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December 12, 2019

VIA U. S. AND ELECTRONIC MAIL

Mr. Steven M. Kahl, Executive Secretary
North Dakota Public Service Commission
State Capitol Building, Dept. 0480
600 East Boulevard
Bismarck, ND 58505-0480

RE: FOXTAIL WIND ENERGY CENTER TREE & SHRUB INVENTORY AND
MITIGATION PLAN (CASE NO. PU-17-284)

Dear Mr. Kahl:

Enclosed as Attachment A, please find the Tree and Shrub Inventory and Mitigation/Replacement Plan developed in accordance with the Commission's tree and shrub mitigation specifications for Foxtail Wind Farm.

An original and seven copies of this filing are being provided via U.S. Mail.

Please contact me if you have any questions. Thank you.

Sincerely,

A handwritten signature in blue ink that reads 'David H. Sederquist'.

DAVID H. SEDERQUIST
SR. REGULATORY/FINANCIAL CONSULTANT
XCEL ENERGY

Encl.

Tree and Shrub Inventory and Mitigation/Replacement Plan

Foxtail Wind Energy Center Northern States Power Company Xcel Energy Dickey County, North Dakota

Prepared for:

**Northern States Power Company
Xcel Energy**
414 Nicollet Mall, 8th Floor
Minneapolis, Minnesota 55401



Prepared by:

AECOM
1000 East Calgary Avenue, Suite 1
Bismarck, North Dakota 58503



December 2019

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1.0 INTRODUCTION

In November 2019, Northern States Power Company, a Minnesota corporation (Xcel Energy), substantially completed construction of the Foxtail Wind Energy Center (Project) in Dickey County, in southeastern North Dakota. The Project has a nameplate capacity of approximately 150 megawatts, consisting of 75 wind turbines and is expected to become commercially operational in December 2019. Construction of the Project required the removal of trees and shrubs and was completed in two phases between 2018 and 2019. All tree and shrub clearings have been completed and final Project reclamation will be completed in 2020.

On October 4, 2017, the North Dakota Public Service Commission (Commission) deemed Xcel Energy's Application for a Certificate of Site Compatibility complete and assigned it to Case No. PU-17-284. On January 31, 2018 the Commission issued the Findings of Fact, Conclusions of Law, and Order (Order) for the Project which contained the Tree and Shrub Mitigation Specifications (**Appendix A**). According to the Tree and Shrub Mitigation Specifications, trees and shrubs must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs. The Commission requires submittal and approval of a tree and shrub inventory and mitigation/replacement plan before tree and shrub replacement. Xcel Energy elected to inventory trees and shrubs by actual count rather than sampling methodology, as provided in Paragraph 6 of the Tree and Shrub Mitigation Specifications.

2.0 TREE AND SHRUB INVENTORY

Trees and shrubs were inventoried prior to Project construction in May 2018. The inventory documented the location, number, and species of trees and shrubs. The tree and shrub inventory occurred within the areas where Project construction easements intersected trees and shrubs. The inventory documented a total of 3,970 trees and shrubs within the Project construction easement (**Appendix B**). A total of 12 different tree and shrub species were identified including eight trees: willow (*Salix alba*), Siberian elm (*Ulmus pumila*), green ash (*Fraxinus pennsylvanica*), Siberian crabapple (*Malus baccata*), cottonwood (*Populus deltoids*), common lilac (*Syringa vulgaris*), American elm (*Ulmus americana*), and Arnold hawthorn (*Crataegus arnoldiana*) and four shrubs: silver buffaloberry (*Shepherdia argentea*), amur honeysuckle (*Lonicera maackii*), chokecherry (*Prunus virginiana*), and caragana (*Caragana arborescens*).

Tree and shrubs were removed during construction of the Project between May 2018 and October 2019. AECOM inventoried remaining trees and shrubs in November of 2018 after the first stage of construction was complete and then again in the October 2019 after completion of final tree and shrub removal. Inventoried trees and shrubs are shown in **Appendix B**. A total of 1,171 trees and shrubs were removed. For each tree removed a two 2-year-old sapling will be planted and for each shrub removed a stem cuttings will be planted for a total of 2,340 trees and shrubs planted. Trees and shrubs will be replaced by the same species (except in cases of invasive or noxious species) or similar species suitable for North Dakota growing conditions as recommended the James River Soil Conservation District.

