minnesota power
AN ALLETE COMPANY

30 west superior street / duluth, minnesota 55802-2093 / fax: 218-723-3955 /www.allete.com

David R. Moeller
Senior Attorney
218-723-3963
dmoeller@allete.com

January 3, 2013

VIA EMAIL & OVERNIGHT DELIVERY

Mr. Darrell Nitschke
Executive Secretary
North Dakota Public Service Commission
600 E. Boulevard Ave., Dept. 408
Bismarck, ND 58505-0480

RE:	Bison 1 Wind Project Oliver/Morton Counties Siting Application Case No. PU-09-151	Bison 2 Wind Project Oliver/Morton Counties Siting Application Case No. PU-11-57	Bison 3 Wind Project Oliver/Morton Counties Siting Application Case No. PU-11-162

Dear Mr. Nitschke:

Please find an original and 10 copies of Minnesota Power's 2012 Wildlife Incident Report in the above-referenced cases.

Please let us know if you have any questions.

Yours truly,

David R. Moeller

kl
Attachments
c: Ron Gullicks, Minnesota Power
Jim Atkinson, Minnesota Power
Mike Pontius, Minnesota Power
Ken Benoit, Minnesota Power
Dan McCourtney, Minnesota Power

Minnesota Power 2012 Wildlife Incident Report For North Dakota Wind Facilities

Contents

Minnesota Power 2012 Wildlife Incident Report

Introduction

Throughout 2012 Minnesota Power (an operating division of ALLETE, Inc.) has been constructing and 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 were performed at those Facilities throughout the year. The following is Minnesota Power's 2012 Annual Wildlife Incident Report which reviews those regular wildlife inspections for its Bison 1, 2, and 3 Facilities in North Dakota.

In early 2012 Minnesota Power completed construction of it its Bison 1 (81.8 MW) Facility. The Bison 2 (105 MW) and Bison 3 (105 MW) Facilities remained under construction throughout the year and were operational by the end of 2012. As a result, the 31 turbines on Bison 1 were the only operational turbines Minnesota Power had in 2012 (see Figure 1A). This 2012 Annual Wildlife Incident Report covers all operational 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 Annual Wildlife Incident Report will be reviewed by Minnesota Power environmental staff, Bison facility personnel and management. It will be used to analyze potential avian or bat impacts at Minnesota Power Facilities and to determine if adaptive management measures are required for either a Facility or individual Facility structures.

Minnesota Power will distribute copies of this report to the North Dakota Public Service Commission as well as the US Fish and Wildlife Service to be incorporated into their records/research. A Wildlife Incident Report will be generated every year for the life of Minnesota Power's North Dakota Facilities and will be distributed by January 15th of each year.

Inspections/Data Collection

This 2012 Wildlife Incident Report includes data collected from 31 operational turbines at the Bison 1 Facility, as well as data collected from the Bison Operations and Maintenance (O&M) facility, the Bison Substation (substation) and one permanent meteorological (met) tower. Each turbine, O&M facility, substation and met tower were 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 substation and O&M facility, were inspected at a much higher frequency.

Two main databases were used to track inspections as well as individual fatalities. Inspections were tracked in the Minnesota Power Wildlife Inspection Database and individual fatalities were tracked in the Minnesota Power Wildlife Incident Database. Each time a carcass was found during regular inspections or during normal operations it was assigned a unique incident number and entered into each database.

Each month-long inspection cycle was recorded as a single monthly entry into the Minnesota Power Wildlife Inspection Database. The inspection cycle results for 2012 are included in the Wildlife Inspection Table (Appendix A).

A detailed report of each incidence/fatality for 2012 was entered into the Wildlife Incident Database. Individual fatality information can be found in the Wildlife Fatality Reports (Appendix B). Table 1-1 below summarizes the date, structure and species for each incident/fatality from the Wildlife Fatality Report.

Table 1-1

Date	Structure.	Species
5/21/2012	O&M Facility	Pheasant
5/31/2012	WTG #27	Mallard
6/4/2012	WTG #8	Sparrow
6/4/2012	WTG #28	Sparrow
8/7/2012	WTG #24	Bat
8/7/2012	WTG #2	Bat
8/7/2012	WTG #14	Bat
8/7/2012	WTG #14	Bat
8/8/2012	WTG #32	Bat
8/8/2012	WTG #33	Bat
8/24/2012	WTG #1	Bat
11/9/2012	WTG #26	Sharp Tailed Grouse

The total wildlife fatalities for 2012 were 12, 5 of which were avian fatalities and 7 were bat fatalities. Specific data per incident and species can be found in the Wildlife Fatality Reports (Appendix B).

