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HEARTLAND WIND

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March 31, 2010

Via Hand Delivery

Ms. Renee Jenkins
Administration/Docketing
Ohio Power Siting Board
180 East Broad Street, 13th Floor
Columbus, Ohio 43215-3793

Re: Heartland Wind, LLC
Case No. 09-1066-EL-BGN

Dear Ms. Jenkins:

Enclosed, please find an original and twenty (20) copies of the Application Supplement of Heartland Wind, LLC. It filed an application for a Certificate of Environmental Compatibility and Public Need under Chapter 4906-17 of the Ohio Administrative Code (OAC) on December 22, 2009. This Application Supplement provides information that will update that application.

Sincerely on behalf of
HEARTLAND WIND, LLC

Sally W. Bloomfield

Enclosure

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BEFORE THE OHIO POWER SITING BOARD
Application of a Certificate of Environmental Compatibility and Public Need
Blue Creek Wind Farm Supplement

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- C Product Data Sheet - General Cable PC 189469
- D Typical Drawing of Support Structures
- E General Design Information for the Met Tower Foundation
- F Photo of a Typical SODAR Unit
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- H IBR Avian and Bat Protection Plan
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- AA Blue Creek Fact Sheet

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- CC** Area Transportation Study Maps
- DD*** ***Revised Layout Drawings***

GLOSSARY

The contents of the glossary have not changed and are therefore not included in this application supplement.

4906-17-02 Project Summary and Facility Overview

(A) PROJECT SUMMARY AND OVERVIEW OF THE PROPOSED PROJECT

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following [Application, 2-1]:

- The Applicant has identified specific locations for 159 turbines and other related Facility components within this Supplemental Filing. The Facility will have up to 175 turbines for a maximum potential output of 350 MW.
- As part of the Facility, the Applicant is evaluating the option of purchasing concrete from a local supplier or constructing a temporary concrete batch plant for producing concrete required during construction. Two locations are being evaluated for siting the temporary batch plant: (1) a 20-acre tract in the southeastern portion of the Project area, adjacent to the O&M building, or (2) the Stoneco aggregate quarry property (Scott Quarry) located near Scott, Ohio.

(1) General Purpose of the Facility

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

(2) Facility Description

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following [Application, 2-3]:

- There are approximately 106 participating landowners representing approximately 1,700 acres of leased land. The December 21, 2009 filing identified 140 participating landowners representing approximately 17,000 acres of leased land.
- The distance between turbines ranges from 892 feet to 3,617 feet. The December 21, 2009 filing identified 764 to 2,986 feet. [Application 2-4]

(3) Site Selection Process

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

(a) High Quality Wind Resource

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

(b) Suitable Transmission

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

- The Facility would include 103.2 miles of underground collection lines and 5.4 miles of aboveground collection lines (rated at 34.5 kV) that would tie into two smaller collector substations. The December 21, 2009 filing identified 78.6 and 3.7 miles respectively. [Application, 2-4 to 2-5]
- Approximately 7.0 miles of 115 kV aboveground collection lines would connect the two collector substations to the 345 kV Interconnection Substation. The December 21, 2009 filing identified 6.0 miles. [Application, 2-5]

(c) Available Land and Land Use Constraints

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

(d) Ecological and Environmental Impacts

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

(e) Community Support

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

(f) Site Accessibility

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

(4) Principal Environmental and Socioeconomic Considerations

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

(a) Ecological

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

- 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 United States Army Corps of Engineers (USACE) and OEPA.
- It is the intent of the Applicant to keep total wetland impacts per location to less than 0.1 acre so the Facility can be authorized by the USACE Nationwide permit program. The December 21, 2009 application identified 0.5 acre. [Application 2-7]

(b) Land Use and Community Development

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

(c) Socioeconomic

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

(d) Cultural Resources

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

(e) 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:

- 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. [Application, 2-12]

(f) Visual Impact

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

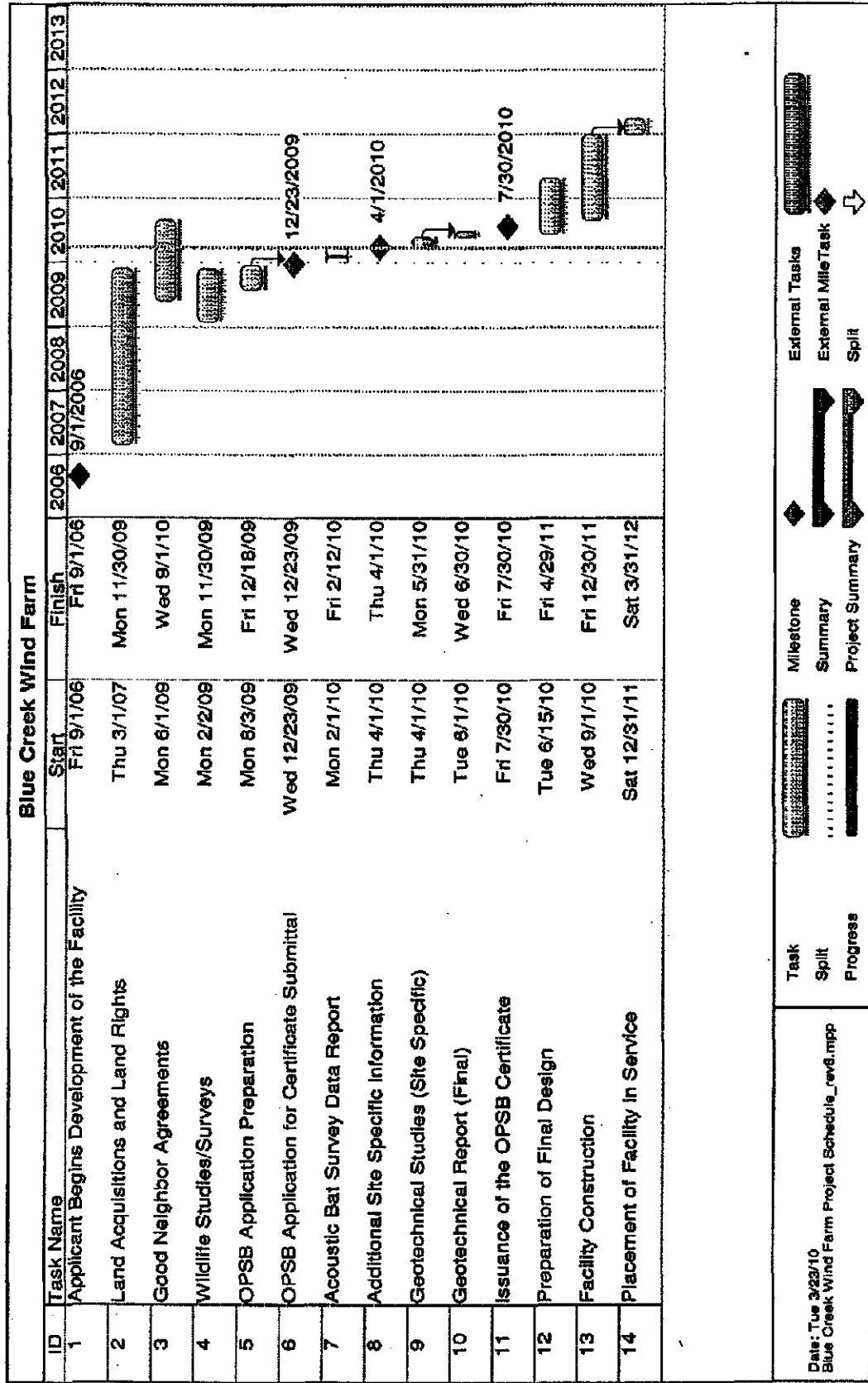
- A revised shadow flicker analysis was performed in March 2010 for the new turbine layout [assuming G-90 wind turbines on 328-foot (100-meter) -tall towers] to evaluate the extent of potential shadow flicker experienced at each residence and primary transportation corridor in the Project area. The revised 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 work with landowners to use a number of mitigation measures to reduce projected shadow flicker impacts to these affected residences. [replaces 1st paragraph, Application, 2-12 to 2-13]

(5) Project Schedule

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following: [Replaces last four sentences, Application, 2-13]

- The Applicant anticipates construction of the Facility from September 2010 through December 2011.
- The Applicant will build the Facility in one Phase rather than in two Phases as indicated in the December 21, 2009 Blue Creek OPSB Application. The Applicant will place the facility in service beginning in December 2011, with full operation of the Facility by March 2012. Figure 2-2 shows the anticipated Facility schedule [Replaces Figure 2-2]

FIGURE 2-2 [NEW: REPLACES APPLICATION FIGURE 2.2]
Blue Creek Project Schedule



(A) PROPOSED FACILITY DESCRIPTION**(1) Project Description****(a) Types of Turbines**

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

(b) Land Area Requirements

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following that should replace the narrative in the December 21, 2009 OPSB Application [Application, 3-2]:

- The Applicant has identified specific locations for 159 turbines and other related Facility components within this Supplemental Filing. The Facility will have up to 175 turbines for a maximum potential output of 350 MW.
- As depicted in Table 3-2, the total construction impact area (including turbine construction area, access roads, collection lines, substations, temporary staging and construction laydown areas, O&M building, a permanent met tower, a SODAR facility, and temporary concrete batch plant) would be 1264.4 acres. The permanent impact of the Facility would be significantly less (approximately 223.0 acres). The December 21, 2009 filing identified 793.2 acres and 236.7 acres respectively.

TABLE 3-2 [REPLACES TABLE 3.2, APPLICATION, 3-3]

Anticipated Land Requirements for Construction and Operation of the Blue Creek Wind Farm

Facility Component	Assumptions	Total Area Disturbed During Construction (including temporary and permanent operational impacts)	Area of Permanent Disturbance
Wind Turbines	159 turbines (1,200-foot or greater radius construction and permanent setback)	258 acres (150-foot radius around each turbine location)	20.7 acres (85-foot diameter)
Access Roads	41.5 miles; 40-foot wide construction; 20-foot wide permanent (20 feet of permanent gravel with 10-foot compacted shoulders during construction on each side for a total width of approximately 40 feet)	204.3 acres	101.5 acres
Crane Path	54.7 miles; 50 foot wide construction ¹ ; No impacts for permanent	331.8 acres	Zero
Underground collection lines (34.5 kV)	103.2 miles; Impacts from collector lines: 1 collector = 24 feet 2 collectors = 32 feet 3 collectors = 40 feet 4 collectors = 48 feet 5 collectors = 56 feet No impact for permanent (per circuit)	284.9 acres	Zero
Aboveground collection lines (34.5 kV)	5.4 miles; 100-foot wide construction corridor; 100-foot wide permanent corridor in forested areas; 5-foot wide permanent elsewhere	66.1 acres	7.3 acres
Aboveground collection lines (115 kV)	7.0 miles; 100-foot wide construction corridor; 75-foot wide permanent	84.5 acres	63.4 acres
Southern 20-acre Parcel (see below)		20 acres all components	20 acres all components
<i>Interconnection Substation</i>	5 acres construction; 5 acres permanent (within 20-acre parcel on southern portion of Project area)	Within above calculation	Within above calculation
<i>Project Collection Substation</i>	5 acres construction; 5 acres permanent (within 20 acre parcel on southern portion of Project area)	Within above calculation	Within above calculation
<i>Operations and Maintenance Building</i>	Within 20-acre parcel on southern portion of Project area	Within above calculation	Within above calculation

¹ In selected locations, additional area may be required for crane mats and crane maneuvering.

