minnesota power
AN ALLETE COMPANY

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RECEIVED
AUG 20 2012
PUBLIC SERVICE COMMISSION

August 17, 2012

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

RE: Minnesota Power's Bison 3 Wind Project
Siting Application for a Certificate of Site Compatibility for the Bison 3 Wind Project, Oliver and Morton counties, North Dakota
Case No. PU-11-162

Dear Mr. Nitschke:

Enclosed please find Minnesota Power's Tree and Shrub Mitigation Plan in the above-referenced case. An original and ten copies are included.

Please let me know if you have any questions related to this matter.

Sincerely,

David R. Moeller

kl
Enc.
c: Dan McCourtney, Minnesota Power
Jim Atkinson, Minnesota Power
Ron Gullicks, Minnesota Power

Minnesota Power Tree and Shrub Mitigation Plan

For Bison 3 (PU-11-162)

A WIND ENERGY INITIATIVE OF MINNESOTA POWER IN NORTH DAKOTA

Contents

Minnesota Power Tree and Shrub Mitigation Plan

Introduction

Throughout 2012 Minnesota Power (an Allete company) has been constructing its Bison 3, 105 MW wind energy conversion facility (Facility). During construction some trees and shrubs were disturbed. In keeping with the Certificate of Site Compatibility for this Facility, Minnesota Power has developed this Tree and Shrub Mitigation Plan. This mitigation plan will facilitate the replacement of the trees and shrubs that were disturbed during construction and minimize any associated environmental impacts.

Number and Variety of Trees

Post construction vegetation surveys were preformed for the Bison 3 project area to determine the species disturbed, the number of species disturbed and their location. The post construction vegetation surveys were preformed by KDK Consulting, Kelly Krabenhoft- Certified Professional Range Management. The species disturbed have been organized into section-township-range. The following table (Table 1-1) shows the total number of trees and shrubs that were disturbed during construction of Minnesota Power's Bison 3 Facility.

Table 1-1 Stems Disturbed (by Species) During Bison 3 Construction.

Common Name	Scientific Name		
		Sec. 36 T141N, R87W	Sec. 26 T141N, R86W
Shrubs	-	-	-
Siberian elm	Ulmus pumila	28	1
Green ash	Fraxinus pennsylvanica	6	
Russian olive	Elaeagnus angustifolia		1
Ponderosa pine	Pinus ponderosa		1
Shrubs	-	-	-
Honeysuckle	Lonicera sp.		2
Total	-	**34**	**5**

Mitigation Plan

Following the requirements of the North Dakota Public Service Commission Certificate of Site Compatibility for the Bison 3 Facility, Minnesota Power will mitigate trees and shrubs disturbed during construction. The disturbed trees and shrubs will be replaced at a minimum ratio of 2:1. However, the actual planting of most species will be at a ratio closer 3:1 to account for mortality associated with any planting/re-vegetation effort.

All disturbed trees and shrubs will be replaced by the same or similar species in following with the North Dakota Public Service Commission's Tree and Shrub Mitigation Specifications.

Upon completion of mitigation activities, the planting site will then be monitored for three years to ensure that there has been a 75% survival rate based on a **2:1** planting regime. Survival surveys will occur in the fall of each year and will be used to determine if any additional mitigation activities will be required.

Proposed Number, Variety, Type

Table 1-2 lists the species that were disturbed during construction, the number of species disturbed and the number of mitigation stems that will be planted. The percent survival will be determined assuming a 2:1 planting ratio.

In following with recommendations provided by local Soil Conservation Districts, range management professionals and local expertise Minnesota Power has opted to replace the species that were disturbed by construction with species with native to North Dakota. As a result Siberian elm and Russian olive will not be used for mitigation. Instead, those species will be replaced with Green ash (native to North Dakota). Also, due to availability, Honeysuckle will be replaced with Buffaloberry.

Table 1-2 # Stems Disturbed (by Species) During Construction of Bison 3

Common Name	Scientific Name	Plants Removed	Plants to Replace
Green ash	Fraxinus pennsylvanica	36*	72
Ponderosa pine	Pinus ponderosa	1	2
Buffaloberry**	Shepherdia argentea	2	4

* Plants removed include Green Ash, Russian Olive and Siberian Elm.
**Honeysuckle will be replaced with Buffaloberry.

Location and Date of Replacements

In an effort to maintain customer satisfaction, project acceptance and a high standard of public relations, Minnesota Power has developed an alternative site for the mitigation plantings to occur if requested by land owners. Land owners have their choice to have mitigation activities occur either on their ownership or on Minnesota Power's alternative site. All affected land owners prefer mitigation (planting) activities not occur on their ownership and have instead opted for Minnesota Power's alternative site.

