



Memo

To: Geoffrey West, FPL Energy
From: Tracey Martorano, Tetra Tech EC, Inc.
Date: May 13, 2008
Re: Summary of the Native Prairie Survey of the Ashtabula Wind Energy Center, Barnes County, North Dakota

PURPOSE

Ashtabula Wind, LLC contracted Tetra Tech EC, Inc. (TtEC) to conduct a native prairie survey at the Ashtabula Wind Energy Center. The Ashtabula Wind Energy Center is located entirely on private land in Barnes County, North Dakota and will consist of up to 133 turbines and associated access roads, collection lines, transmission lines, and other facilities. In May 2008, Levi Binstock (Natural Resource Specialist from Western Plain Consultants with a degree in Range Management) conducted this reconnaissance. This summary was prepared for a late filing exhibit to the North Dakota Public Service Commission.

SUMMARY OF RESULTS

While onsite, the surveyor identified several areas of native prairie. The majority of the native prairie observed at the Ashtabula Wind Energy Center is currently being grazed heavily and is in poor shape due to years of overgrazing. During this survey, there was no standing vegetation from last years growing season. In addition, native prairie quality is decreased by the presence of invasives. Near Lake Ashtabula, native prairies are typically surrounded by cropland and are more susceptible to being invaded by unwanted vegetation such as Kentucky bluegrass (*Poa pratensis*) and smooth brome (*Bromus inermis*).

The attached figure identifies the locations of the areas of native prairie (*Please note that due to the timing of the survey and the request from the North Dakota Public Service Commission, a formal figure was not ready at the time of this late filed exhibit*). Areas identified in yellow are native prairie/rangeland. Areas that are not shaded yellow are cropland or hayland. One area identified on the figure in Section 31 contains native prairie vegetation but does not qualify as native prairie because it appears to have been tilled many years ago and left to revegetate. This area will not be affected by the project facilities.

The native prairie observed along the hill tops is in better condition than the prairie in the lowlands; however, most areas are small and surrounded by agricultural land. These hills and ridges are too steep to farm, so they remain native. Hill tops are usually of shallow, well drained soils where native vegetation is more suited for competing against invasive plants. They also receive less grazing pressure due to the steepness of the terrain and the fact that the livestock typically graze the lowland areas.

Also, although native prairie was observed within the project boundary of the Ashtabula Wind Farm, no threatened and endangered species were observed in any of the native prairie that was observed, although surveys for listed species were not explicitly conducted.

Table 1: Turbines where development may or will impact native prairie:

Turbine Number	Condition
AT-13	May be located in native prairie or closely borders. Fair to good condition on hill top. Cattle were grazing in enclosure.
OT-39 thru OT-46	Turbines located on hilltops and ridges in good native prairie. The rangeland downhill from the turbines is overgrazed and in fair to poor condition.

CONCLUSIONS AND RECOMMENDATIONS

Overall, the impacts to native prairie will be minimal due to the following: 1) patches of native prairie were small and surrounded by agricultural land, 2) often the native prairie was impacted by invasive species, and 3) many areas of the existing prairie were in poor condition due to overgrazing. Therefore, displacement of wildlife appears unlikely.

As discussed in the Certificate of Site Compatibility application, Ashtabula Wind will revegetate non-cropland and pasture areas with a seeding mix as recommended by USFWS and NRCS.

- Check turbine areas
- highlighted areas

NOTE: INFORMATION SHOWN, INCLUDING PROPERTY BOUNDARY LINES, IS A GRAPHIC REPRESENTATION OF EXISTING AND PROPOSED FEATURES AND IS NOT BASED ON LAND SURVEYS. ACTUAL PROPERTY BOUNDARY LINES AND EASEMENTS TO BE DETERMINED PRIOR TO CONSTRUCTION. ALL TURBINE, ACCESS ROAD, COLLECTION AND TRANSMISSION LINE LOCATIONS ARE PRELIMINARY AND SUBJECT TO FINAL DESIGN.