3.0 LANDOWNER CONSULTATION

The James River Soil Conservation District contacted landowners that had trees and shrubs removed on their property to determine planting locations. The landowners were asked whether they preferred trees and shrubs to be replaced on their property on or off the Project right-of-way, or whether they preferred not to have trees replaced on their property and instead have them planted at an alternative

location. All landowners requested replacement of the trees and shrubs on their property with the exception of one landowner. The landowner has signed a waiver to waive rights to planting of replacement trees on their property (**Appendix C**) and an alternate tree and shrub replacement location has been identified. The James River Soil Conservation District created a planting plan specific for each planting that was coordinated with the landowner. The planting plan designates the planting location and replacement tree and/or shrub with a series of 2:1 planting (**Appendix D**). Personal information such as name and contact information was redacted from each planting plan.

4.0 PLANTING SCHEDULES

The tree and shrub replacement plantings are scheduled to occur in the spring or early summer of 2020. The James River Soil Conservation District will cultivate each area, prepare the soil for plantings, and plant the replacement trees and shrubs. Conservation grade trees, generally trees are two-year-old saplings and the shrubs are stem cutting, have been ordered by the James River Soil Conservation District.

5.0 FOLLOW-UP DOCUMENTATION AND MONITORING

Following the completion of the tree and shrub replacement planting, the actual number, variety, type, location, and date of replacement planting will be filed with the Commission. Replacement plantings will be inspected annually each year for three years in September of 2021, 2022, and 2023. The number and type of each surviving tree and/or shrub will be recorded. Notes on the condition of the saplings will be taken. Survival rates will be calculated, and a report will be submitted to the Commission before October 1 of each year documenting the condition of plantings and any woodlands work completed as of September of each year. If the survival rate after three years is less than 75%, additional plantings may be ordered based on consideration by the Commission.

Appendix A
Tree and Shrub Mitigation Specifications

STATE OF NORTH DAKOTA
PUBLIC SERVICE COMMISSION

Foxtail Wind, LLC
Foxtail Wind Energy Center - Dickey County
Siting Application

Case No. PU-17-284

Tree and Shrub Mitigation Specifications

Inventory

1. Trees and shrubs anticipated to be cleared, including those that are considered invasive species or noxious weeds (e.g., *Caragana arborescens*, *Elaeagnus angustifolia*, *Rhamnus cathartica*, *Tamarix chinensis*, *T. parviflora*, *T. ramosissima*, *Ulmus pumila*), must be inventoried before cutting. The inventory must record the location, number, and species of trees and shrubs.
2. In windbreaks, shelterbelts and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, must be inventoried for replacement.
3. In native growth areas, trees anticipated to be cleared that are 1 inch diameter at breast height (dbh) or greater must be inventoried for replacement.
4. In native growth areas, shrubs anticipated to be cleared in the permanent right-of-way must be inventoried for replacement.
5. In native growth areas outside the permanent right-of-way, shrubs must be cut flush with the surface of the ground, taking care to leave the naturally occurring seed bank and root stock intact. If soil disturbance is necessary, the native topsoil must be preserved and replaced after construction. Shrubs must be allowed to regenerate naturally where native topsoil is preserved and replaced. Where native topsoil is not preserved and replaced, shrubs anticipated to be cleared must be inventoried for replacement.
6. In native growth areas, trees and shrubs may be inventoried by actual count or by a sampling method that will properly represent the woody vegetation

population. A sampling plan developed by the company, filed with the North Dakota Public Service Commission (Commission) and approved prior to the start of construction must define the sampling method to be used for trees, for tall shrubs and for low shrubs. The data from the sample plots must be extrapolated to the total acreage of the wooded area to be cleared to determine the species and quantity of trees and shrubs to be replaced.

Clearing for Construction

7. Trees and shrubs must be selectively cleared, leaving mature trees and shrubs intact where practical.
8. The maximum width of clear cuts through windbreaks, shelterbelts and all other wooded areas is 50 feet, unless otherwise approved by the Commission.
9. If the area of trees or shrubs actually cleared differs from the area inventoried, the difference in number of trees and shrubs to be replaced must be noted on the inventory.

Replacement

10. Prior to tree and shrub replacement, documentation identifying the number and variety of trees and shrubs removed, as well as the mitigation plan for the proposed number, variety, type, location and date of replacement plantings, must be filed with and approved by the Commission.
11. Two 2-year-old saplings must be planted for every one tree removed. Two shrubs (stem cuttings) must be planted for every one shrub removed.
12. Except in the case of invasive or noxious species, trees and shrubs must be replaced by the same species or similar species, suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service. Invasive or noxious species must be replaced by similar non-invasive or non-

- noxious species suitable for North Dakota growing conditions as recommended by the North Dakota Forest Service.
13. Tree and shrub replacement must not be conducted within a 20 to 30 foot wide path over the pipeline to facilitate visual inspections of the right-of-way in accordance with U.S. Department of Transportation safety regulations.
 14. Landowners must be given the option of having replacement trees and shrubs planted on the landowner's property, either on or off the right-of-way. The landowner must also be given the opportunity to waive those options in writing in order to have replacement trees and shrubs planted off the landowner's property.
 15. At the conclusion of the project, documentation identifying the actual number, variety, type, location and date of the replacement plantings must be filed with the Commission.
 16. Tree and shrub replacements must be inspected annually, in September, for three years. The first annual inspection must be at least one year from the anniversary date of the original plantings. A report of each annual inspection must be submitted to the Commission by October 1 of each year, documenting the condition of plantings and any woodlands work completed as of September of each year. If after the third annual report the survival rate is less than 75%, the Commission may order additional planting(s).

