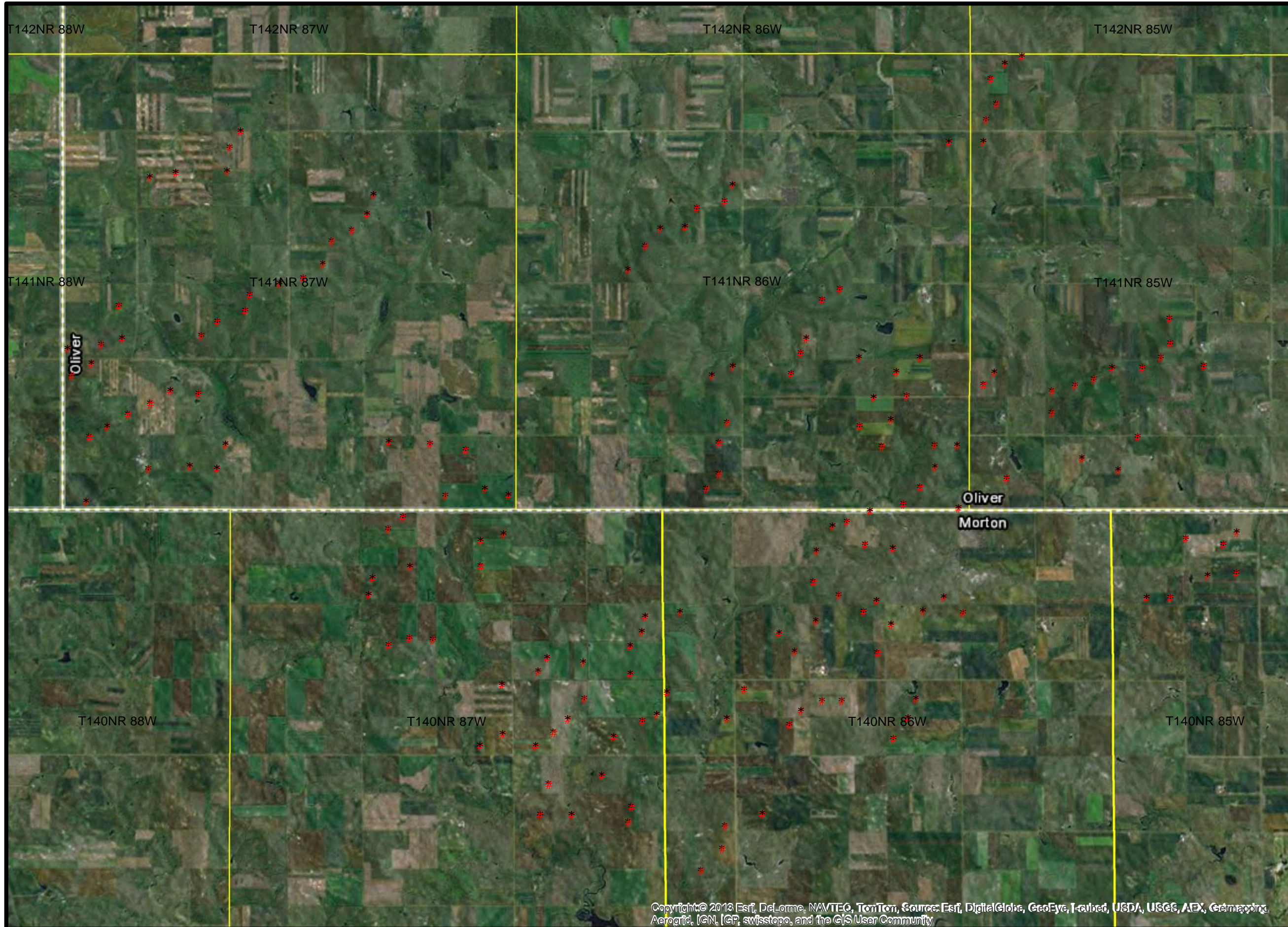


Figure 1

Legend

- * MP Bison Wind Turbines
- Townships

4

3

□ Miles



Appendix A

-Wildlife Impact Reports



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 6-2022(3)	<u>Date:</u> 6/1/2022	<u>Time of Day</u> 1030	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/2/2022	<u>Structure #</u> 455	<u>Latitude/Longitude</u> 47.045505 -101.718282
<u>Location Remarks:</u> Approximately 100 feet from base of turbine			
<u>Physical Condition:</u> Fatality- decaying	<u>Estimated Time Since Death:</u> 1-2 weeks	<u>Estimated Date of Injury:</u> 5/20/2022	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 6-2-2022	<u>Perillon Entry Date:</u> 6-2-2022	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Mallard (Drake)	<u>Threatened or Endangered:</u> No	<u>Agencies contacted:</u> No
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> None	<u>Other Notes:</u>