TABLE 3-2 [REPLACES TABLE 3.2, APPLICATION, 3-3]

Anticipated Land Requirements for Construction and Operation of the Blue Creek Wind Farm

Facility Component	Assumptions	Total Area Disturbed During Construction (including temporary and permanent operational impacts)	Area of Permanent Disturbance
<i>Staging Area and Construction Laydown Area</i>	Within 20-acre parcel on southern portion of Project area	Within above calculation	Within above calculation
<i>Temporary Concrete Batch Plant</i>	One option includes the development of the concrete batch plant within the 20-acre parcel on southern portion of Project area. The second option includes the existing Scott Quarry.	Within above calculation	Within above calculation
Collector Substation #1	5 acres construction; 5 acres permanent	5 acres	5 acres
Collector Substation #2	5 acres construction; 5 acres permanent	5 acres	5 acres
Up to Two Permanent Met Tower	320 feet by 320 feet construction; 50 feet by 50 feet permanent	4.7 acres	0.11 acres
SODAR Facility	45 feet by 45 feet construction; 15 feet by 15 feet permanent	0.05 acres	0.005 acres
Facility Total Impact		1,264.4 acres	223.0 acres

(i) Access Roads

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following [Application, 3-4]:

- The facility would utilize 41.5 miles of access roads. The access road and adjacent cleared areas would be approximately 40 feet wide during construction of the Facility. The post-construction access road width would be up to 20 feet (including the access road and stormwater drainage). The December 21, 2009 filing identified 37.0 miles.

(ii) Temporary Staging and Construction Laydown Area

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

(iii) Operation and Maintenance Building

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

(iv) Temporary Concrete Batch Plant

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following would be added [Application, 3-6]:

- Two locations are being evaluated for siting the temporary batch plant and include: (1) a 20 acre tract in the southeastern portion of the Project area, adjacent to the O&M building, or (2) the Stoneco aggregate quarry property (Scott Quarry) located near Scott, Ohio.

(2) Description of Equipment

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

(a) Wind Energy Turbines

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

(3) Description of New Transmission Lines

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following [Application, 3-7]:

- The Facility would include 103.2 miles of underground collection lines and 5.4 miles of aboveground collection lines (rated at 34.5 kV) that would tie into two smaller collector substations. The December 21, 2009 filing identified 78.6 and 3.7 miles respectively.
- Approximately 7.0 miles of 115 kV aboveground collection lines would connect the two collector substations to the 345 kV Interconnection Substation. The December 21, 2009 filing identified 6.0 miles.

(4) Description of New Substations

No text changes from the December 21, 2009 Blue Creek OPSB Application text has occurred in this section, with the exception of the following to be added at the end of this part [Application, 3-9]:

- The Applicant would like to clarify (in response to OPSB Staff data request 34) that the proposed voltage transmission process requires two collector substations that connect to the Project collection substation, which in turn connects to the interconnection substation.
- There are no longer Phase I and Phase II construction dates as the Project is being considered as one development. [To be added as a new subpart, [Application, 3-9]

(5) Description of Met Tower [Renumbered, [Application, 3-9]

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

(6) Description of SODAR [Renumbered [Application, 3-9]:

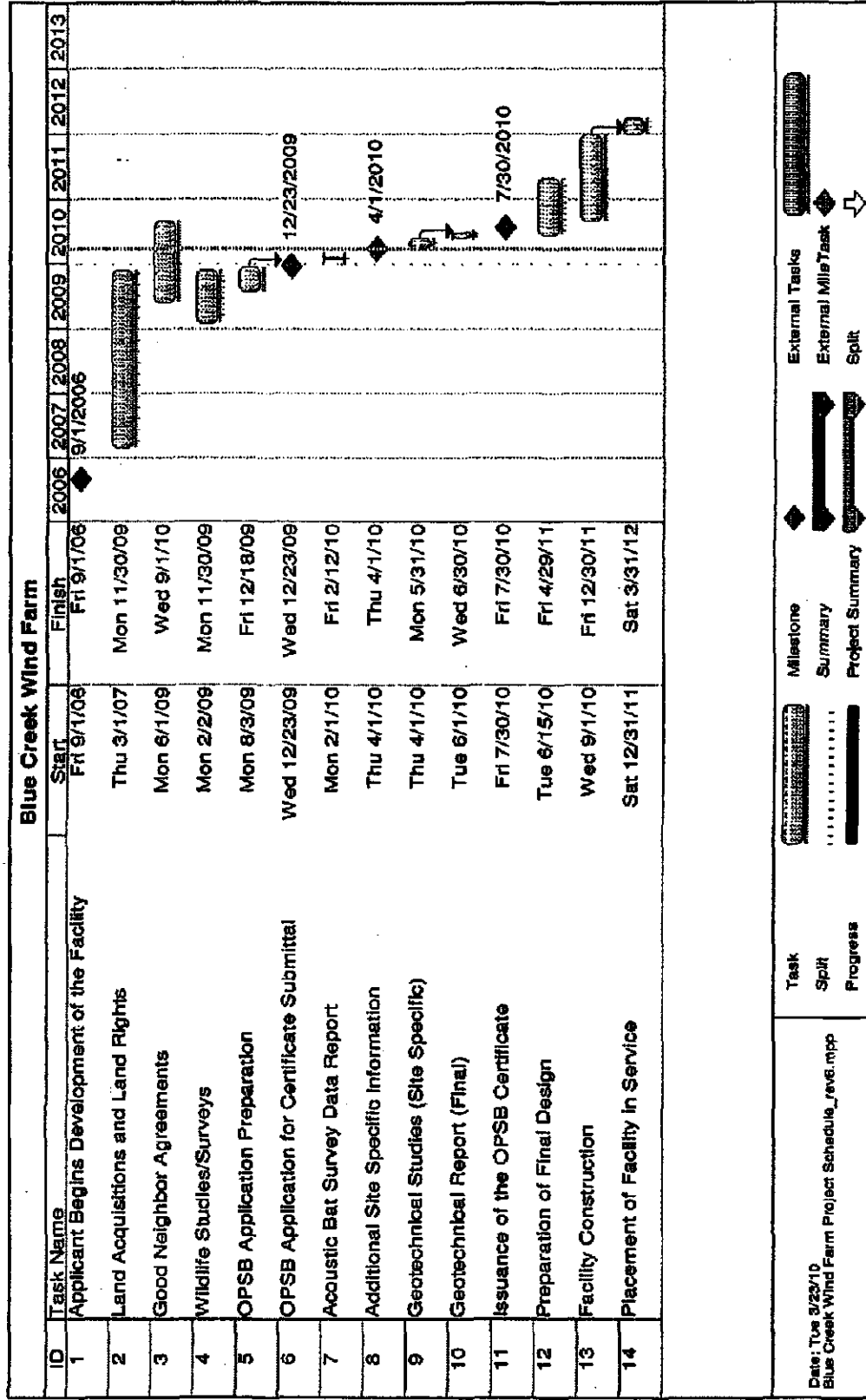
No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section.

(B) DETAILED PROJECT SCHEDULE**(1) Project Schedule**

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following that would replace the past 5 sentences [Application, 3-10]:

- The Applicant anticipates construction of the Facility from September 2010 through December 2011.
- The Applicant will build the Facility in one Phase and no longer will be built in two Phases as previously indicated in the December 21, 2009 Blue Creek OPSB Application. The Applicant will place the facility in service beginning in December 2011 with full operation of the Facility by March 2012. Figure 2-2 shows the anticipated Facility schedule.
- Additional investigations are being performed for changes in the Facility configuration. Reports will be submitted to the OPSB upon completion of these investigations.

FIGURE 3-2 [REPLACES FIGURE 3.2, APPLICATION 3-11]
Blue Creek Project Schedule



(2) Delays

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

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.

(A) PROJECT AREA SITE

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

(1) Geography and Topography

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

(2) Aerial Photography

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

(3) Site Mapping

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

(4) Geology and Seismology

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

(a) Site Geology

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

(b) Geologic Hazards

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the revision of Table 5-2: [Application, 5-5 to 5-6]

TABLE 5-2
Geologic and Geotechnical Hazards Summary

Hazard	Present at Site?	Comment
Flooding/High groundwater	Yes	The site is relatively flat and poorly drained soils exist throughout much of the site and could be prone to localized flooding. No turbines are located in a FEMA flood zone.
Slope failure	No	The site is relatively flat.
Subsidence – Pumping	Unlikely	Project area is underlain by bedrock with a framework capable of resisting subsidence due to production of oil, gas, or water.
Subsidence – Mining	No	Mining activity is limited to limestone quarry operation and no coal mining
Subsidence – Caves/Karst	Possibly	<i>Bedrock is susceptible to dissolution, but no current karst hazards areas are presently known in the Project area.</i>
Earthquake/Seismicity	Unlikely	The site is in a moderately low seismic area.
Swelling/shrinking soil	Yes	Lake origin (fat) clay soil is present throughout the site.
Corrosive soil	Possibly	Clay soils exist throughout the Project area, which are potentially corrosive to steel.
Made ground	Unlikely	<i>No coal mining exists in the region and there does not appear to be any significant relief associated with raised grades. There is a small potential for filled areas associated with the low-lying swamp areas.</i>
Collapse soil	No	Collapse soils are not known or likely to be present.
Volcanic activity	No	No current volcanic activity exists in the region.
Quick clay	No	Quick clay conditions are not known or likely to be present.

Source: Barr, 2009.

(c) Soil Suitability

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

(5) **Hydrology and Wind**

(a) **Water Budgets**

(i) **Surface Water Resources**

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

(ii) **Groundwater Resources**

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following: [Application 5-14]

- The Applicant would like to clarify that no sole source aquifers are located near the Project area. The closest designated sole source aquifer is approximately 8 miles to the southeast of the Facility.

(iii) **Construction Water Usage**

Water use during construction of the Facility will entail such operations as temporary concrete batch plant operations, dust suppression *and road watering. Construction water demands for the site will be temporary. Portable restroom facilities will be used for construction workers; therefore, they will not require water.*

The Applicant is evaluating the possibility of creating a temporary concrete batch plant for producing the concrete necessary during Facility construction. This plant will be located *either* on a 20-acre property located in the southeastern portion of the Project area *(that will be the location of the future O&M building) or at the existing Stoneco quarry property near Scott.*

It is estimated that the plant will operate *12 hours a day*, 6 days a week and produce up to 1,500 cubic yards of concrete per day. Based on this production rate, the estimated water demand will be approximately 55,000 gallons per day (gpd) (about 115 gpm).