Appendix B
Tree and Shrub Inventory

Tree and Shrub Inventory

Location		Number		Species of Trees and Shrubs	
Latitude	Longitude	Number (May 2018)	Number (October 2019)	Common Name	Scientific Name
46° 5' 27.865" N	98° 54' 9.183" W	10	7	Green Ash	Fraxinus pennsylvanica
46° 5' 29.427" N	98° 54' 7.327" W	14	14	Chokecherry	Prunus virginiana
46° 7' 15.328" N	98° 55' 24.366" W	34	34	Green Ash	Fraxinus pennsylvanica
46° 7' 15.328" N	98° 55' 24.366" W	2	2	Siberian Elm	Ulmus pumila
46° 7' 15.328" N	98° 55' 24.366" W	8	8	Amur Honeysuckle	Lonicera maackii
46° 8' 12.574" N	98° 55' 38.338" W	1	1	Chokecherry	Prunus virginiana
46° 8' 25.135" N	98° 55' 7.401" W	5	5	Cottonwood	Populus deltoides
46° 8' 24.279" N	98° 55' 6.376" W	1	1	Cottonwood	Populus deltoides
46° 8' 24.032" N	98° 55' 8.465" W	13	13	Cottonwood	Populus deltoides
46° 8' 20.232" N	98° 55' 8.774" W	18	18	Siberian Elm	Ulmus pumila
46° 8' 19.702" N	98° 55' 10.010" W	11	11	Siberian Elm	Ulmus pumila
46° 8' 19.702" N	98° 55' 10.010" W	2	2	Amur Honeysuckle	Lonicera maackii
46° 8' 24.334" N	98° 55' 10.902" W	1	1	Cottonwood	Populus deltoides
46° 8' 22.666" N	98° 55' 16.467" W	1	1	Cottonwood	Populus deltoides
46° 8' 21.521" N	98° 55' 18.917" W	2	2	Cottonwood	Populus deltoides
46° 8' 17.533" N	98° 55' 11.125" W	51	51	Amur Honeysuckle	Lonicera maackii
46° 8' 17.533" N	98° 55' 11.125" W	18	18	Common Lilac	Syringa vulgaris
46° 8' 17.533" N	98° 55' 11.125" W	20	20	Siberian Elm	Ulmus pumila
46° 8' 17.533" N	98° 55' 11.125" W	19	19	Chokecherry	Prunus virginiana
46° 8' 3.901" N	98° 54' 35.356" W	1	1	Cottonwood	Populus deltoides
46° 7' 57.795" N	98° 54' 44.191" W	2	2	White Willow	Salix alba
46° 7' 33.346" N	98° 55' 1.955" W	7	5	Siberian Crabapple	Malus baccata
46° 7' 33.346" N	98° 55' 1.955" W	5	3	Green Ash	Fraxinus pennsylvanica
46° 7' 33.346" N	98° 55' 1.955" W	3	1	Siberian Elm	Ulmus pumila
46° 7' 33.346" N	98° 55' 1.955" W	1	1	Silver Buffaloberry	Shepherdia argentea
46° 7' 28.686" N	98° 54' 58.012" W	3	3	Silver Buffaloberry	Shepherdia argentea
46° 7' 27.661" N	98° 54' 57.320" W	13	8	Silver Buffaloberry	Shepherdia argentea
46° 8' 5.429" N	98° 51' 7.767" W	20	20	Chokecherry	Prunus virginiana
46° 8' 5.429" N	98° 51' 7.767" W	20	20	Common Lilac	Syringa vulgaris
46° 8' 3.433" N	98° 51' 6.276" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 8' 3.433" N	98° 51' 6.276" W	9	9	Common Lilac	Syringa vulgaris
46° 8' 3.433" N	98° 51' 6.276" W	8	8	Cottonwood	Populus deltoides
46° 8' 3.433" N	98° 51' 6.276" W	12	12	Chokecherry	Prunus virginiana
46° 7' 58.473" N	98° 51' 5.329" W	11	11	Common Lilac	Syringa vulgaris
46° 7' 17.533" N	98° 50' 40.009" W	48	48	Caragana	Caragana arborescens
46° 7' 17.533" N	98° 50' 40.009" W	12	12	Common Lilac	Syringa vulgaris
46° 7' 17.533" N	98° 50' 40.009" W	12	12	Eastern Red-cedar	Juniperus virginiana
46° 5' 56.498" N	98° 52' 46.501" W	118	100	Common Lilac	Syringa vulgaris
46° 5' 56.498" N	98° 52' 46.501" W	72	54	Green Ash	Fraxinus pennsylvanica
46° 5' 56.498" N	98° 52' 46.501" W	7	5	Cottonwood	Populus deltoides
46° 5' 56.498" N	98° 52' 46.501" W	61	55	American Elm	Ulmus americana
46° 5' 56.498" N	98° 52' 46.501" W	58	48	Amur Honeysuckle	Lonicera maackii
46° 5' 56.498" N	98° 52' 46.501" W	54	42	Siberian Elm	Ulmus pumila
46° 5' 56.498" N	98° 52' 46.501" W	10	10	White Willow	Salix alba