Results

After reviewing the inspection records and recorded fatalities, no turbine, structure or location showed an elevated risk for avian or bat mortality when compared to the surrounding facility structures. Bat species appeared to be more susceptible to collision in the month of August than in any other month throughout the year. Mortality appeared to be dispersed throughout the site. With the small number of fatalities, the small sample size of structures inspected and the short time period of observations, no conclusive data has been collected that would indicate any adaptive management activities should occur.

With the data collected, it appears that Minnesota Power's Bison facilities pose low risk to surrounding and migrating avian and bat populations. Minnesota Power will continue to monitor its facilities. As the number of turbines increase and the length of time for data collection increases, the information collected could prove beneficial to Facility operations.

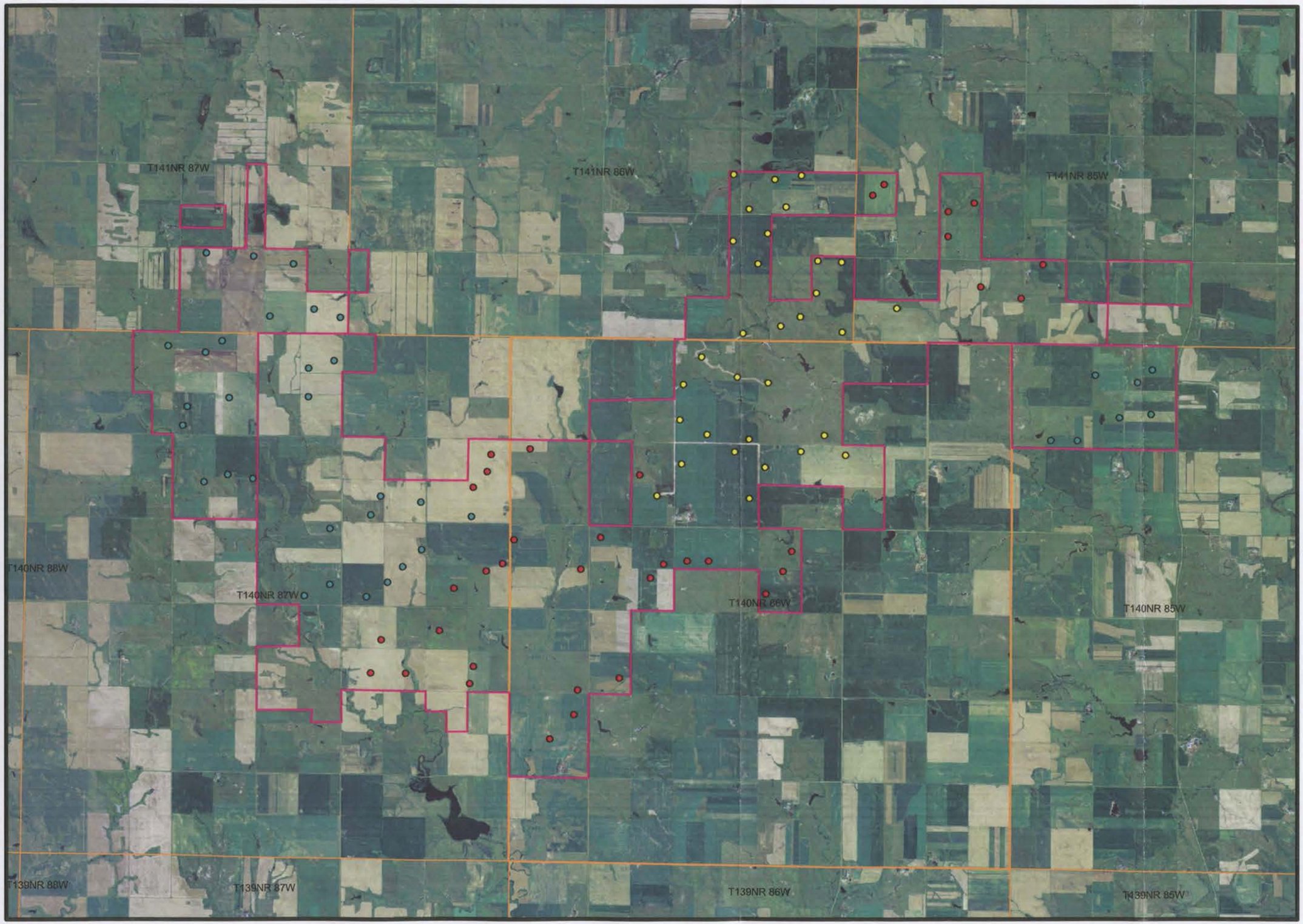
In addition, upon completion of all construction activities for Bison 1, 2 and 3 facilities, Minnesota Power will be performing one year of extensive post construction monitoring for both avian and bat species (to be performed in 2013). The results from this post construction monitoring program will be combined with Minnesota Power's regular site inspection data to further Minnesota Power's continual effects analysis.