For the 20-acre property, water will be supplied via one of three or a combination of the following options:

- Onsite bedrock wells*
- Trucking in water from the Stoneco quarry near Scott, Ohio*
- Trucking in water from another source*

Onsite bedrock wells would be drilled and completed at a depth of several hundred feet. Available water well logs near this site indicate that the deepest local domestic well was 63 feet in depth and is completed in bedrock. If a batch plant is planned for the O&M Building/Substation site, a production test well and associated observation wells will be installed prior to mobilization of the batch plant and tested to determine the specific yield for the well. Depending on the production test well results, a water storage tank may be considered to reduce peak demand on the water supply wells.

If a batch plant is planned for the Stoneco Quarry property, water will be provided by an existing onsite well with a pump rate of 100 gpm. Additional water requirements would be provided by trucking in water from another source.

(iv) Operation Water Usage

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

(b) Floods and High Winds

(i) Floods

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following: [Application, 5-15 to 5-16]

- Turbines 69 and 146 have shifted from the revised layout. All unrevised and revised turbine locations were confirmed to be outside of the 100-year floodplain limits.
- Turbine BC-I 20 is within approximately 10 feet of a floodplain.
- The following statement will be added to the Civil Engineering drawings for any turbine located within 50 feet of the 100-year floodplain: "No permanent fill material will be placed within the limits of the 100-Year Floodplain".
- Portions of access roads and overhead transmission lines are located within the 100-year floodplain. The floodplains within the Project area boundary are classified as FEMA Zone A. This means the boundaries defined are approximate because no detailed study has been completed. Construction within these areas is generally allowed provided the original contours are not significantly modified due to construction activities. This has been confirmed with Tony Windsor and Nancy Blanke, the FEMA floodplain administrators at Paulding County and Van Wert County, respectively. The construction activities for this Facility will not change the contours within the floodplain. As currently proposed, underground collector lines will cross the 100-year floodplain associated with Blue Creek, Hoaglin Creek, Maddox Creek, Town Creek and Prairie Creek, and an

overhead collector line will cross the 100-year floodplain of Hoaglin Creek

(ii) Winds

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

(c) Maps

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

(B) LAYOUT AND CONSTRUCTION

This section describes the layout and construction of the Facility.

(1) Project Area Site Activities

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:

- There are no longer Phase I and Phase II construction dates because the Project is being considered as one development. [Application, 5-18]
- Approximately 60 large truck trips per day (delivering wind turbines and associated equipment) are anticipated during construction of the Project. The December 21, 2009 text identified 20 large truck trips. [Application, 5-19]
- Up to 200 small vehicle (pickups and automobiles) trips per day within the Project area are anticipated during construction. The December 21, 2009 text identified 100 small vehicle trips. [Application, 5-19]

(a) Wind Turbine Foundation

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:

- Figure 5-10 has been updated to show the potential locations of the concrete batch plant.
- The crane pad includes an area of 100 feet by 75 feet. The December 21, 2009 filing identified an area of 40 feet by 60 feet. [Application, 5-21]

(b) Underground Electric Collection System

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section except for the following: [Application, 5-22]

- The underground collection system will require varying widths of temporary ROW depending upon the number of collection lines in the trench:
 - 1 Collector = 24 feet
 - 2 Collectors = 32 feet
 - 3 Collectors = 40 feet
 - 4 Collectors = 48 feet
 - 5 Collectors = 56 feetThe December 21, 2009 filing identified a 20-foot ROW.

(c) Aboveground Collection Lines

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following: [Application, 5-23]

- There will be approximately 7.0 miles of 115kV aboveground collection lines. The December 21, 2009 filing identified 6.0 miles.

(d) Substations

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

(e) O&M Building

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

(f) Test Borings and Cone Penetrating Test

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

(g) Removal of Vegetation [Application, 5-25-5 to 26]

Construction of the Facility will require removal of vegetation at all turbine sites, access roads, collection system line routes, substations, temporary staging and construction laydown area, met tower(s) and SODAR facility, and O&M building locations. It is assumed that a 150-foot radius will be cleared for each turbine footprint, a 40-foot wide corridor for access roads, and 100-foot wide corridor for the aboveground 34.5 kV and 115 kV collection lines. *The underground collection system will require varying widths of temporary ROW depending upon the number of collection lines in the trench:*

- *1 Collector = 24 feet*
- *2 Collectors = 32 feet*
- *3 Collectors = 40 feet*
- *4 Collectors = 48 feet*
- *5 Collectors = 56 feet*

Two of the substations will require 5 acres each for construction. Two substations will be constructed within a 20-acre area that will include the temporary staging construction laydown area, O&M building, and temporary concrete batch plant.

It is anticipated that *1,264.4 acres* of vegetation (*1237.3 acres* of cultivated crops and *19.6 acres* of deciduous forest) will be temporarily removed during construction of the Facility; and of that, *223.0 acres* (*213.2 acres* of cultivated crops and *8.6 acres* of deciduous forest) will be removed permanently. Temporarily disturbed areas will be re-seeded to blend in with existing vegetation as needed. To the extent practicable, disturbance of wetlands during construction and operation of the Facility will be avoided. Applicable permit approvals will be obtained for any impacts to jurisdictional wetlands.

The majority of the Project area is agricultural land. The Facility has been designed to avoid forested areas; therefore, limited tree clearing is expected. The Applicant will use BMPs during construction and operation of the Facility to protect topsoil and adjacent resources and to minimize soil erosion. Practices may include containing excavated material, protecting exposed soil and stabilizing restored material, and revegetating areas.

The Applicant will dispose of all vegetation that has to be removed. The topsoil will be stripped and stockpiled within the construction area for later use during restoration activities. Trees cleared from the Project area will be cut into logs and either left for the landowner or removed. Limbs and brush will be buried, chipped, or otherwise disposed of as directed by the landowner and as required under federal, state, and local regulations.

(h) Grading and Drainage

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

(i) Access Roads [Application, 5-27 to 5-28]

Wherever possible, existing roads will be upgraded for use as an access road during construction and maintenance activities. Where an existing road is not available, new temporary and permanent access roads will be constructed.

The roads have been sited in consultation with local landowners. The roads will facilitate both construction and ongoing operation and maintenance. Siting roads in areas with unstable soil will be avoided. All roads will include appropriate drainage and culverts while still allowing for the crossing of farm equipment. The applicant will select the location of these temporary and permanent access roads to minimize or avoid sensitive resources.

Private access roads will be built adjacent to the towers, allowing access to the turbine strings both during and after construction. During construction, the roads will be approximately 40 feet wide to accommodate safe crane movement, equipment delivery, and other construction vehicles. *Road building will include about 54.7 miles of one-time pass temporary crane paths with only minor grading to maintain the necessary slope for safe transportation. Only limited post-construction restoration would be required.* After construction is complete, permanent access roads will be utilized for maintenance activities. The 41.5 miles of access roads will be up to 20 feet wide (including the access road and drainage channels).

These roads will consist of graded dirt overlaid with geotechnical fabric (if needed) and covered with gravel. The roads will be prepared to support the size and weight of maintenance vehicles.

Roadway improvements will also be required primarily at intersections to widen the roads to accommodate turbine delivery. Additional roadway improvements may be necessary, based on the results of a pre-delivery review conducted by Gamesa's selected trucking company. This pre-delivery review is typically scheduled prior to component delivery in the spring prior to erection, and is currently anticipated to occur in spring 2011.

(j) Removal and Disposal of Debris

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

(k) Post-Construction Reclamation

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

(2) Layout

Figure 5-10 provides a map that shows the various elements of the Facility.

(a) Wind-Powered Electric Generation Turbines [Application, 5-29]

Figure 5-10 provides the location of the proposed 159 G-90 wind-powered electric generating turbines at the scale of 1:12,000.

(b) Transformers and Collection Lines [Application, 5-29]

The proposed Facility will require approximately 103.2 miles of underground and 5.4 miles of aboveground 34.5 kV collection system and approximately 7.0 miles of aboveground 115 kV collection line. Figure 5-10 provides the location of the collection lines. In the event the GE turbine model is used, a pad-mounted transformer will be located near the base of the turbine. For all other proposed turbine models, the transformer will be located in the nacelle.

(c) Construction Laydown Areas

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

(d) Transmission Lines

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

(e) Substations

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

(f) Transportation Facilities and Access Roads [Application, 5-30]

A total of 41.5 miles of access roads will be required for the Facility. Figure 5-10 provides the location of the access roads used during construction and maintenance activities.

(g) Security Facilities

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

(h) Grade Elevations

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

(i) Other Pertinent Installations

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

(3) Structures

This section describes the major proposed structures of the Facility.

(a) Estimated Overall Dimensions

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

(b) Construction Materials

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

(c) Color and Texture of Facing Surfaces

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

(d) Photographic Interpretation or Artist's Pictorial Sketches

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

(e) Unusual Features

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

(4) Plans for Construction

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

(5) Future Plans

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:

- The project will no longer be built in phases and will be considered as one development, with an operation start date of December 2011 and commissioning completed in March 2012. [Application, 5-34]

(C) EQUIPMENT [APPLICATION, 5-35]

As previously discussed, the equipment to be used for the Project area will include the following.

- 159 wind turbine generators¹;
- An electrical collection system using 34.5 kV underground and aboveground collection lines;
- Some 115 kV aboveground collection lines;
- Three intra-project collection substations;
- An interconnection substation;
- Up to two permanent met towers and a SODAR facility;
- A temporary concrete batch plant; and
- An O&M building.

The following sections provide a description for each Facility component.

(1) Wind Powered Generation Equipment**(a) Wind Energy Turbines**

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

(i) Nacelle

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

(ii) Rotors

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

¹ Within this Application, specific locations for 159 turbines and other related Facility components are identified. The queue position for the proposed development has a maximum potential output of 350 MW or 175 two MW turbines.

(iii) Tower

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

(iv) Foundation

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

(b) Electrical Components

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

(i) 34.5 kV Electric Collection System

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:
[Application, 5-38]

- Approximately 103.2 miles of underground collector lines and approximately 5.4 miles of aboveground 34.5 kV collector lines will be required for the Facility. The December 21, 2009 filing identified 78.6 and 3.7 miles respectively.

(ii) 115 kV Electric Line [Application, 5-38]

In locations where more than one set of aboveground 34.5 kV lines are needed, a small substation will be constructed to transform the electricity to 115 kV. By doing so, this will allow the use of only one set of poles. Approximately 7.0 miles of aboveground collection lines at 115 kV will be required. Appendix D provides typical drawings showing support structures for these aboveground lines.

(iii) Substations [Application, 5-39]

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:

- The Applicant would like to clarify that the proposed voltage transformation process requires two collector subs that connect to the Project collection sub, which in turn connects to the interconnection sub.
- There are no longer Phase I and Phase II construction dates because the Project is being considered as one development.