Location		Number		Species of Trees and Shrubs	
Latitude	Longitude	Number (May 2018)	Number (October 2019)	Common Name	Scientific Name
46° 6' 6.327" N	98° 51' 36.936" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 6' 6.313" N	98° 51' 49.379" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 6' 6.313" N	98° 51' 49.379" W	11	7	Chokecherry	Prunus virginiana
46° 6' 20.068" N	98° 52' 10.241" W	11	11	Chokecherry	Prunus virginiana
46° 5' 50.675" N	98° 50' 29.685" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 51.580" N	98° 49' 53.064" W	9	9	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 49.266" N	98° 49' 52.841" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 49.584" N	98° 49' 52.020" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 45.557" N	98° 49' 51.665" W	7	6	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 43.504" N	98° 49' 50.949" W	16	16	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 41.955" N	98° 49' 55.392" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 39.388" N	98° 50' 4.932" W	2	2	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 43.587" N	98° 49' 49.885" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 49.715" N	98° 49' 50.571" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 51.000" N	98° 49' 51.251" W	4	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 51.885" N	98° 49' 50.691" W	3	3	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 38.714" N	98° 53' 14.326" W	3	3	Cottonwood	Populus deltoides
46° 5' 38.714" N	98° 53' 14.326" W	4	4	Chokecherry	Prunus virginiana
46° 4' 9.202" N	98° 50' 29.773" W	3	3	Cottonwood	Populus deltoides
46° 4' 14.219" N	98° 50' 29.583" W	6	6	Chokecherry	Prunus virginiana
46° 4' 15.569" N	98° 50' 29.568" W	12	12	Arnold Hawthorn	Crataegus arnoldiana
46° 4' 23.880" N	98° 50' 30.015" W	29	29	Arnold Hawthorn	Crataegus arnoldiana
46° 4' 25.182" N	98° 50' 29.745" W	10	10	Arnold Hawthorn	Crataegus arnoldiana
46° 4' 28.759" N	98° 50' 29.377" W	7	7	Arnold Hawthorn	Crataegus arnoldiana
46° 4' 19.046" N	98° 50' 30.674" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 44.281" N	98° 52' 14.129" W	5	5	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 43.569" N	98° 52' 14.467" W	7	7	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 38.971" N	98° 52' 20.278" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 36.662" N	98° 52' 27.153" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 35.813" N	98° 52' 26.509" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 35.379" N	98° 52' 26.150" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 35.191" N	98° 52' 25.616" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 36.222" N	98° 52' 20.964" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 38.070" N	98° 52' 11.256" W	26	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 37.951" N	98° 52' 8.619" W	2	2	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 39.125" N	98° 52' 5.475" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 40.107" N	98° 52' 4.909" W	9	6	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 39.645" N	98° 52' 3.794" W	5	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 39.463" N	98° 52' 0.721" W	3	3	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 36.399" N	98° 51' 58.311" W	41	41	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 35.846" N	98° 51' 57.478" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 34.074" N	98° 51' 54.591" W	64	64	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 34.496" N	98° 51' 53.748" W	3	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 34.952" N	98° 51' 54.458" W	3	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 35.421" N	98° 51' 54.246" W	9	9	Arnold Hawthorn	Crataegus arnoldiana