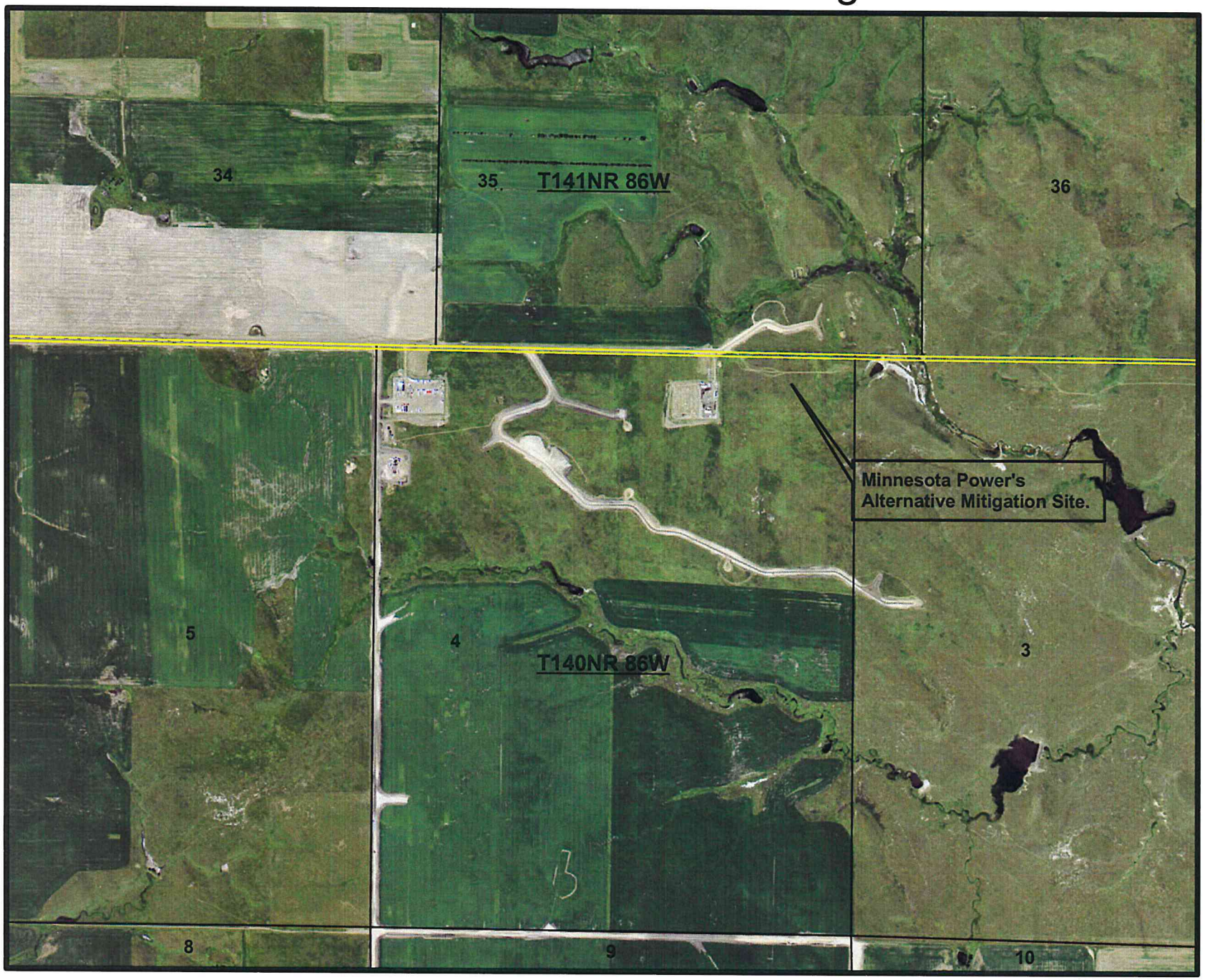
The Minnesota Power alternate site is located in Morton County in Section 4 - Township 140N - Range 86W. See Attached Figure #1 for mitigation site location information.

Figure 1

-Mitigation Site Location

Figure 1

Minnesota Power Alternative Mitigation Site.