(2) Safety Equipment

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

(a) Proposed Major Public Safety Equipment

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

(i) Construction

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

a) Fencing

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

b) Signage

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

(ii) Operation

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

a) Gamesa Monitoring System

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

b) Braking System [Application, 5-43]

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:

- The Applicant would like to clarify that the RPM range for the G90 is 9 to 19 RPM, varying non-linearly with wind speed. This corresponds to a blade pass frequency of 0.45 to 0.95 Hz.

c) Lightning Protection

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

d) Fire Prevention

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

e) Aeronautical

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

f) Fencing and Access Control

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

g) Signage

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

(b) Reliability of Equipment

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

(c) Turbine Manufacturer's Safety Standards

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

(3) Any Other Major Equipment

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

(a) O&M Building

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

(b) Met Tower(s)

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

(c) SODAR Unit

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

(d) Temporary Concrete Batch Plant [Application, 5-47]

The Applicant is evaluating the option of constructing a temporary concrete batch plant for producing concrete required during construction. *This plant will be located either on a 20-acre property in the southeastern portion of the Project area (that will be the site of the future O&M building) or at the existing Stoneco aggregate quarry property (Scott Quarry) near Scott.*

An aboveground storage tank may also be constructed at this location to provide for storage of water that will be required for batch plant operations during construction of the Facility. After construction is complete, the temporary concrete batch plant and associated water storage tank will be disassembled and removed.

(D) REGIONAL ELECTRIC POWER SYSTEMS

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

(1) Interconnection Queue

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

(a) Name of the Queue

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

(b) Web Link of the Queue

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

(c) Queue Number

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

(d) Queue Date

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

(2) System Studies

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

(a) Feasibility Study

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

(b) System Impact Study

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

(c) Facilities Study

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

4906-17-06 Financial Data

(A) OWNERSHIP

IBR is the sole member and manager of the Applicant. IBR is the largest owner and operator of wind generating assets with more than 10,000 MW of wind power capacity in operation globally. In the United States, IBR owns and operates approximately 3,500 MW of wind facilities and employs more than 800 people. IBR currently operates wind farms in 20 states and constructed five new projects in 2009. The Applicant and its parent company, IBR, are well capitalized and committed to providing the necessary financial resources to develop and build the Facility.

Applicant currently owns all leases and other Facility assets, *with the exception of the Interconnection Substation, which will be owned by the transmission line operator.* Before construction, a Facility-specific entity, for example Blue Creek Wind Farm, LLC, would be created and own all assets of the Facility, including leases, permits, wind turbines and related facilities, and other assets. Electricity generated by the Facility would be integrated into the existing transmission 345 kV transmission line system for delivery of the power to the PJM transmission grid system.

The majority of the land to be used in the construction and operation of the Facility is privately owned by approximately 106 participating landowners. The Applicant has entered into voluntary lease agreements with the landowners under the Applicant's standard Wind Energy Lease Agreement to construct and operate the Facility. These lease agreements are long-term leases that could extend for up to 60 years, if all lease agreement extensions are exercised. The lease agreements allow the Applicant to capture the flow of wind across the property and install the facilities necessary to do so, among other privileges. The landowners are paid an annual fee per acre plus a portion of the production of the wind turbines. This type of lease agreements represents approximately 99 percent of the agreements for total leased area.

The Applicant also has Good Neighbor Agreements (GNAs) that allow for reduced property line setbacks and other rights. *If a residence is enrolled in the GNA and as such receives financial compensation, the Applicant considers these residences "participating" landowners.* Some of

the GNAs are for relatively large (greater than 20-acre) parcels where construction of wind turbines would be feasible; however, most of the GNAs are for small parcels within the Project area where construction of wind power facilities is impracticable. The purpose of these agreements is to allow all landowners in the Project area to be a part of the Facility and share in the financial gain.

Once a GNA is signed by a participant, the agreement remains in place until the cessation of operations of the Facility. The GNAs are voluntary documents, and a Grantor would understand that signing the agreement constitutes acceptance of the effects of the Wind Facility. The Applicant's OPSB Application has been made available to all potential Grantors, so they have an opportunity to quantitatively understand potential effects they may experience. The GNA provides compensation to a landowner in return for acceptance of potential Project effects.

Although the situation has never arisen, in theory, a landowner could violate the agreement by making a claim against the Project for the waived effects. The Applicant would, at that point, be able to cite the landowner's prior consent in defense of such claim. The sole breach by Applicant would be failure to pay the required amounts. Assuming the Applicant failed to cure that breach, the landowner would be able to make a claim for either payment of the amount or would be able to reassert his/her right to assert a claim against the Project. As with any contract, the breach of agreement by a party would lead to a civil dispute in which, as noted, damages could be sought, or the waiver of rights by the landowner could either be asserted (if the breach is by the landowner) or revoked (if the breach is by the Applicant). Although the Applicant has the discretionary right to terminate the agreement on 120 days' notice (which would end the restrictions on the landowner's ability to file a claim against the Project), that termination does not terminate the Applicant's obligation to make previously accrued payments to the landowner. The landowner does not have the discretionary right to terminate the agreement.

The GNAs are fundamentally about communication, giving owners of small parcels a direct line to IBR to better address any issues that come up during development, construction, and operations. A signed GNA also demonstrates that the neighboring landowner understands the

implications of having a large wind energy generating facility in their neighborhood, and they accept any possible inconveniences, such as sound, shadow flicker, and television interference.

At the time of application submission, the Applicant estimates that greater than 99 percent of the land agreements that would be necessary to construct the Facility have been obtained. No changes in current landownership patterns are anticipated. Gaps in ownership and other details of land title would be discovered during the ALTA[®] survey, expected to be performed in Spring 2010. At that time, any additional agreements would be entered into, as necessary, to allow for the construction of the Facility.

A model wind energy lease agreement and GNA, which the Applicant considers to be proprietary and a trade secret, will be provided for OPSB staff inspection at the offices of Bricker & Eckler, LLP.

Before construction, the Applicant would exercise multiple land purchase options to acquire ownership of the land where the substations would be located. It is expected that eventually the transmission operator, AEP, would own the land under the interconnection substation.

(B) CAPITAL AND INTANGIBLE COSTS

(1) Capital and Intangible Cost Estimates

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

(2) Cost Comparison

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

(3) Tabulation of Present Worth and Annualized Capital Costs

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

(C) OPERATION AND MAINTENANCE EXPENSES

(1) Estimate of Annual Operation and Maintenance Costs

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

(2) Cost Comparison

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

(3) Present Worth and Annualized Capital Costs

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

(D) DELAYS

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

(A) GENERAL [APPLICATION, 7-1]

This section provides environmental data regarding air, water, and solid waste in terms of site conditions, potential impacts from the Facility and proposed mitigation measures. Unlike traditional power plants that combust fossil fuel to generate electricity, the proposed Facility will not emit air pollutants, require water for cooling purposes, or require process wastewater to be discharged from the Facility. In addition, the Facility will not produce any solid combustion wastes as a by-product of its energy production process. Therefore, the Applicant's proposed Facility will avoid major impacts associated with decreased air quality, water consumption, thermal pollution and ash landfills.

As part of the Facility, the Applicant is evaluating the option of *purchasing concrete from a local supplier or constructing a temporary concrete batch plant for producing concrete required during construction. Two locations are being evaluated for siting the temporary batch plant: (1) a 20-acre tract in the southeastern portion of the Project area, adjacent to the O&M building, or (2) the Stoneco aggregate quarry property (Scott Quarry) located near Scott, Ohio.*

(B) AIR

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

(1) Preconstruction

(a) Ambient Air Quality

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

(b) Applicable State/Federal Air Quality Regulations

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

(c) List of Required Permits

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

(d) Compliance Plans

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

(i) (d)(1) Concrete Batch Plant Compliance

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

a) Operational Restrictions

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

b) Compliance with Operational Restrictions- Plant Design

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

c) Emission Limits

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

d) Compliance with Emission Limits – Plant Design and Air Pollution Control Equipment

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

e) Visible Emissions Requirements

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

f) Compliance with Visible Emission Requirements – Plant Design and Operating Procedures

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

g) Compliance Monitoring and Testing

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

(e) Batch Plant Monitoring, Recordkeeping, and Reporting

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

(i) (d)(2) Unpaved Roadways and Parking Areas Compliance

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

a) Emission Limits

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

b) Compliance with Emission Limits – Plant Design

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

c) Visible Emissions Requirements

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

**d) Compliance with Visible Emission Requirements –
Operating Procedures**

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

e) Compliance Monitoring and Testing

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

(ii) Unpaved Roads Monitoring, Recordkeeping, and Reporting

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

(2) Construction

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

(3) Operation

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

(C) WATER

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

(1) Surface Water

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

(2) Groundwater

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

(3) Preconstruction

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

(4) Construction

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

(a) Permits

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:

- The Applicant would like to maintain its options for wastewater handling at the proposed batch plant facility. All discharges will be made in accordance with federal, state and local permits and approvals identified in the December 21, 2009 Application. [Application, 7-20]

(b) Aquatic Discharges

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following: [Application, 7-21]

- During construction, approximately 1,264.4 acres will be disturbed in the total 40,500-acre Project area. The December 21, 2009 text identified 793 acres being disturbed.
- When constructed, approximately 223.0 acres of impervious surface will be covered by the Facility, including turbine foundations, access roads, substations, and an O&M building footprint. The December 21, 2009 text identified 237 acres being disturbed.

(c) Mitigation Plans

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

(d) Changes in Flow Patterns and Erosion

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

(5) Operation

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

(a) Quantitative Flow Diagram

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

(b) Conservation Practices

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

(D) SOLID WASTE

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

(1) Preconstruction

(a) Debris and Solid Waste

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

(2) Construction

(a) Debris and Solid Waste Generated

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following:

- Facility construction would require clearing or disturbance of 1,264.4 acres of vegetation, 19.6 acres of which is forested. The December 21, 2009 text identified 793.2 and 4.7 acres respectively. [Application, 7-25]

(b) Storage and Disposal Methods

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

(3) Operations

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

(a) Solid Wastes Generated

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

(b) Treatment, Transport, and Disposal

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

(4) Licenses and Permits

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

(A) HEALTH AND SAFETY**(1) Demographic Characteristics**

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

(2) Noise

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

(a) Construction Noise Levels

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

(i) Blasting activities

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

(ii) Operation of earthmoving equipment

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

(iii) Driving of piles

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

(iv) Erection of structures

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 section [Application, 8-9]:

- The Applicant would like to clarify that heavy construction activities referenced in the application as occurring during day operations would be turbine erection. Turbine erection may also be required at night depending on construction schedule and wind conditions. During certain seasons, wind conditions are lower at night and thus can allow for safe erection operations. Although the Applicant generally avoids night-time erection operations, erection may be performed at night if conditions during the day have sufficiently delayed the construction schedule to the point that night-time erection is justified.

(v) Truck traffic

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

(vi) Equipment installation

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

(b) Operational Noise Levels

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 section [Application, 8-13]:

- The Applicant would like to clarify that the Mitsubishi turbines are the loudest turbine being considered. This is true at both hub heights (noise level does not correlate significantly with hub height).
- The Applicant would like to clarify that 960 receptors (as identified in the December 21, 2009 application under Table 8-5) were modeled. In addition to the modeled home locations, noise contours were developed. The Applicant is performing additional noise studies for the Blue Creek Wind Farm. The Applicant will submit the findings of the noise study to OPSB following a Noise Review Meeting with OPSB in early May, 2010.
- The Applicant would like to clarify that although noise implications were extensively analyzed, the actual noise constraints of the Facility were not known at the time of the December 21, 2009 filing. The noise restrictions have since been identified, and the layout has been substantially re-designed at great cost and effort by the Applicant.
- The Applicant would like to clarify that ambient noise measurements commenced in March 2010.
- The Applicant would like to clarify that modeling results provided in the Application are representative of the scenario where geostrophic winds sufficient for generation exist, but ground-level winds remain calm. The maximum sound power level of the turbine was used and is therefore independent of ground level winds.