Location		Number		Species of Trees and Shrubs	
Latitude	Longitude	Number (May 2018)	Number (October 2019)	Common Name	Scientific Name
46° 3' 36.105" N	98° 51' 54.125" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 33.775" N	98° 51' 52.336" W	105	10	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.981" N	98° 51' 52.902" W	71	71	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.651" N	98° 51' 51.761" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.060" N	98° 51' 50.487" W	8	8	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.734" N	98° 51' 50.493" W	24	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.033" N	98° 51' 49.125" W	67	55	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 33.240" N	98° 51' 49.954" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 33.417" N	98° 51' 49.172" W	4	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 33.898" N	98° 51' 49.278" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 33.144" N	98° 51' 47.072" W	2	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 31.782" N	98° 51' 47.689" W	17	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.105" N	98° 51' 46.099" W	5	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 31.847" N	98° 51' 45.428" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 30.498" N	98° 51' 46.950" W	63	40	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 29.947" N	98° 51' 47.541" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 28.032" N	98° 51' 48.265" W	25	25	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.014" N	98° 51' 44.649" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 32.862" N	98° 51' 43.409" W	86	50	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 30.085" N	98° 51' 42.294" W	208	149	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 28.936" N	98° 51' 42.641" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 28.445" N	98° 51' 41.171" W	32	32	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 29.424" N	98° 51' 39.691" W	3	3	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 29.349" N	98° 51' 38.293" W	13	13	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 28.404" N	98° 51' 37.373" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 27.835" N	98° 51' 37.842" W	18	6	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 24.634" N	98° 51' 32.764" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 24.378" N	98° 51' 31.494" W	18	18	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 25.271" N	98° 51' 27.063" W	39	29	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 24.197" N	98° 51' 25.324" W	12	12	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 23.468" N	98° 51' 23.699" W	9	9	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 26.266" N	98° 51' 24.610" W	8	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 26.797" N	98° 51' 23.138" W	25	25	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 26.318" N	98° 51' 22.320" W	4	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 24.642" N	98° 51' 19.414" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 30.473" N	98° 50' 36.070" W	3	3	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 10.022" N	98° 52' 35.959" W	2	2	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 9.621" N	98° 52' 33.944" W	25	25	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 10.550" N	98° 52' 33.644" W	9	9	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 11.108" N	98° 52' 31.666" W	40	40	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 9.139" N	98° 52' 31.634" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 7.884" N	98° 52' 31.833" W	39	39	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 7.719" N	98° 52' 32.906" W	16	16	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 16.443" N	98° 52' 37.363" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 17.415" N	98° 52' 36.005" W	1	0	Arnold Hawthorn	Crataegus arnoldiana

Location		Number		Species of Trees and Shrubs	
Latitude	Longitude	Number (May 2018)	Number (October 2019)	Common Name	Scientific Name
46° 2' 17.369" N	98° 52' 34.752" W	24	12	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 16.956" N	98° 52' 34.887" W	2	2	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 17.661" N	98° 52' 32.753" W	3	3	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 17.805" N	98° 52' 32.206" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 17.446" N	98° 52' 32.129" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 18.765" N	98° 52' 27.384" W	22	22	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 19.364" N	98° 52' 26.455" W	3	3	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 19.739" N	98° 52' 26.681" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 19.982" N	98° 52' 26.987" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 20.395" N	98° 52' 26.015" W	69	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 20.717" N	98° 52' 24.117" W	42	10	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 18.676" N	98° 52' 21.891" W	360	215	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 19.769" N	98° 52' 20.132" W	5	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 19.846" N	98° 52' 18.888" W	18	18	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 20.753" N	98° 52' 19.619" W	17	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 21.289" N	98° 52' 17.850" W	4	4	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 23.482" N	98° 52' 22.661" W	286	282	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 19.805" N	98° 52' 30.190" W	7	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 18.510" N	98° 52' 39.918" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 18.076" N	98° 52' 40.687" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 18.936" N	98° 52' 42.792" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 18.693" N	98° 52' 44.269" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 19.326" N	98° 52' 44.385" W	15	15	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 18.314" N	98° 52' 46.217" W	8	8	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 17.898" N	98° 52' 44.245" W	65	65	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 22.120" N	98° 52' 31.663" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 22.333" N	98° 52' 32.821" W	2	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 22.162" N	98° 52' 34.805" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 23.208" N	98° 52' 33.225" W	3	3	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 24.430" N	98° 52' 31.642" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 29.708" N	98° 52' 27.191" W	2	2	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 31.327" N	98° 52' 25.056" W	10	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 32.945" N	98° 52' 21.418" W	2	2	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 36.493" N	98° 51' 53.679" W	61	56	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 39.527" N	98° 51' 57.605" W	159	20	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 23.673" N	98° 52' 43.642" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 24.620" N	98° 52' 44.974" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 24.666" N	98° 52' 46.450" W	1	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 23.566" N	98° 52' 47.805" W	2	1	Arnold Hawthorn	Crataegus arnoldiana
46° 2' 23.607" N	98° 52' 31.967" W	2	2	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 18.108" N	98° 51' 56.120" W	2	0	Arnold Hawthorn	Crataegus arnoldiana
46° 3' 19.549" N	98° 51' 55.015" W	5	5	Arnold Hawthorn	Crataegus arnoldiana
46° 7' 36.240" N	98° 52' 17.020" W	27	16	Common Lilac	Syringa vulgaris
46° 7' 36.240" N	98° 52' 17.020" W	33	13	Amur Maple	Acer ginnala
46° 7' 36.240" N	98° 52' 17.020" W	20	6	Chokecherry	Prunus virginiana