Appendix A

-Alternative Mitigation Agreements

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Alternative Mitigation Location Agreement

Dave Klusman, whose property is located in Section 5 Township 140N-Range 85W, CONSENTOR, for valuable consideration, hereby acknowledge consent and convey unto MINNESOTA POWER legally incorporated as ALLETE, Inc., a Minnesota corporation, CONSENTEES and its successors, the right to perform tree and shrub mitigation activities at a mitigation restoration site which is not located on the CONSENTOR personal property.

The CONSENTOR understand that this replaces their rights to have tree and shrub mitigation, as required by applicable permits issued by the North Dakota Public Service Commission, activities preformed on the CONSENTOR personal property in favor of a location determined at the CONSENTEES discretion.

CONSENTOR

NAME HERE Dave Klusman 7-18-12

COUNTY OF Morton.

This instrument was drafted by:
Minnesota Power
30 West Superior Street
Duluth, MN 55802

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Alternative Mitigation Location Agreement

Greg and Jeanne Voegele, whose property is located in Section 36 Township 141N-Range 87W, CONSENTOR, for valuable consideration, hereby acknowledge consent and convey unto MINNESOTA POWER legally incorporated as ALLETE, Inc., a Minnesota corporation, CONSENTEES and its successors, the right to perform tree and shrub mitigation activities at a mitigation restoration site which is not located on the CONSENTOR personal property.

The CONSENTOR understand that this replaces their rights to have tree and shrub mitigation, as required by applicable permits issued by the North Dakota Public Service Commission, activities preformed on the CONSENTOR personal property in favor of a location determined at the CONSENTEES discretion.

CONSENTOR

NAME HERE Greg Voegele NAME HERE Jeanne Voegele

COUNTY OF Oliver.

This instrument was drafted by:
Minnesota Power
30 West Superior Street
Duluth, MN 55802

Appendix B

-Woodland Inventory Procedures & Survey Results

- Bison 3
  - Trees
  - Shrubs
- Results

WOODY SPECIES DISTURBANCE REPORT FOR ALLETE, INC. BISON I WIND PROJECT- PHASE 1C- SHRUBS/TREES IN OLIVER/MORTON COUNTIES OF NORTH DAKOTA

Prepared by KDK Consulting
Kelly Krabbenhoft- Certified Professional Range Management
July 2012

Woodland inventory within the easement corridors for Phase 1C of the Bison Wind Projects was conducted on July 11th, 2012 by KDK Consulting. The inventory was conducted to meet the specifications outlined in Case No. PU-09-151. This was accomplished by conducting a thorough ground-truth reconnaissance. All tall shrubs/trees were inventoried for loss by species through direct counts within the previously sampled area.

All data by each tree and shrub species related to the disturbance inventory conducted in mid-July can be found in Table 1 following construction of Phase 1c for the Bison 1 Wind Farm. NRAWV2 had a majority of the construction losses with 28 Siberian Elm individuals removed. NRAWV4 was next in numbers with 6 green ash individuals removed during construction. Within NRBWV1, 5 individuals were removed across 4 separate species. A total of 39 trees/shrubs were removed during the construction of Phase 1C of the Bison Wind Projects.

Now that the determinations of disturbance numbers by species are calculated, a planting plan and survivability monitoring protocol can be outlined to mitigate these losses due to construction. Depending upon each owner's preference, these losses can be either within their own lands or possibly the total disturbance could be pooled together for one off-site planting to be determined later.

Table 1- Shrub/Tree Species Observed Following Construction Along Phase 1C Easement Boundary for the Bison I Wind Project

Name	Species	Number of Individuals	Number of Individuals Remaining following Construction	Number of Individuals Disturbed during Construction
NRAWV1	Chokecherry (Prunus virginiana)	17	17	0
NRAWV2	Siberian elm (Ulmus pumila)	59	31	28
NRAWV3	Green ash (Fraxinus pennsylvanica)	24	24	0
NRAWV4	Green ash	11	5	6
NRAWV5	Green ash	2	2	0
NRAWV6	Green ash	43	43	0
NRBWV1	Russian olive (Elaeagnus angustifolia)	17	16	1
	Siberian elm	9	8	1
	Honeysuckle (Lonicera sp.)	30	28	2
	Ponderosa pine (Pinus ponderosa)	11	10	1
NRBWV2	Ponderosa pine	79	79	0

Total Removed=39

Total Disturbed Amount By Species

Species	# Individuals Removed
Siberian elm (Ulmus pumila)	29
Green ash (Fraxinus pennsylvanica)	6
Russian olive (Elaeagnus angustifolia)	1
Honeysuckle (Lonicera sp.)	2
Ponderosa pine (Pinus ponderosa)	1
TOTAL	**39**