(c) Location of Noise Sensitive Areas

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

(d) Mitigation of Noise Emissions

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 section [Application, 8-14]:

- The Applicant would like to clarify that the layout provided in the April 1, 2010 Supplemental Report is designed to achieve maximum noise levels of 50 dBA at all residences regardless of their participating status in the Good Neighbor Program or with wind leases.

(3) Water

(a) Impact to Public and Private Water Supplies

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following at the end of the section [Application, 8-16]:

- The Applicant would like to clarify that no sole source aquifers are located near the Project area. The closest designated sole source aquifer is approximately 8 miles to the southeast of the Facility.

(b) Construction Water Impacts [Application, 8-17, replacement]

The Applicant is evaluating the option of constructing a concrete batch plant on the site for producing concrete required for construction. Water use during construction of the Facility would include temporary concrete batch plant operations (to produce concrete for turbine foundation construction) and dust suppression *and road watering. Construction water demands for the site will be temporary. Portable restroom facilities will be used for construction workers; therefore, they will not require water.*

If a temporary batch plant were constructed for the Facility, the plant would be used temporarily for the production of concrete during Facility construction. The batch plant would *either* be located on the 20-acre property located in the southern portion of the Project area and adjacent to the location of the future O&M building *or at the existing Stoneco quarry near Scott*. It is estimated that the batch plant would operate *12 hours per day* 6 days a week and produce up to 1,500 cubic yards of concrete cubic yards per day. Based on this production rate, the estimated water demand would be approximately 55,000 gpd (approximately 115 gpm). *For the 20-acre property, water will be supplied via one of three or a combination of the following options:*

- *Onsite bedrock wells*
- *Trucking in water from the Stoneco quarry near Scott*
- *Trucking in water from another source*

Onsite bedrock wells would be drilled and completed at a depth of several hundred feet. Available water well logs near the site indicate that the deepest local domestic well is 63 feet in depth and completed in bedrock. If a batch plant is planned for the O&M building/substation site, a production test well and associated monitoring wells would be installed in 2010 and tested to determine the specific well yield and evaluate any potential impacts. An inventory of wells adjacent to the property would be conducted as part of this evaluation. Depending on the production test well results, a water storage tank may be considered to reduce peak demand on the water supply wells. However, if the concrete batch plant were not to be constructed at the O&M site, a residential well would be drilled to serve the O&M facility.

If a batch plant is planned for the Stoneco Scott Quarry property, water will be provided by an existing onsite surface water source with a pump rate of 100 gpm. Additional water requirements would be provided by trucking in water from another source.

Construction water demands for the Facility would be temporary. Portable washrooms would be available for construction workers; therefore, they would not require water. Upon completion of construction, onsite wells will be used for the water supply at the O&M building.

Water usage during Facility construction will be minimal, so it is not expected to have a measurable impact on public or private water supplies near the Project area. No adverse impacts are anticipated to the aquifer systems within the Project area. Facility construction is not likely to pose any risk of contaminant release that would compromise the quality of the groundwater resources.

(c) Operation Water Impacts

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

(4) Ice Throw

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

(5) Blade Shear

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

(6) Shadow Flicker

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 section [Application, 8-21]:

- The Applicant would like to clarify that according to the Gamesa literature, the rotations per minute (RPM) range for the G-90 turbine is 9 to 19 RPM, varying non-

linearly with wind speed. This corresponds to a blade pass frequency of 0.45 to 0.95 Hz.

(a) Shadow Flicker Analysis

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 section [Application, 8-23]:

- 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 Applicant would like to clarify that there will be more than eight turbines added in the designated expansion area, as a result of the Staff's expected noise conditions. These results are included in the revised shadow flicker analysis and report.
- The shadow flicker report will address potential effects, define "discrete points" and other terminology within the report, and identify how many homes were identified within 2,950 feet of a turbine.
- The Applicant would like to clarify that resident surveys were conducted on November 4 to 5, 2009 for the December 21, 2009 filing. Additional line-of-sight surveys for the April 1, 2010 Supplemental Report were to be conducted on March 23, 2010. The residences studied within 2,950 feet of a turbine totaled 1,275. Thirty-seven of the 39 residences with 30 or more hours of potential shadow flicker were observed to have some type of existing obstruction. Due to the number of residences within the Project area, the assessment was limited to those participating and nonparticipating residences with 30 or more hours of potential exposure. A standard digital camera was used to document the existing obstructions.

(b) Shadow Flicker Results

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 section before Table 8-6 [Application, 8-23]:

- The Applicant would like to provide additional information in the form of forecasted operational noise exposure in dBA for receptors identified in the April 1, 2010 Supplemental Report as having an exposure of greater than 30 hours per year. The table below provides these details:

ID #	Coordinates UTM NAD83 Z16		Shadow hours per year	Forecasted Noise Levels
	Easting	Northing	[h/year]	dBA
1094	707683.78	4534550.34	56:56:00	50.3
445	697709.38	4541677.27	44:40:00	50.3
213	702642.75	4536429.72	41:39:00	49.1
471	704155.09	4542640.4	39:57:00	50.3
224	702664.08	4536831.15	39:27:00	49.2
340	699322.59	4539592.7	38:40:00	48.5
1165	708615.31	4535770.46	33:00:00	49.2
96	699523.81	4534145.67	31:47:00	48.4
470	697628.66	4542295.44	31:07:00	48.6
88	697993.19	4533816.4	31:00:00	49.3
1096	709294.58	4534771.75	30:43:00	48.3

- The revised shadow flicker analysis performed in March 2010 resulted in predicted shadow flicker effects over 30 hours per year at 11 residences in the Project area. The revised shadow flicker report will provide additional details as requested by the OPSB Staff.

- Table 8-6 has been revised and includes:
 - The distance of each residence from the closest flicker-generating turbine;
 - The number of hours of shadow flicker the model predicts the residence would be exposed to over the course of a year;
 - An identification of the turbines that would contribute to shadow flicker at that residence; and
 - Any features noted during the site visit with the potential to prevent the shadow flickering from being visible at the residence.

The Applicant plans to use a number of mitigation measures as described in the December 21, 2009 Blue Creek OPSB Application to reduce projected shadow flicker impacts to these affected residences.

TABLE 8-6 [ADDITION TO TABLE 8-6, APPLICATION, 8-24 AND 8-25]
Predicted Shadow Flicker.

Residence ID	Predicted Shadow Flicker (hours:minutes per year) ^a	Turbines Contributing to Shadow Flicker	Distance to Closest Contributing Turbine (m)	Noteworthy Obstructions
1094	56:56	9, 10, 12	387	Barn to the southeast at approximately 20 feet aboveground level (AGL). Several deciduous trees to the west approximately 50 feet AGL.
445	44:40	70, 71, 72	340	Two car garage to the southeast approximately 15 feet aboveground level. Row of mixed deciduous trees/conifers to the east approximately 10 feet AGL.
213	41:39	113, 115, 116, 127	540	Shed to the west at approximately 12 feet AGL. Row of conifers to the south and southwest at approximately 35 feet AGL.
471	39:57	146, 147, 153, 154	424	Two conifer trees to the west at approximately 30 feet AGL.
224	39:27	113, 115, 126, 127	489	Two barns to the south at approximately 30 feet AGL.

TABLE 8-6 (ADDITION TO TABLE 8-6, APPLICATION, 8-24 AND 8-25)
Predicted Shadow Flicker

Residence ID	Predicted Shadow Flicker (hours:minutes per year)^a	Turbines Contributing to Shadow Flicker	Distance to Closest Contributing Turbine (m)	Noteworthy Obstructions
340	38:40	79, 81	391	Barn to the southwest at approximately 20 feet AGL. Two car garage to the west at approximately 12 feet AGL. Row of conifer trees to the west at approximately 35 feet AGL.
1165	33:00	14, 21	382	Two conifer trees to the west and northwest at approximately 30 feet AGL.
96	31:47	59, 60	420	Garage to the southwest at approximately 20 feet AGL. Small barn to the west at approximately 15 feet AGL. Ring of conifers surrounding a pond to the south at approximately 25 feet AGL.
470	31:07	68, 69	421	One conifer tree to the west at approximately 20 feet AGL. Some deciduous trees to the west at approximately 30 feet AGL.
88	31:00	64	374	Shed to the northeast at approximately 15 feet AGL.
1096	30:43	13, 15	381	Two conifer trees to the northwest at approximately 30 feet AGL.

^a Model results adjusted by mean monthly sky cover from Fort Wayne, Indiana

(c) Mitigation Measures

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 section [Application, 8-26]:

- The Applicant would like to provide additional details on mitigation measures for an affected receptor (>30 hours of shadow flicker per year). If an affected receptor is expected to receive >30 hours of shadow flicker, he/she will first be offered a Good Neighbor Agreement. If a receptor does

not wish to sign a Good Neighbor Agreement, the receptor will be offered a one-time payment to sign a letter agreement stating that the receptor accepts the effects and will be encouraged to use the money to buy window blinds or vegetative plantings, such as tall growing evergreen shrubs, and trees such as local species of spruce and pine. Fast-growing genotype species may also be available. If an agreement is not obtained, the Applicant will reconsider the siting of the relevant turbine or curtailment of the turbine.

- The Applicant would like to provide additional details on micro-siting turbines. It is possible, but not likely, that slight moves to turbines or removal of turbines can bring shadow flicker exposure down below 30 hours per year. A case-by-case analysis is presented in the shadow flicker results report filed with the April 1, 2010 Supplemental Report.

(B) ECOLOGICAL IMPACT

(1) Project Site Information

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section except for the following at the end of the section [Application, 8-27]:

- The Applicant would like to clarify that adverse impacts are not anticipated to high quality streams or wetlands. As shown in Figure 8-3, a portion of the proposed 115 kV transmission line heads south and east from the Taylor Road collector substation to the planned interconnection point. In so doing, it bisects a large wooded area. This 115kV line was sited along an existing cleared railroad bed at a height above normal grade that anticipated a reduction in tree clearing based on the additional height provided by the railroad bed and existing cleared corridor. An alternative route through adjacent agricultural fields is currently being evaluated and will be considered an option for this portion of the Facility.

(a) Mapping

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

(b) Vegetative Survey

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

(i) Upland Habitats

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

(ii) Wetland Habitats

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 section [Application, 8-34]:

- 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.