Location		Number		Species of Trees and Shrubs	
Latitude	Longitude	Number (May 2018)	Number (October 2019)	Common Name	Scientific Name
46° 7' 36.240" N	98° 52' 17.020" W	13	5	Cottonwood	Populus deltoides
46° 7' 36.240" N	98° 52' 17.020" W	33	4	Redosier Dogwood	Cornus sericea
46° 7' 37.310" N	98° 52' 6.190" W	62	62	Common Lilac	Syringa vulgaris
46° 7' 37.310" N	98° 52' 6.190" W	43	43	Amur Maple	Acer ginnala
46° 7' 37.310" N	98° 52' 6.190" W	41	41	Chokecherry	Prunus virginiana
46° 7' 37.310" N	98° 52' 6.190" W	18	18	Cottonwood	Populus deltoides
46° 7' 37.310" N	98° 52' 6.190" W	106	106	Redosier Dogwood	Cornus sericea
46° 5' 53.265" N	98° 50' 29.655" W	12	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.003" N	98° 50' 23.012" W	19	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.331" N	98° 50' 22.299" W	26	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.398" N	98° 50' 20.954" W	4	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.335" N	98° 50' 17.877" W	2	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.273" N	98° 50' 14.605" W	17	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.241" N	98° 50' 12.576" W	28	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.175" N	98° 50' 7.118" W	12	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.198" N	98° 50' 5.378" W	24	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.122" N	98° 50' 3.558" W	30	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.111" N	98° 49' 57.283" W	1	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 53.243" N	98° 49' 52.898" W	3	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 52.741" N	98° 49' 53.110" W	2	0	Arnold Hawthorn	Crataegus arnoldiana
46° 5' 52.730" N	98° 49' 52.292" W	12	0	Arnold Hawthorn	Crataegus arnoldiana
Totals		3970	2799		

Note: Highlighted yellow cell indicates tree(s) and/or shrub(s) removed

Appendix C
Waiver

Northern States Power Company d/b/a Xcel Energy
Foxtail Wind – Dickey County
Case No. PU-17-284

Tree Mitigation Form

Surveyed Tree Plots: FT-TS-047 - FT-TS-101 & FT-TS-152 – Ft-TS-153

Landowner Name: [REDACTED]

Project Tract Number: 16

Landowner Address: [REDACTED]

Vegetation can interfere with the safe and reliable construction and operation of wind farm facilities. As part of the Foxtail Wind project, some trees located within the project boundary were cleared. You are being contacted as your property contains trees within the project boundary that were cleared prior to construction. Per the mitigation specifications issued by the North Dakota Public Service Commission (PSC), trees are required to be mitigated at a 2:1 ratio.

Table 1 – Landowner Tree Mitigation Summary

Tract Number	Number of Trees Impacted	Total Eligible Mitigation Quantity	Additional Requested Trees (If Available)
16	328	656	

Tree Mitigation Request (check one):

I request that replacement trees (at a 2:1 ratio) be planted on my property at the locations shown attached.

In requesting planting of replacement trees, I acknowledge and grant Xcel Energy and its contractor's access to these locations for planting, maintenance and monitoring purposes. Removed trees will be replaced in-kind unless otherwise requested. No invasive species (i.e. buckthorn, Russian olive) will be replanted in tree mitigation efforts and an alternate, native species will be planted instead.



I waive my right to planting of replacement trees on my property to mitigate for the project's removal of existing trees on the parcel of land referenced above.