Pictures and attachments

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ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 6-2022(4)	<u>Date:</u> 6/27/2022	<u>Time of Day</u> 1030	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/27/2022	<u>Structure #</u> 223	<u>Latitude/Longitude</u> 46.928831 -101.628189
<u>Location Remarks:</u> Approximately 100 feet from base of turbine			
<u>Physical Condition:</u> Fatality- decaying	<u>Estimated Time Since Death:</u> 1-3 days	<u>Estimated Date of Injury:</u> 6/24/2022	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 6-28-2022	<u>Perillon Entry Date:</u> 6-28-2022	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Upland Sandpiper	<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> 10-2022(2)	<u>Date:</u> 10-11-2022	<u>Time of Day</u> 1430	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 10-11-2022	<u>Structure #</u> 404	<u>Latitude/Longitude</u> 47.012715 -101.454493
<u>Location Remarks:</u> Bird appeared to have hit the base of the tower on the S side.			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 1 week	<u>Estimated Date of Injury:</u> 10-1-2022	<u>Name of Respondent:</u> Philip miller
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 10-12-2022	<u>Perillon Entry Date:</u> 10-12-2022	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Red-tailed hawk	<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> 10-2022(3)	<u>Date:</u> 10-6-2022	<u>Time of Day</u> 1030	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 10-6-2022	<u>Structure #</u> 14	<u>Latitude/Longitude</u> 46.974774 -101.539835
<u>Location Remarks:</u> 50 ft from tower base			
<u>Physical Condition:</u> Deceased	<u>Estimated Time Since Death:</u> 1 Day	<u>Estimated Date of Injury:</u> 10-5-2022	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 10-26-2022	<u>Perillon Entry Date:</u> 10-26-2022	<u>Responding ELM staff:</u> Zach Golkowski
<u>Species Confirmation:</u> Red Tailed Hawk	<u>Threatened or Endangered:</u> No	<u>Agencies contacted:</u> None
<u>Action Items:</u> Leave carcass where it lay unless a threat to human health or the environment	<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> 8-2022(1)	<u>Date:</u> 8/1/22	<u>Time of Day</u> 0900	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 8/1/222	<u>Structure #</u> 303	<u>Latitude/Longitude</u> 46.9686489863 , -101.444011954
<u>Location Remarks:</u> Found 5ft west of tower.			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 1 day	<u>Estimated Date of Injury:</u> 1 day	<u>Name of Respondent:</u> Brian Houle
<u>Other Notes:</u> Bat			

ELM Follow up/Confirmation

<u>Date:</u> 8-3-2022	<u>Perillon Entry Date:</u> 8-3-2022	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Big Brown Bat	<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>



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 8-2022(2)	<u>Date:</u> 8/1/22	<u>Time of Day</u> 1300	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 8/1/222	<u>Structure #</u> 324	<u>Latitude/Longitude</u> 46.9700057018, -101.667148539
<u>Location Remarks:</u> Found near stairs			
<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> Pheasant			

ELM Follow up/Confirmation

<u>Date:</u> 8-3-2022	<u>Perillon Entry Date:</u> 8-3-2022	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> 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

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ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 5-2022(1)	<u>Date:</u> 5/2/2022	<u>Time of Day</u> 0900	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 5/3/2022	<u>Structure #</u> 7	<u>Latitude/Longitude</u> 46.9981298088/-101.5413632
<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> 5/3/22	<u>Perillon Entry Date:</u> 5/3/22	<u>Responding ELM staff:</u> McCourtney
<u>Species Confirmation:</u> Coot	<u>Threatened or Endangered:</u> No	<u>Agencies contacted:</u> N/A
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> None	<u>Other Notes:</u> None

Pictures and attachments

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ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 6-2022(2)	<u>Date:</u> 6/1/2022	<u>Time of Day</u> 1000	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/1/2022	<u>Structure #</u> 10	<u>Latitude/Longitude</u> 46.989370 -101.520339
<u>Location Remarks:</u> 20' north of the wind 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
<u>Other Notes:</u> Looks like it was chewed on by other wild life			

ELM Follow up/Confirmation

<u>Date:</u> 6-1-2022	<u>Perillon Entry Date:</u> 6-1-2022	<u>Responding ELM staff:</u> Zach Golkowski
<u>Species Confirmation:</u> Green wing teal	<u>Threatened or Endangered:</u> No	<u>Agencies contacted:</u> N/A
<u>Action Items:</u> None	<u>Carcass Preservation actions:</u> None	<u>Other Notes:</u> None

Pictures and attachments



ALLETE Wildlife Impact Report Form

<u>ALLETE Wind Facility Name</u>			
<u>Entry Number</u> 9-2022(1)	<u>Date:</u> 9/1/2022	<u>Time of Day</u> 14:00	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 9/1/2022	<u>Structure #</u> 235	<u>Latitude/Longitude</u> 46.961933 -101.591583
<u>Location Remarks:</u>			
<u>Physical Condition:</u> Decaying	<u>Estimated Time Since Death:</u> 3 Days	<u>Estimated Date of Injury:</u> 8/28/2022	<u>Name of Respondent:</u> Brant Nettleton
<u>Other Notes:</u>			

ELM Follow up/Confirmation

<u>Date:</u> 9-6-2022	<u>Perillon Entry Date:</u> 9-6-2022	<u>Responding ELM staff:</u> Drew Janke
<u>Species Confirmation:</u> Unidentifiable due to decomposition – appears to be Little Brown Bat	<u>Threatened or Endangered:</u> Unknown / 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> 6-2022(1)	<u>Date:</u> 6/1/2022	<u>Time of Day</u> 1100	<u>Injury/Fatality</u> Fatality
<u>Notification Given to</u> 3200	<u>Date Notification Was Given</u> 6/1/2022	<u>Structure #</u> 223	<u>Latitude/Longitude</u> 46.9288309542 / -101.628189053
<u>Location Remarks:</u> Mallard duck located 10ft south of tower, between transformers.			
<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> 6-1-2022	<u>Perillon Entry Date:</u> 6-1-2022	<u>Responding ELM staff:</u> Zach Golkowski
<u>Species Confirmation:</u> Mallard	<u>Threatened or Endangered:</u> NO	<u>Agencies contacted:</u> NONE
<u>Action Items:</u> Leave carcass where it sits unless harmful to health or environment	<u>Carcass Preservation actions:</u> none	<u>Other Notes:</u>

Pictures and attachments

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Appendix B

-Wildlife Inspection Table