(c) Animal Life Survey

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

(i) Mammals

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

(ii) Amphibians

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

(iii) Reptiles

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

(iv) Birds

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

(v) Raptor Study

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

(d) Summary of Ecological Studies

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

(e) Major Species List

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

(i) Commercial Species

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

(ii) Recreational Species

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

(iii) Federally Listed Species

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

(iv) State Listed Species

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

(2) Construction

(a) Impact of Construction

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with exception of the following to be added at the end of the section [Application, 8-48]:

- 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.
- The Applicant would like to clarify that roadway improvements (widening, etc.) are expected at intersections, ramps, and other key locations to facilitate oversized-equipment access to the Project site. These are limited to agricultural lands with some temporary impacts that may occur if jurisdictional waterbodies or wetlands are identified. The current roadway improvements are based on the Applicant's experience on past projects. Gamesa's selected trucking company may identify additional areas for

roadway improvement during its pre-delivery review. . This review typically occurs prior to component delivery and is anticipated to occur in spring 2011.

(i) Upland Habitat

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

(ii) Wetlands and Waterbodies

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with exception of the following:

- It is the intent of the Applicant to keep total wetland 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 acres [Application, 8-50, last paragraph].
- The Applicant would like to clarify that access road crossings of jurisdictional waters are focused primarily on roadside ditches or minor shallow stream crossings of low quality where vegetative impacts would be limited to previously impacted or routinely maintained areas. Underground collection line crossings would be directionally bored under most stream crossings, allowing for existing vegetation to remain intact. In areas of minor low-quality stream crossings vegetation may be temporarily disturbed for open trenching but also allowed to naturally regenerate with no future maintenance [Application, 8-50 to be added after last paragraph].

(b) Impact of Construction on Major Species

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

(c) Mitigation of Short and Long-term Construction Impacts

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

(3) Operation

(a) Estimate the Impact of Operation on Areas

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

(b) Estimate the Impact of Operation on Major Species

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

(c) Mitigation of Impacts

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

(d) Post-Construction Monitoring of Wildlife Impacts

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

(C) ECONOMICS, LAND USE AND COMMUNITY DEVELOPMENT**(1) Land Uses**

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

(a) Land Use Map

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

(b) Residential Structures In Relation to the Boundary of the Proposed Facility

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

- Residential structures were reviewed to determine if they will be located within either 1,000 feet or 100 feet of a Facility component, including turbine towers, underground and aboveground 34.5 kV collection lines, the 115 kV aboveground collection lines, project collector substations (which includes two substations and the O&M building), project collection substation, interconnection substation, and access roads. For this analysis, the centerline was used for all linear Facility components (electric collection system and access roads), center-points for the turbine towers, and the footprint for residences, substations, and O&M building. There are 229 residences within 1,000 feet of access roads or collection lines. Of these, there are 15 residences within 100 feet of access roads or collection lines. [The December 21, 2009 filing identified 147 residences and 20 residences, respectively.] *Revised* Table 8-7 lists the residential structures within 100 feet of an access road or collection line. The table also provides the residence ID, tax lot ID, owner,

latitude and longitude, and distance from the access road or collection line.

No residences are within 1,200 feet of a proposed turbine.

TABLE 8-7 [REPLACES TABLE 8-7 ON APPLICATION, 8-57]
Residential Structures within 100 Feet of the Facility

Residence ID#	Tax Lot ID, Owner	Longitude, Latitude	Distance (feet)	Facility Component
61	080122120100, ROLSTEN JAMES L & PHYLLIS L JTS	-84.68302657, 40.92921748	77	Proposed UG Collector
91	080115760000, SHOOK DAVID A	-84.68365005, 40.9315185	85	Proposed UG Collector
161	080112400000, BROTHERWOOD KATHLEEN JO LIV TR	-84.58161815, 40.94651786	73	Proposed OH Collector
171	150391620100, MIHM NANCY	-84.57181807, 40.9470739	83	Proposed UG Collector
215	080114920200, HOERSTEN JASON J	-84.66709507, 40.95332615	83	Proposed Access Road
262	010004680000, COLLINS WILLIAM J & LORRAINE	-84.69518612, 40.96073713	86	Proposed Access Road
294	150386280100, HESSEL RONALD J & JOYCE	-84.56149563, 40.97503364	73	Proposed UG Collector
339	080108680000, MCOMBER ROBERT L & CAROLYN S	-84.64928673, 40.98273296	54	Proposed UG Collector
430	WENNINGER	-84.61139245, 40.99503758	98	Proposed UG Collector
433		-84.59110521, 40.99724163	47	Proposed Access Road
685	150385200100, FIEDLER BERNARD E & ALBERTA A	-84.53379655, 40.97534432	83	Alternate UG Collector
1008	150396660100, WILDER DARRELL & LISA JTS	-84.53304705, 40.91754045	51	Alternate UG Collector
1241	150385200100, FIEDLER BERNARD E & ALBERTA A	-84.53378301, 40.97529035	79	Alternate UG Collector
1242	150385200100, FIEDLER BERNARD E & ALBERTA A	-84.53379935, 40.97533586	84	Alternate UG Collector
1243	150385200100, FIEDLER BERNARD E & ALBERTA A	-84.53381451, 40.97538985	88	Alternate UG Collector

(c) Wind Turbine Structure Locations [Application, 8-58]

As shown in *Revised* Table 8-8, there are no residences within 1,000 feet of a wind turbine. In accordance with IBR policy, no residences will be within 1,200 feet of a wind turbine.

TABLE 8-8 [REPLACES TABLE 8-8, APPLICATION, 8-58]
Residential Structures Near Facility Components

Facility Component	Number of Structures within 100 feet of Facility component	Number of Structures within 1,000 feet of Facility component
Wind Turbine	0	0
Access Road	3	88
34.5 kV Collection Lines	12	132
115 kV Collection Line	0	9
Total	15	229

(i) Distance from base to property line

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

(ii) Distance from blade to residential structure

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

(iii) Waiver of minimum setback

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

(d) Impact of Proposed Facility

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

- Approximately 1,264.4 acres of land would be temporarily impacted and 229.3 acres of land permanently impacted by construction of turbines and associated access roads (*Revised* Table 8-9). The December 21, 2009 filing identified 793 acres and 237 acres, respectively [First paragraph, Application, 8-59].
- As shown in *Revised* Table 8-9, agricultural land uses account for 95.8 percent of the area that would be permanently impacted if all of the 159 turbines detailed in this Supplemental Filing and associated facilities were constructed. [The December 21, 2009 filing identified agricultural land uses account for 97.4 percent of the area that would be permanently impacted if all of the 167 turbines were constructed.] Lower intensity developed uses, or open space, would account for approximately 0.5 percent of the permanently impacted land uses. [The December 21, 2009 filing identified approximately 1.1 percent.] [Second paragraph, Application, 8-59]

TABLE 8-9 [REPLACES TABLE 8-9 ON APPLICATION, 8-60]
Land Use Within the Project Area

Land Use Type	Total Land Use		Temporary Impacts		Permanent Impacts	
	Acreage	Percent of Total	Acreage	Percent of Total	Acreage	Percent of Total
Cultivated Crops	38601.1	95.2	1237.3	97.9	213.2	95.6
Deciduous Forest	717.6	1.8	19.6	1.5	8.6	3.8
Developed, High Intensity	0	0	0	0	0	0
Developed, Low Intensity	1078.4	2.7	7.3	0.6	1.2	0.6
Pasture Land	93.6	0.2	0.3	<0.1	0	0
Shrub and Brush Rangeland	28.4	0.1	0	0	0	0
Lakes and Ponds	30.1	0.1	0.3	<0.1	0	0
TOTAL	40,549	100	1264.4	100.0	223.0	100.0

Note: Percentage values have been rounded, so that total is slightly more than 100 percent.

(e) Identification of Structures to be Removed or Relocated

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

(f) Plans for Future Use

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

(g) Concurrent or Secondary Uses

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

(2) Economics

(a) Estimated Payroll

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

(b) Estimated Employment

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

(c) Estimated Tax Revenue

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

(d) Estimated Economic Impact

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

(3) Public Services and Facilities

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

(a) Sewerage and Sewer Treatment**Construction and Operations**

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

(b) Water**Construction**

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 paragraph [Application, 8-64]:

- The location of the batch plant will be either at the Stoneco quarry near Scott or on the proposed 20-acre O&M building/substation property near the southeastern portion of the project area. Water for construction will be obtained from one of the following sources:
 - Unused water from the Stoneco Quarry near Scott,
 - Water from a municipal or commercial water supplier, or
 - Two newly constructed wells adjacent to the O&M building.

If the well option is selected, the Applicant will obtain applicable permits for these wells from the OEPA and the Van Wert County Health Department. If public water sources are to be used, the Applicant will coordinate with the relevant municipality to ensure that it has adequate water to supply the Facility without impairing supply to existing users. Peak day demand for Facility construction would occur for concrete batch plant production and could reach a maximum of 55,000 gpd.

Operations

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

(c) Solid Waste Management

Construction and Operations

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

(d) Police Protection

Construction and Operations

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

(e) Fire Protection and Emergency Response

Construction and Operations

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

(f) Health Care

Construction and Operations

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

(g) Schools

Construction and Operations

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

(4) Impact on Regional Development

(a) Description

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

(i) Housing

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

(ii) Commercial and Industrial Development

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

(iii) Transportation System Development

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

- It is anticipated that during the construction period, delivery of turbines and other equipment will result in ~~60~~ large trucks per day traveling to the Project area. [The December 21, 2009 filing identified 20 large trucks per day.] [First paragraph, Application, 8-72]

- In addition, smaller vehicles, such as pickups and automobiles, are expected at a rate of approximately 200 per day during construction. [The December 21, 2009 filing identified 100 smaller vehicles per day would travel to the site.] [First paragraph, Application, 8-72]

(b) Compatibility with Regional Plans

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

(D) CULTURAL IMPACT

(1) Landmarks of Cultural Significance

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

(a) Archeological Investigation

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

(b) Architectural Investigation

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

(i) Built Resources

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

(ii) Historic Districts

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

(iii) Rural Schools

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

(iv) Agricultural Properties

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

(v) Individual Properties

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

(2) Estimated Impacts on Landmarks

(a) Archeological Resources

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

(b) Built Resources

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

(3) Consideration of Landmarks

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

(4) Mapping Landmarks

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

(5) Recreational Areas

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

(6) Visual Impacts

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

(E) PUBLIC RESPONSIBILITY**(1) Public Information Program**

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of Table 8-12 being revised to show public meetings and correspondences that have occurred since the filing of the December 21, 2009 OPSB Application. [Application, 8-85]

TABLE 8-12 [REVISED TABLE 8-12, APPLICATION, 8-85 TO 8-87]
Public Meetings and Correspondence

Date	Description
11/20/08	A meeting was held with approximately 200 potential landowners to discuss the Facility and lease options. A presentation was provided outlining all aspects of the Facility.
11/21/08	A tour of the site was conducted with Keith Lott of the ODNR-Division of Wildlife, and Megan Seymour of the USFWS. Both Mr. Lott and Ms. Seymour indicated that they had no specific concerns about the Facility and later confirmed that the Facility area was a low risk to wildlife. This meeting was setup as a pre-survey review of the Facility and included an informal review of the Facility maps and a field review.
1/15/09	A public meeting was held in Paulding County with approximately 50 attendees. A presentation was provided regarding all aspects of the Facility.