Additional Comments: _____

Northern States Power Company d/b/a Xcel Energy
 Foxtail Wind – Dickey County
 Case No. PU-17-284

Table 2 – Tree Inventory Species Summary

Tree Plot	Common Name	Non-Native Species ¹	Mitigation Options	Type ²	Count	Number Eligible	Quantity Selected for Mitigation
FT-TS-047 - FT-TS-101	Arnold Hawthorn	Y	Boxelder	Tree	328	656	
Total					328	656	



4-1-2019
 Date



Right-of-Way Agent Signature

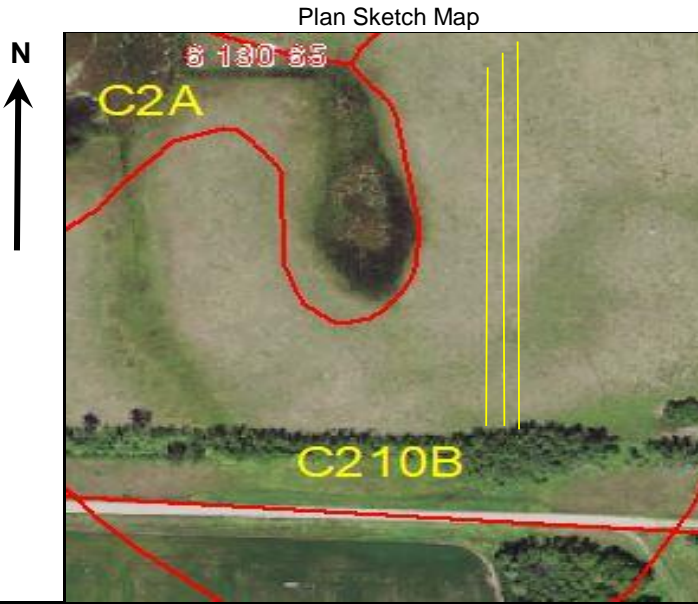
4/29/19
 Date

¹ Per the PSC tree and shrub mitigation specifications, invasive or noxious species of trees and shrubs must be replaced with similar non-invasive or non-noxious species suitable for North Dakota Growing conditions as recommended by the North Dakota Forest service.

² Low-growing shrubs will be cut to ground level, leaving the root structure in place. As such, shrubs are expected to regenerate naturally and replacement shrubs are not currently being considered in this agreement.

Appendix D Planting Plans

Name Address Phone # Date: 8-19-2019



Quarter SW 1/4 Section 6 Twnshp 130 Range 65

Planned Soil Mapunit / name component(s) C210B Planned by: JU Date: 8-19-2019

Approved by: Date:

Conservation Tree & Shrub Group 3 Select MLRA 53B

Type of Planting New

Landuse Field Program

Site Preparation Tilled/Herbicide Protected from livestock? Yes

Site conditions at planting time:

Spacing between rows: 16 feet

Distance from Windward row to roads or bldgs.: OK feet
 (Minimum 200' on N & W, and 100' on S & E)

Planted by:

Remarks on site prep, conditions and management (Weed Cor Date:)

Xcel Energy Program. Fabric to be applied. Silver buffaloberry, boxelder, Green ash, Common Chokecherry to be planted.

This practice installation **MEETS** / **DOES NOT MEET** the ND FOTG standards and specifications. (circle one)

Checkout by: 		Date: 		Certified By: 		Date: 								
Planting No.	Planned Length	Planted Length	Planned Width	Acres	Row #	Primary Species of Tree or Shrub	Type or Variety	Alternating Specie	Planned Spacing in row	Row Spacing (installed)	Number Planned (est)	Number Planted (installed)	Primary Specie / CTSG Suitability	Alternating Specie / CTSG Suitability
1	510		18	0.21	1	Buffaloberry	▼	Chokecherry, common	6		85		suitable	suitable
	525				2	Boxelder	▼		12		44		suitable	
	550				3	Ash, Green	▼		12		46		suitable	
							▼							
							▼							
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		1585		18	0.21	Totals			175				WEST - TREEPLAN	

Name: [Redacted] Address: [Redacted] Phone #: [Redacted]