Figures:

Figure 1A

Bison 1, 2, and 3 Project Area

Figure 1A



Legend

Bison 1, 2, 3 Turbine Layout Use

- Bison 1
- Bison 2
- Bison 3
- Bison 1, 2, 3 Facility Boundary
- Townships

N
W E
S

0 3,000 6,000 12,000 Feet

minnesota power
AN ALLETE COMPANY

ALLETE

Appendix A:

Minnesota Power 2012 Wildlife Inspection Table

Minnesota Power 2012 Wildlife Inspection Table

Inspection Date	1/31/2012	2/29/2012	3/31/2012	4/30/2012	5/31/2012	6/30/2012	7/31/2012	8/31/2012	9/30/2012	10/31/2012	11/30/2012	12/31/2012
Inspector Name	Todd Simmons	Todd Simmons	Todd Simmons	Todd Simmons	Todd Simmons	Philip Miller	Philip Miller	Philip Miller	Philip Miller	Todd Simmons	Todd Simmons	Todd Simmons
WTG 1	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	2012-06	Nothing	Nothing	Nothing	Nothing
WTG 2	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	2012-07	Nothing	Nothing	Nothing	Nothing
WTG 3	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 4	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 5	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 6	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 7	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 8	Nothing	Nothing	Nothing	Nothing	Nothing	2012-03	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 9	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 10	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 11	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 12	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 13	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 14	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	2012-08/2012-09	Nothing	Nothing	Nothing	Nothing
WTG 15	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 16	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 17	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 18	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 19	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 20	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 22	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 23	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 25	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 26	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	2012-5	Nothing	Nothing	2012-12	Nothing
WTG 27	Nothing	Nothing	Nothing	Nothing	2012-02	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 28	Nothing	Nothing	Nothing	Nothing	Nothing	2012-04	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 29	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 30	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 31	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing
WTG 32	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	2012-10	Nothing	Nothing	Nothing	Nothing
WTG 33	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	2012-11	Nothing	Nothing	Nothing	Nothing
O&M Compound	Nothing	Nothing	Nothing	Nothing	2012-01	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing	Nothing

Appendix B:

Minnesota Power 2012 Wildlife Fatality Reports

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-01	21-May, 2012	700	Fatality	Good (Bird is intact)
Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude	
Daniel McCourney	21-May, 2012	O&M Compound		
Location Remarks:				
Phesant was found west of the O&M Building				
Species:	Field Marks Used For Field ID:			
Male Pheasent	Bird was intact.			
Physical Condition	Estimated Time Since Death	Estimated Date of Injury		Name of Respondent
Carcass is intact.	14 hours	20/21 May, 2012		Todd Simmons
Other Notes:				

Estimate the bird died somewhere between 1700 hours on Sunday 20 May, 2012 and 0700 hours on Monday 21 May, 2012. Siemens contractors left site Sudnay afternoon at 1700 hours. The bird is located on the west side of the O&M building which is where the contractors park their private vehicles. The bird doesn't apear to have any real damage that you can see. I believe that the bird flew into the side of the O&M Building and died as a result.

