

June 7, 2017

**VIA E-MAIL AND FEDERAL EXPRESS**

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

**RE: Meadowlark Wind I LLC's Application for a Certificate of Site Compatibility  
for the New Frontier Wind Energy Project in McHenry County, North Dakota  
Case No. PU-11-69**

Dear Mr. Nitschke:

Enclosed for filing please find an original and ten (10) copies of Meadowlark Wind I LLC's ("Meadowlark") Tree and Shrub Sampling Plan, along with ten (10) copies of this letter. In accordance with Paragraph No. 6 of the Tree and Shrub Mitigation Specifications incorporated into the North Dakota Public Service Commission's Order of Continuing Suitability, Meadowlark respectfully requests approval of the enclosed Sampling Plan.

If you have any questions, please let me know.

Sincerely,



MOLLIE M. SMITH

MMS/ms/61543811  
Enclosure

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## Memorandum

**To:** Bill Behling and Jena Tufts, Capital Power Corporation  
**From:** Sarah McCall, Tetra Tech, Inc.  
**Date:** June 7, 2017  
**Project:** New Frontier Wind Energy Project  
**Subject:** Tree and Shrub Inventory Methodology

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Tetra Tech Inc. (Tetra Tech) was contracted by Meadowlark Wind I LLC (Meadowlark), a wholly-owned subsidiary of Capital Power Corporation, to conduct a tree and shrub inventory survey for the New Frontier Wind Energy Project (Project) in compliance with the Tree and Shrub Mitigation Specifications incorporated into the North Dakota Public Service Commission's (Commission) May 10, 2017 Order of Continuing Suitability to Meadowlark in Case Number PU-11-69 (Order).

In compliance with the Order, a tree and shrub inventory will be conducted within the construction corridor to identify the number of trees and shrubs anticipated to be cleared during construction of the Project and therefore would require replacement. This inventory will be conducted through a combination of actual count and sampling of trees and shrubs anticipated to be removed and will include all trees and shrubs regardless of size within windbreaks, shelterbelts, and other planted areas, all shrubs within native growth areas, and trees 1 inch in diameter at breast height (dbh) or greater in native growth areas. This inventory will be conducted as follows:

- In windbreaks, shelterbelts, and other planted areas, trees or shrubs anticipated to be cleared, regardless of size, will be inventoried by actual count.
- In native growth areas:
  - Trees and tall shrubs anticipated to be cleared that are 1-inch dbh or larger will be inventoried by actual count.
  - Trees and tall shrubs smaller than 1-inch dbh will be inventoried using actual count when the patch is small, discrete, or individuals appear to be distinct and easily counted, based on professional judgment.
  - Trees and tall shrubs smaller than 1-inch dbh will be inventoried using sampling methodologies when the patch is large or dense such that counting would be inefficient, based on professional judgment.
  - Low shrubs anticipated to be cleared in the permanent right-of-way or other areas where the root stocks will be disturbed will be inventoried by sampling methodology.

Sampling methodology for trees and tall shrubs smaller than 1-inch dbh in native growth areas will include choosing a representative point within the patch to be sampled and counting all shrubs and trees within an 11.8 foot radius of the sample point. This methodology will provide an estimate of the number of small trees and shrubs within 0.01 acre. The outer boundary of each patch being sampled will be mapped using GPS and the sample count will be extrapolated to this mapped area.

For low shrubs anticipated to be cleared or other areas where the root stocks will be disturbed, sampling methodology will consist of choosing a representative point within the patch to be sampled and counting all shrub species within a 3.8-foot radius of the sample point. This methodology will provide an estimate of the number of shrubs to be removed within 0.001 acre. The outer boundary of the patch being sampled will be recorded using GPS and the sample count will be extrapolated to this mapped area.

The inventory data will include GPS coordinates for all trees and shrubs within windbreaks, shelterbelts, and other planted areas, all trees and shrubs greater than 1-inch dbh in native growth areas, sampling points, and GPS polygons of the outer boundaries of native growth areas inventoried through sampling methods. Data will be documented on standard forms and will include the GPS location, location within the Project area (nearest Project facility), whether the location is in a planted area (e.g., windbreak, shelterbelt) or native growth area, growth habit (tree or shrub), scientific and common name of species anticipated to be removed, shrub height, tree dbh, and condition of tree or shrub to be removed.

Trees and shrubs removed during construction will be documented and the tree and shrub inventory will be amended to document the actual number and species of trees and shrubs removed. Following completion of construction, a Tree and Shrub Mitigation Plan will be prepared to provide details on the number and species of trees and shrubs removed during construction as well as the mitigation or replacement plan for trees and shrubs removed during construction, including the proposed number, variety, type, location, and date of replacement plantings. The Tree and Shrub Mitigation Plan will also document the results of landowner consultations, including preferred planting location, either on or off the right-of-way or inclusion of written waiver to plant off the landowner's property; preferred tree and shrub species for replacement, based on suitable species as recommended by the North Dakota Forest Service; and quantities of each preferred species as specified in the PSC Tree and Shrub Mitigation Specifications (two to one ratio of trees and shrubs planted to those removed). Record forms that outline the details regarding replacement of trees and shrubs removed during construction will also be included in the Tree and Shrub Mitigation Plan. The Tree and Shrub Mitigation Plan will be submitted to the Commission for approval prior to tree and shrub replacement.