Plan Sketch Map



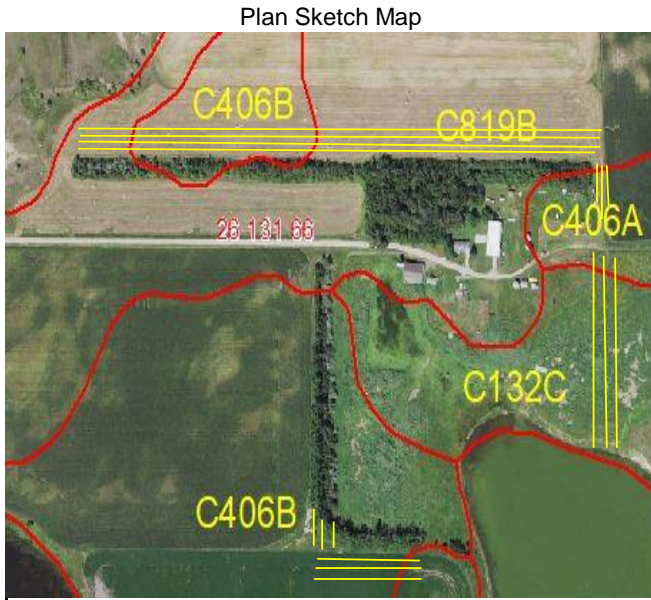
Quarter/Half: NE 1/4 Section: 33 Twnshp: 130 Range: 65
 Planned Soil Mapunit / name component(s): G250A & G282A Planned by: JU Date: 7-29-2019
 Approved by: [Redacted] Date: [Redacted]
 Conservation Tree & Shrub Group: 2KK Select MLRA: 55B
 Type of Planting: New
 Landuse: Field Program: [Redacted]
 Site Preparation: Tilled/Herbicide Protected from livestock?: Yes
 Site conditions at planting time: [Redacted]
 Spacing between rows: 16 feet
 Distance from Windward row to roads or bldgs. 200 feet
 (Minimum 200' on N & W, and 100' on S & E) Planted by: [Redacted]
 Date: [Redacted]

Remarks on site prep, conditions and management (Weed Co Date: [Redacted])
 Xcell Energy Program. The plan is to stay 200 feet from road, would need Variance to plant closer than 200 feet from road. We picked the extra rows that is native and fits the CTSG 2KK.

This practice installation **MEETS** / **DOES NOT MEET** the ND FOTG standards and specifications. (circle one)

Check Out By:		Date:		Certified By:		Date:								
Planting No.	Planned Length	Planted Length	Planned Width	Acres	Row #	Primary Species of Tree or Shrub	Type or Variety	Alternating Specie	Planned Spacing in row	Row Spacing (installed)	Number Plannned (est)	Number Planted (installed)	Primary Specie / CTSG Suitability	Alternating Specie / CTSG Suitability
1	1800		18	0.7	1	Buffaloberry			6		300		suitable	
	1870				2	Boxelder			12		156		suitable	
	1870				3	Boxelder			12		156		suitable	
5540			18	0.7	Totals						612			

Name [REDACTED] Address [REDACTED] Phone # [REDACTED] Date: 8/19/2019



Plan Sketch Map

Quarter **NW 1/4** Section **26** Twnshp **131** Range **66**

Planned Soil Mapunit / name component(s) **C406B, C406A, C132C, C819C** Planned by: **JU** Date: **8-19-2019**

Conservation Tree & Shrub Group **3** Select MLRA **53B**

Type of Planting **New**

Landuse **Farmstead** Program

Site Preparation **Tilled/Herbicide** Protected from livestock? **Yes**

Spacing between rows: **16** feet

Distance from Windward row to roads or bldgs.: **OK** feet

(Minimum 200' on N & W, and 100' on S & E)

Planted by: [REDACTED]

Remarks on site prep, conditions and management (Weed Cor [REDACTED] Date: [REDACTED])

Xcel Energy Program. Fabric to be applied.

This practice installation **MEETS** / **DOES NOT MEET** the ND FOTG standards and specifications. (circle one)

Checked out by: [REDACTED] Date: [REDACTED] Certified By: [REDACTED] Date: [REDACTED]

Planting No.	Planned Length	Planted Length	Planned Width	Acres	Row #	Primary Species of Tree or Shrub	Type or Variety	Alternating Specie	Planned Spacing in row	Row Spacing (installed)	Number Planned (est)	Number Planted (installed)	Primary Specie / CTSG Suitability	Alternating Specie / CTSG Suitability
1	450		18	0.19	1	Pine, Ponderosa			12		38		suitable	
	450				2	Pine, Ponderosa			12		38		suitable	
	450				3	Ash, Green			12		38		suitable	
2	575		16	0.21	1	Pine, Ponderosa			12		48		suitable	
	575				2	Pine, Ponderosa			12		48		suitable	
	575				3	Ash, Green			12		48		suitable	
3	225		16	0.08	1	Pine, Ponderosa			12		19		suitable	
	225				2	Pine, Ponderosa			12		19		suitable	
	225				3	Ash, Green			12		19		suitable	
4	2000		16	0.73	1	Pine, Ponderosa			12		167		suitable	
	2000				2	Pine, Ponderosa			12		167		suitable	
	2000				3	Ash, Green			12		167		suitable	
	2000				4	Ash, Green			12		167		suitable	
5	120		16	0.04	1	Pine, Ponderosa			12		10		suitable	
	120				2	Pine, Ponderosa			12		10		suitable	
	120				3	Ash, Green			12		10		suitable	

12110		82	1.26	Totals				1013		WEST - TREEPLAN					
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