TABLE 8-12 [REVISED TABLE 8-12, APPLICATION, 8-85 TO 8-87]
Public Meetings and Correspondence

Date	Description
1/15/09	Meetings were held with the Van Wert County engineer, Paulding County engineer, Van Wert County Commissioners, and two township zoning officers in Paulding County. Potential impacts to county roads and road agreements were discussed with the county engineers. The building permit process was discussed with the township zoning officers. A general wind energy presentation was provided to the Van Wert County Commission and an overview of the Facility was provided. As part of this meeting, there were open discussions about the development, construction, and operation of the Facility. In addition, there were discussions of local permits, road and utility requirements, and the use of town and county roads and ROWs. A meeting was also conducted with the Van Wert Conservation District to discuss important issues relative to local farmers including drainage tile and agricultural land restoration.
2/11/09	A meeting was held with the Paulding County Commissioners to give a general wind energy presentation and to discuss the Facility.
2/12/09	A meeting was held with the principal and a middle school science teacher of Wayne Trace Junior and Senior High (Paulding area) to plan a wind turbine kit project for a science class.
2/12/09	The Paulding County Farm Bureau organized a public meeting and the Applicant gave a presentation about the Facility and how wind energy fits with agriculture.
2/13/09	A meeting was held with the Ohio State University extension office's Professor Andy Kleinschmidt to discuss how wind energy fits with agriculture and possible special construction techniques to minimize impact to heavy clay soils in the area.
2/13/09	A meeting was held with Crestview schools about wind turbine kit projects for science classes.
2/23/09	A presentation was given to Van Wert Lions Club about the Facility.
2/24/09	A presentation was provided to the OPSB, Keith Lott (ODNR) and Dave Snyder (OHPO) to discuss the general Facility details, forecasted surveys, and schedule. The necessary coordination that would be required to move the application forward was also discussed.
3/20/09	A teleconference was held with the Applicant's Project Engineer Jeromy Miceli and Randall Reeder of Ohio State University about ways to mitigate soil damage due to construction activities.
4/2/09	A telephone conversation was held with Mildred Chatterton of the Black Swamp Audubon Society to declare the Applicant's intent to build a Facility and detail the Applicant's ABPP. Ms. Chatterton indicated that she had no concerns about the Facility.
4/2/09	The Applicant attended a tour of the Van Wert Historical society and had further discussions with Joe Steffan regarding the history of the area. Mr. Steffan indicated that he had no concerns about the Facility.
4/2/09	A telephone conversation was held with Bill Beckham of the Paulding Soil and Water Conservation District/Black Swamp Nature Center to declare the Applicant's intent to build the Facility and detail the Applicant's ABPP. Mr. Beckham indicated that he had no concerns about the Facility.
4/23/09	The Applicant spoke with Mrs. Randy Shaffer of the Otto Ehrhart Museum of Natural History and Paulding County Historical Society. Mrs. Shaffer indicated that she had no concerns about the Facility and does not foresee opposition to the Facility.
4/24/09	On Van Wert Arbor Day, the Applicant sponsored the planting of a tree at the reservoir park located south of town.
4/28/09	The Applicant met with Les Weidenhamer of the John Paulding Historical Museum and had a tour of the museum to learn about the agricultural history of the area. Mr. Weidenhamer indicated that he had no concerns about the Facility.

TABLE 8-12 [REVISED TABLE 8-12, APPLICATION , 8-85 TO 8-87]
Public Meetings and Correspondence

Date	Description
5/13/09	A meeting was held with Rahel Babb (OEPA Isolated Wetlands) and a follow-up meeting with David Snyder (OHPO) to introduce the Facility and determine how to best coordinate with them.
5/15/09	A meeting was held with the Van Wert County Soil and Water Conservation District to discuss the Facility and learn how to best coordinate with them.
5/15/09	A meeting was held with Van Wert County Commissioners' Clerk Larry Clouse and Auditor Nancy Dixon to discuss tax issues.
8/13/09	A meeting was held with a resident of the project area to discuss his concerns about noise, shadow flicker, and other items. The Applicant provided him with facts regarding each of these issues. The resident left the meeting comfortable with the Facility's plans.
8/26/09	An email was submitted to area resident to address questions about noise, shadow flicker, wind turbine syndrome, and other items.
9/4/09	A meeting was held with Union Township (in Van Wert County) to discuss the Facility and tax issues. The Township is supportive of the Facility and would like to be assured of receiving adequate tax revenue. Concerns regarding conflicts of interest were also discussed. Potential conflicts of interest were identified by the Township due to township trustees being lessors and also voting to approve a property tax abatement for the Facility.
9/2/09 through 9/9/09	The Applicant had a booth at the Van Wert County fair to meet the public and answer any questions about the Facility. During the fair, all persons who approached the booth indicated positive support for the Facility.
9/24/09	A telephone conversation was conducted with Lynn Army of the Maumee Watershed Conservancy District to discuss collocation with their facilities and agreements that may be needed to cross their drainage easements.
9/29/09	A meeting was held at Lincolnview High School that was organized by Hoaglin Township. This meeting was held to discuss wind energy and property taxes.
10/7/09	The Applicant initiated a miniature wind turbine program at Wayne Trace Junior High.
10/8/09	The Applicant initiated a miniature wind turbine program at Lincolnview High School.
10/8/09	A meeting was held with Union Township to discuss the Facility and tax implications.
10/19/09	A presentation was given to the Crestview School Board to discuss the Facility and taxes.
11/19/09	A public meeting was held for the Facility with assistance from the OPSB.
11/19/09	A meeting was held with Patricia Tebie (OEPA NPDES) and Lynn Army of the Maumee Watershed Conservation District.
11/20/09	A presentation was given to a sophomore science class at Crestview School to discuss technical aspects of the proposed Facility.
1/14/10	<i>Attended Union Township meeting for general project update and tax discussion.</i>
1/26/10	<i>Meeting with Paulding and Van Wert counties and Benton, Blue Creek, Latty, Tully, Union, and Hoaglin townships to discuss a draft road agreement.</i>
1/26/10	<i>Iberdrola representative attended Blue Creek Township meeting for general project update.</i>
1/28/10	<i>Iberdrola Renewables construction site manager Lincoln Phillips attended the Union Township meeting to answer questions about construction process, especially road repair and drainage tile repair.</i>

TABLE 8-12 [REVISED TABLE 8-12, APPLICATION, 8-85 TO 8-87]
Public Meetings and Correspondence

Date	Description
2/8/10	Attended Blue Creek Township Zoning Committee meeting to discuss whether the Township's own zoning regulations would apply to the wind farm.
2/8/10	Attended Van Wert TWIGs meeting for general wind energy presentation.
2/9/10	Attended Hoaglin Township meeting for general discussion on wind energy, including discussions of the potential effects of an operating wind farm, including noise and shadow flicker, and energy subsidies, and taxes.
2/10/10	Attended Paulding County Commissioners' daily session for general project update and discussion of taxes.
2/15/10	Attended Crestview Board of Education meeting for general project update and discussion on taxes.
2/15/10	General wind energy presentation at the Convoy Lions Club meeting.
2/23/10	Iberdrola representative attended Hoaglin Township meeting for discussion on blowing survey debris, Iberdrola's finances, energy subsidies, alleged health effects from wind turbines, and taxes.
3/8/10	Iberdrola representative attended Hoaglin Township Meeting for discussion on shadow flicker, alleged health effects from wind turbines, and taxes.
3/11/10	Attended Union Township meeting for general project update and tax discussion. Also went through the OPSB application to explain where to find certain information.
3/11/10	Paulding County Commissioners' meeting with Latty and Blue Creek township trustees, Wayne Trace Administration and Board of Education, State Senator Steve Buehrer, and Representative Lynn Wachtmann. Gave a presentation on Iberdrola's perspective on taxes in Ohio and participated in a general discussion on wind farm taxes.

(2) Liability Insurance

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

(3) Evaluation of Interference with Radio and Television

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

(a) Microwave

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

(b) **Radio**

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

(c) **Television**

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 section [Application, 8-90]:

- In December 2009, the Applicant performed a TV Broadcast Off-Air Reception Measurement Study for the Facility. Appendix BB, *Comsearch Studies and Communications with NTIA*, has been updated to include a copy of the complete study. 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 to 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. Mitigation measures that may be utilized include any of the following, either singly or in combination:
 - Installation of high-gain television antenna on towers with rotors with a 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 at 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.

- The Applicant would like to clarify that “minimal to no impact” to Weather Surveillance Radar-1988 Doppler weather radar operations, is the lowest rating provided, indicating that no significant impact is expected by the Project.
- The Applicant would like to clarify that updated turbine coordinates provided to the OPSB on March 9, 2010 were filed with the FAA on March 11, 2010.

(d) Cellular and Personal Communication Systems

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

(4) Evaluation of Interference with Military Radar

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, except for the following to be added at the end of the section [Application, 8-91]:

- The Applicant would like to clarify that according to reference correspondence provided in Appendix BB, the Marine Corps does not consider the Project a significant impact and is willing to adjust its training facilities in accordance with the proposed Facility operating layout.

(5) Evaluation of Impact to Roads and Bridges

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

(6) **Plan for Decommissioning**

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 section [Application, 8-96]:

- The Applicant would like to clarify that although it is willing to make available full lease agreements to the Staff under appropriate confidential protection, the relevant language from its standard agreement, which provides specific remediation obligations and timeframes, states:

12.3 Effect of Termination. Upon termination of this Agreement, whether as to the entire Property or only as to part, Lessee shall (i) upon written request by Landowner, execute and record a quitclaim deed to Landowner of all of Lessee's right, title and interest in and to the Property, or to that part thereof as to which this Agreement has been terminated, and (ii) as soon as practicable thereafter, remove i) all under-ground Windpower Facilities down to 48 inches from the surface and ii) all above-ground Windpower Facilities from the Property or portion as to which this Agreement was terminated, exclusive of any continuing right established pursuant to this Agreement to survive the term of this Agreement, and restore the soil surface to a condition reasonably similar to its original condition. If Lessee fails to remove such Windpower Facilities within eighteen (18) months of termination of this Agreement, Landowner may do so, in which case Lessee shall reimburse Landowner for reasonable and actual costs of removal incurred by Landowner, less any salvage value received by Landowner, within thirty (30) days after receipt of an invoice from Landowner. Regardless of the date of termination of this Agreement, Lessee shall have a license to enter the Property during the aforesaid eighteen (18) month period for the purpose of removing above ground Windpower Facilities.

Please note that the Applicant has made slight modifications to this language in response to specific landowner requests, but each of the lease agreements contain

terms which impose at least this level of remediation upon the company in the event of termination or expiration of the lease.

