
Appendix E
Pre-Construction Investigation Protocols

2009 Spring Avian Point Count and Raptor Nest Survey

For the spring survey, one qualified biologist will conduct 13 surveys, each consisting of a single-day site visit at approximately weekly intervals from early March through the end of June, in order to encompass the breeding and spring migration. Provided the turbine layout has not changed dramatically, the spring counts will utilize the same point locations as the fall surveys. The order in which points are surveyed will be varied so that equal numbers of points are surveyed during the morning and afternoon. If evident during the field survey, more specific information on habitats, especially areas that appear to be attractive to birds, will be documented.

A raptor nest survey will also be conducted to determine the number, distribution and density of nests and the species and density of breeding raptors within the project area. Biologists will also scan the available habitat for potential and active raptor nests while traveling between avian point count locations. Particular attention will be given to shelter belts, woodlots, riparian areas and areas where the likelihood of observing raptor nests is increased. Potential nests detected in the early spring will be visited throughout the spring survey period to record breeding activity. Data on nest condition, size, nest tree species, approximate height of nest in tree, and proximity to turbine arrays will be recorded. All nests found will be mapped using a GPS and entered into a GIS database.

Tetra Tech will prepare a draft report summarizing the results of the spring avian surveys and raptor nest surveys as discussed above. This final report will include all data contained in the fall report and will describe the overall avian use, flight behavior, and risk index at the project area for the two seasons.

2009 Spring Lek Survey

The survey objective is to identify the location of potential greater prairie chicken and sharp-tailed grouse leks in the project area and surrounding areas. NextEra Energy will conduct this survey because agencies have expressed concern about prairie grouse avoidance of tall structures, such as those associated with wind facilities. The grouse lek surveys will be conducted following methods developed by the North Dakota Game and Fish Department (NDGFD). Lek censuses will be conducted on the ground between mid-to-late April 2008 from one-half hour before sunrise to two hours after sunrise. Peak attendance by females on leks in North Dakota is usually April 15 to 25. Surveys for leks will be conducted by driving country roads throughout areas of the project identified as potential lek habitat. The observer will stop every half-mile and listen for at least five minutes for cackling sounds of male sharp-tailed grouse. Listening stops will not be conducted when winds exceed 10 miles per hour (mph) or if there is any type of precipitation event. If a lek is visible, the biologist will observe the lek for 10 minutes to count the number of males and females. If displaying prairie grouse are heard, but the lek is not visible, the biologist will attempt to pinpoint the location. The biologist will try to obtain a count of males and females at each active lek on three separate occasions.

At each lek location, GPS coordinates of the biologist's observation area will be recorded and a description of the area will be noted. Standardized data collection forms will be used. The biologist will also document the location of prairie grouse leks incidentally encountered outside the survey area. Results from the lek survey will be summarized and incorporated into the spring avian report.

Post-Construction Avian Mortality

NextEra will implement their Wildlife Response and Reporting System (WRRS) at the Rough Rider I wind farm. The purpose of the WRRS is to standardize the actions taken by NextEra in response to any wildlife fatalities and/or injuries found within the wind plant boundaries.

Any wildlife incident found within wind-plant boundaries, regardless of cause of death, will be reported immediately to the on duty Plant Lead/Site Supervisor who will complete an incident report and take photographs. Wind Fleet Wildlife Program Manager will be notified and further actions will be determined at that time based on the species and the circumstances surrounding the incident.

Wildlife finds, e.g., Avian Fatality, Avian Injuries and Non-Avian will be recorded on the appropriate Wildlife Incident Reporting Form and submitted to the appropriate NextEra Wildlife Program Manager. Information received by the NextEra Wildlife Program Manager will be included in the monthly Wind Avian Indicator. Eagles and endangered species require special reporting procedures.