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-02	31-May, 2012	1445	Fatality	Good/Intact
Notification Given to	**Date Notification Was Given**	**Structure #**	**Latitude & Longitude**	
Dan McCourtney	31-May-12	T-27 (Bison 1B)		
Location Remarks:				
Species	**Field Marks Used For Field ID:**			
Mallard	Bird was intact.			
Physical Condition	**Estimated Time Since Death**	**Estimated Date of Injury**	**Name of Respondent**	
Some yellowish puss looking fluid coming out of the mouth and a little bit of blood looking material.	It most likely occurred in the past 24 to 36 hours as Siemens was out at that turbine yesterday and did not report the death.	May 30/31, 2012	Mike Pontius found the bird.	

Other Notes: Mike Pontius reported the bird at 1445 hours and I went out to take photos. It is hard to see how the bird died exactly but my assumption is that the bird struck the side of the tower as there was not much damage to the bird outwardly. I will send pictures to Dan McCourtney.

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-03	4-Jun-12	2:35 PM	Fatality	Rear part of tail area was damaged.
Notification Given to	**Date Notification Was Given**	**Structure #**	**Latitude & Longitude**	
Daniel McCourney	4-Jun-12	WTG #8	Lat. 46d 57m 34.8048s - Lon. 101 33m 12.3156s	
Location Remarks:				
Bird was located approximately 50' east of tower structure.				
Species	**Field Marks Used For Field ID:**			
Small sparrow type bird.	Bird was in tact.			
Physical Condition	**Estimated Time Since Death**	**Estimated Date of Injury**		**Name of Respondent**
Some damage to the rear tail section of the bird.	With last week.	28-May-12 to 04-Jun-12		Todd Simmons
Other Notes:				
Phil Miller was out conducting avian & bat survey for the month of June when he located the bird. Judging from the picture the bird had been dead approximately a week or so.				

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-04	4-Jun-12	2:30 PM	Fatality	No visible damage to bird.
Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude	
Daniel McCourney	4-Jun-12	28	Lat. 47d 59m 58.2367s - Lon. 101 31m 57.6521s	
Location Remarks:				
Bird was approximately 20' north of turbine base.				
Species	Field Marks Used For Field ID:			
Small Sparrow type bird.	Bird was in tact.			
Physical Condition	Estimated Time Since Death	Estimated Date of Injury		Name of Respondent
Carcass was in tact.	Within the last week.	11-Jun-12 to 18-Jun-12		Todd Simmons
Other Notes:				
Judging from the photos it is difficult to determine how the bird died.				

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-05	August 7th, 2012	1305	Fatality	In tact - slightly dehydrated
Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude	
Daniel McCourney	August 7th, 2012	WTG-24	Lat. 46d 59m 7.0072s / Lon. 101d 31m 13.25s	
Location Remarks:				
Bat located approximately 20' west of turbine foundation.				
Species	Field Marks Used For Field ID:			
Bat	None			
Physical Condition	Estimated Time Since Death	Estimated Date of Injury		Name of Respondent
It was somewhat dehydrated but in tact.	About a week.	Within the week of August 2th,		Todd Simmons
Other Notes:				
Philip Miler found the bat while conducting a safety walk down of the site on August 7th, 2012.				

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-06	August 24th, 2012	900	Fatality	Dried out and partially eaten.
Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude	
Daniel McCourney	August 24th, 2012	Turbine #1	46d 59m 7.0072s/101d 31m 27.2511s	
Location Remarks: Tempratures outside were in the mid-80's to mid-90's. Bat appears to be quit dehydrated and partially eaten. It is dificult to make any determination as to what happened.				
Species	Field Marks Used For Field ID:			
Bat	None			
Physical Condition	Estimated Time Since Death	Estimated Date of Injury	Name of Respondent	
Poor condition: partially eaten a	Estimated last week or two.	August 17th - August 24th.	Todd Simmons	
Other Notes: None				

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-07	August 7th, 2012	1300 hours	Fatality	Dehydrated
Notification Given to	**Date Notification Was Given**	**Structure #**	**Latitude & Longitude**	
Todd Simmons	August 7th, 2012	Tubrine #2	46d 59m 41.49s/101d 31m 13.25s	
Location Remarks:				
WTG-2 is located North East of the Bison O&M building approximately 2 miles off 29th Street.				
Species	**Field Marks Used For Field ID:**			
Bat	None			
Physical Condition	**Estimated Time Since Death**	**Estimated Date of Injury**		**Name of Respondent**
Dehydrated	Withing the past few days.	August 4th-August 7th.		Philip Miller
Other Notes:				
While out conducting transformer and avian & bat inspections Phil discovered the dead bat at T-2. Weather conditions for the past week have been very warm with thunderstorms periodically.				

