4906-17-04 Project Area Analyses

(A) SITE SELECTION STUDY

(1) General

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(a) Siting Criteria

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(i) High Quality Wind Resource

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(ii) Suitable Transmission

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(iii) Available Land and Land Use

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(iv) Environmental or Ecological Considerations

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(b) Relevant Factors in the Site Selection Process

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(i) Wind Resource

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(ii) Available Land and Land Use Constraints

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(iii) Environmental or Ecological Considerations

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

a) Avian and Wildlife

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

b) Aeronautical Study

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

c) Communication/Electromagnetic Interference

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following to be added to the third bullet point [Application, 4-8]:

- In December 2009, the Applicant performed a TV Broadcast Off-Air Reception Measurement Study for the Facility. The conclusions of the study indicate the following:

  - The Project area relies on off-air television from the greater metropolitan areas of Fort Wayne, Indiana, and Lima, Ohio (approximately 30 to 45 miles from the Facility). The existing received signals in the Project area are well below the Grade A or B contour levels for the television stations. It is anticipated that the installation of wind turbines will attenuate the television signal if they are in the path between the station and the residence or business where the signal is received. Because the signals are weak to begin with, the additional attenuation caused by the turbines may make some of the signals unsuitable for producing good video.

  - The maximum number of off-air television stations available in the Project area is nine - one analog and eight digital. Study results show that no more than five stations produce good video.

  - Cable television is available in the larger communities in the area. This mode of television service will be undisturbed by the presence of wind turbines.

  - Most homes in the area have off-air reception antennas and most of them are pointed toward Fort Wayne, Indiana. Many homes also have direct broadcast satellite antennas. Reception issues may be encountered at agricultural or farm areas that have off-air antennas after the wind turbines

are installed, and the resolution of these issues will need to be handled on a case-by-case basis.

The Applicant will work with landowners to implement the necessary mitigation measures should television reception be degraded as a result of Facility operations. As mitigation for those landowners interested, Good Neighbor Agreements maybe offered in support of the following mitigation measures that may be utilized either singly or in combination:

- Installation of high-gain television antenna on towers with rotors with preamplifier to boost the received signal level at individual reception sites. This mitigation measure is most suitable for farm homes and other remote sites where cable television hookup does not exist.

- Where cable television exists, providing cable hookups to sites affected. This mitigation measure is most applicable inside communities where cable television exists.

- Provide satellite television reception service to homes affected. This mitigation measure is applicable to both homes within communities and remote sites.

- For areas where a cluster of homes exist, providing installation of cable systems, satellite head end reception point with a cable distribution system, or installation of a wireless television distribution system may also be options.

d) Cultural Resources

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

e) Geotechnical

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

f) Wetlands

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following, which should be added after the second sentence of the first paragraph [Application, 4-11]:

- In March and April 2010, the Applicant performed additional wetland delineations for various Facility components. The Applicant will submit a Revised Wetland Delineation Report to the OPSB upon completion of the investigation and coordination with USEPA and OEPA.

- It is the intent of the Applicant to keep total "Waters of the US" impacts per location to less than 0.1 acre so the Facility can be authorized by the United States Army Corps of Engineers (USACE) Nationwide permit program. The December 21, 2009 application identified 0.5 acre.

g) Noise

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following at the end of the discussion [Application, 4-12]:

- The Applicant is performing additional noise studies for the Blue Creek Wind Farm. The Applicant will submit the findings of the noise study following a Noise Review Meeting with OPSB in early May, 2010.

h) Visual

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following to be added at the end of the discussion [Application, 4-13]:

- A revised shadow flicker analysis was performed in March 2010 for the new turbine layout [assuming G-90 wind turbines on 328-foot (100-meter) tall towers] to evaluate the extent of potential shadow flicker experienced at each residence and primary transportation corridor in the Project area. The revised shadow flicker analysis resulted in predicted shadow flicker effects over 30 hours per year at 11 residences in the Project area. The Applicant plans to use a number of mitigation measures relating to the Fall 2009 VIA, as described in the December 21, 2009 Blue Creek OPSB Application, to reduce projected shadow flicker impacts to these affected residences.

(iv) Site Accessibility

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(v) Community Support

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(2) Constraint Map

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(B) SUMMARY TABLE OF EVALUATED SITES

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.