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-08	August 7th, 2012	700	Fatality	Some dehydration/no visible cause.
Notification Given to	**Date Notification Was Given**	**Structure #**	**Latitude & Longitude**	
Todd Simmons/Daniel McCourney	August 7th, 2012	Tubine - 14	46d 58m 29.1876s/101d 32m 23.4062s	
Location Remarks:				
Species	**Field Marks Used For Field ID:**			
Bat	None			
Physical Condition	**Estimated Time Since Death**	**Estimated Date of Injury**		**Name of Respondent**
Deyhdrated/No visible damage.	Within the last week.	August 2nd - 8th, 2012		Philip Miller

Other Notes:

Weather: The weather for the past week has been very warm with scattered thunderstorms moving through the area.

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-09	August 7th, 2012	700	Fatality	No visible signs of damage.

Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude
Todd Simmons/Daniel McCourney	August 8th, 2012	T-14	46d 58m 29.1876s/101d 32m 23.4062s

Location Remarks:
Turbine 14 is located due East of the Bison O&M building approximately one mile in an open field. There is both pasture land and row corn planted in the vicinity of the turbine.

Species	Field Marks Used For Field ID:
Bat	

Physical Condition	Estimated Time Since Death	Estimated Date of Injury	Name of Respondent
Not visible damage.	Last couple of days.	August 5th -7th, 2012	Philip Miller

Other Notes:
Weather: The weather for the past week has been very warm with scattered thunderstorms moving through the area.

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-10	August 8th, 2012	700	Fatality	O.K. condition.
Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude	
Todd Simmons/Daniel McCourtney	August 8th, 2012	Tubine - 32	46d 58m 24.1835s/101d 33m 12.1106s	
Location Remarks:				
Turbine 32 is located South of the Bison O&M building approximately a quarter (1/4) mile.				
Species	Field Marks Used For Field ID:			
Bat	None			
Physical Condition	Estimated Time Since Death	Estimated Date of Injury		Name of Respondent
O.K. condition	More than a week.	31-Jul-12		Philip Miller
Other Notes:				
Weather: The weather for the past week has been very warm with scattered thunderstorms moving through the area.				

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-11	August 8th, 2012	700	Fatality	Dehydrated
Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude	
Todd Simmons/Daniel McCourtney	August 8th, 2012	Turbine - 33	46d 57m 33.655s/101d 31m 57.2111s	
Location Remarks:				
Turbine 33 is located SE of the Bison O&M building approximately 2.5 miles. It is located in primarily row corn fields.				
Species	Field Marks Used For Field ID:			
Bat	None			
Physical Condition	Estimated Time Since Death	Estimated Date of Injury		Name of Respondent
Dehydrated	Week	August 1st, 2012		Philip Miller (Wind Technician)
Other Notes:				
Weather: The weather for the past week has been very warm with scattered thunderstorms moving through the area.				

Minnesota Power 2012 Wildlife Fatality Report

Entry Number	Date	Time of Day	Injury or Fatality	Condition of Carcass
2012-12	November 9th, 2012	1400 hrs	Fatality	Damage around the neck.
Notification Given to	Date Notification Was Given	Structure #	Latitude & Longitude	
Todd Simmons/Daniel McCourtney	November 9th, 2012	Turbine-26	47d 0m 34.5019s/01d 32m 29.2541s	
Location Remarks:				
Turbine 26 is located North of the Bison O&M Building in Oliver County approximately 3 miles.				
Species	Field Marks Used For Field ID:			
Female Sharp Tailed Grouse	None			
Physical Condition	Estimated Time Since Death	Estimated Date of Injury	Name of Respondent	
There is damage to the upper chest area and the neck of the bird. With some damage on	Approximately a day or two.	November 8th, 2012	Philip Miller (Wind Technician)	
Other Notes:				
Weather: Fall weather has been mixed temps with some rain and snow.				