- The Applicant would like to clarify that given the fundamental business structure of wind energy – building a high capital cost generating unit that requires no fuel inputs and only minimal operational expenses in the form of maintenance, land lease payments, and taxes – a functional wind turbine has a high intrinsic value. Therefore, a functioning wind turbine in place is invaluable compared to its salvage value. This rationale also serves to demonstrate the low likelihood of decommissioning the facility before the end of its operational life. Details of the Applicant's investment in the project are confidential but available for Staff review at Counsel's office.
- The Applicant would like to clarify that the primary logic behind leaving the collector lines in place during/after decommissioning is to avoid additional disturbance of field drainage tile. The farm ground in the Project area is highly dependent on a network of underground drainage tile to reduce moisture levels in the soil to the point that modern farming practices are economically feasible. The underground electrical collection system is necessary to collect the electricity generated by each wind turbine and convey it ultimately to the interconnection substation. (Underground electrical lines are generally preferred by farmers and residents of the Project area because, once installed, they do not interfere with normal farming operations in the fields (i.e., no poles for tractors to navigate around) and because they cannot be seen, lessening visual impact). If underground collection lines are required to be removed as part of a decommissioning sequence, there could be several years of continued maintenance required to ensure that all tile lines repaired upon removal were fixed correctly. This will hinder the farmers' attempt to return to normal farming operations. It should also be noted, that even though the lines may be left in place, the company has an obligation to restore the surface topsoil to a depth of 48 inches, which exceeds what is required by most farming practices.

(F) AGRICULTURAL DISTRICT IMPACT**(1) Agricultural District Mapping**

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

(2) Impact Assessment on Agricultural Land

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

- The Facility would disturb some agricultural land temporarily (1,237.3 acres) and occupy some agricultural land permanently (213.2 acres). [The December 21, 2009 filing identified that the Facility would disturb some agricultural land temporarily (782.4 acres) and occupy some agricultural land permanently (230.5 acres)] [First paragraph, Application, 8-96].
- The Applicant would like to clarify the total acreage of temporary and permanent impact to agricultural land—1,003.4 acres of temporary impact and 183.8 acres of permanent impact would occur in Van Wert County, and 234.2 acres of temporary impact and 5.4 acres of permanent impact would occur in Paulding County. Of the acres of impact to agricultural land, 22.4 acres of temporary impact and 5.4 acres of permanent impact would occur within a designated agricultural district in Van Wert County. Of the acres of impact to agricultural land, 22.4 acres of temporary impact and 4.0 acres of permanent impact would be within a designated agricultural district in Paulding County. [To be added at the end of the section, Application, 8-97]

(a) Field Operations

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

(b) Irrigation

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

(c) Field Drainage Systems

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

(3) Mitigation for Agricultural Land Impacts

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

(4) Agricultural Land Viability Assessment

No text changes from the December 21, 2009 Blue Creek OPSB Application text have occurred in this section, with the exception of the following:

The temporary and permanent impact of the construction and operation of the Facility on the viability of agricultural land has been *revised* and is quantified in Table 8-13.

TABLE 8-13 [REVISED, APPLICATION, 8-101]-
Temporary and Permanent Impacts on the Viability of Agricultural Land

Agricultural Land	Temporary Disturbance (acres)	Permanent Disturbance (acres)
Total Agricultural Land	1237.3	213.2
Cultivated Lands	1234.0	213.2
Pasture Land (Permanent)	0.3	0
Managed Wood Lots	0	0
Orchards	0	0
Nurseries	0	0
Livestock and Poultry Confinement Areas	0	0
Agricultural Related Structures	0	0

References

References for the December 21, 2009 Blue Creek Wind Farm OPSB Application have not changed except for the following addition:

Comsearch, December 2009, TV BROADCAST OFF-AIR RECEPTION MEASUREMENT REPORT, Prepared for Iberdrola Renewables for their proposed Dog Creek, Blue Creek, and Prairie Creek Wind Farms.

Appendix K -- Shadow Flicker Analysis Report

Potential shadow flicker impacts were reanalyzed for the revised Project layout presented on Figure 5-10 (see Appendix DD). A summary of results is presented in Section 8 of this report. Residences predicted to have shadow flicker over 30 hours per year decreased from 39 residences in the December 21, 2009 Blue Creek Wind Farm OPSB Application to 11 residences for the revised layout presented in this report. The final shadow flicker report presenting this analysis will be provided to OPSB by May 1, 2010.

Appendix T – Noise Analysis Report

Potential noise impacts were reanalyzed for the revised Project layout presented on Figure 5-10 (see Appendix DD). The final noise report presenting this analysis will be provided following a Noise Review Meeting with OPSB in early May, 2010.

Appendix V – Wetland/Waterbody Delineation Report

A wetland/waterbody delineation survey was performed in March/April 2010 for the revised Project layout presented on Figure 5-10 (see Appendix DD). The final Wetland/Waterbody Delineation Report will be provided to OPSB following completion of analysis and meetings with the U.S. Army Corps of Engineers and Ohio Environmental Protection Agency.

Appendix W – Agency Correspondence

***Additional agency correspondence received since submission of the December 21, 2009
Blue Creek Wind Farm OPSB Application is presented in this appendix.***



March 11, 2010

Ms. Tina Bartunek
Iberdrola Renewables
1125 NW Coach Street, Suite 700
Portland, OR 97209

Re: Blue Creek Project, 10-N-0521.OR.007 (A)

Dear Ms. Bartunek:

Enclosed please find the list of proposed turbine locations along with lighting recommendations for each turbine in the Blue Creek Project. This lighting plan was developed in compliance with the FAA Advisory Circular (AC) 70/7460-1K, Change 2 and on the basis of our discussions with FAA Wind Turbine Obstruction Specialists regarding their current policy. However, final review by FAA could require some changes.

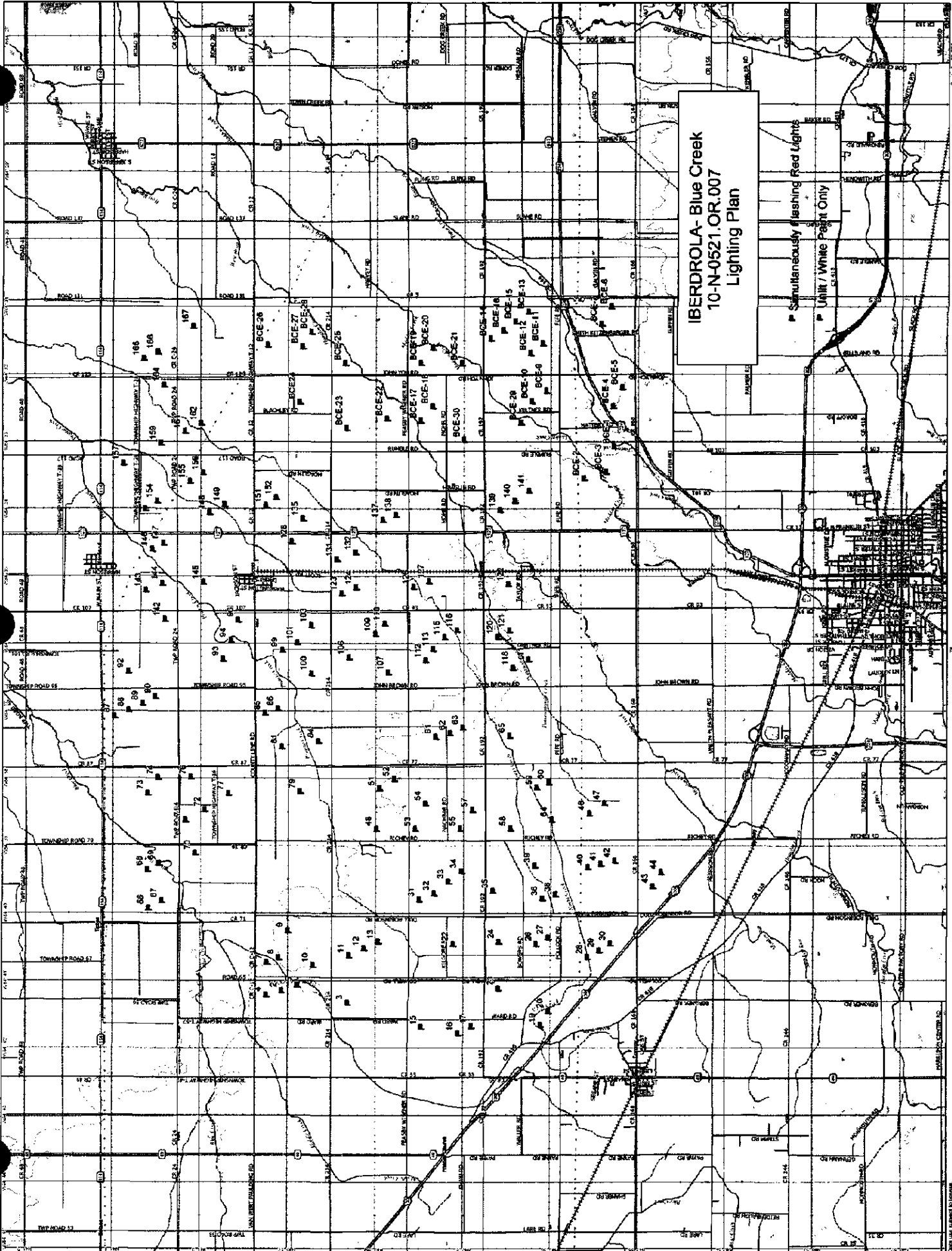
The project was reviewed against the previous ASI Aviation Constraints Study. Some turbines in the western portion may require a survey to receive a Determination of No Hazard from the FAA. Otherwise, the project appears to conform to the constraints depicted in the study.

The lighting plan calls for the lighting of 95 out of 159 wind turbine towers, the equivalent of 60% overall. Please note any changes to the project may require the development of a new lighting plan. As requested, ASI has electronically filed wind turbines with the FAA and copies of these submittals have been sent to the State of Ohio for their records. The FAA Filing Summary of these submittals are also enclosed for your records.

Sincerely,

Jerry Chavkin
Vice-President, Airspace Operations

Enclosures: Wind Turbine List
Map
FAA Filing Summary



IBERDROLA RENEWABLES

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Scott, Ohio

Structure ID	LATITUDE			LONGITUDE			Elevation (AGL)(Ft)	Turbine Ht(AGL)	Total Height	Recommended Marking/Lighting	FAA Aeronautical Study Number
	Deg	Min	Sec	Deg	Min	Sec					
2	40	59	1.97	84	41	10.75	755	428	1183	NONE	2010-WTE-2973
3	40	58	17.03	84	41	21.37	760	428	1188	SFRL	2010-WTE-2971
4	40	59	12.67	84	41	14.63	755	428	1183	SFRL	2010-WTE-2970
5	40	58	51.49	84	41	5.77	755	428	1183	SFRL	2010-WTE-2969
7	40	59	12.14	84	40	45.65	755	428	1183	SFRL	2010-WTE-2968
8	40	59	3.81	84	40	41.58	755	428	1183	NONE	2010-WTE-3034
9	40	58	57.75	84	40	17.49	755	428	1183	SFRL	2010-WTE-2967
10	40	58	40.51	84	40	48.29	755	428	1183	NONE	2010-WTE-3033
11	40	58	16.03	84	40	39.45	755	428	1183	SFRL	2010-WTE-2966
12	40	58	5.68	84	40	33.15	755	428	1183	NONE	2010-WTE-3032
13	40	57	55.80	84	40	27.12	760	428	1188	SFRL	2010-WTE-2965
15	40	57	26.45	84	41	43.41	760	428	1188	SFRL	2010-WTE-2964
16	40	57	1.53	84	41	48.95	765	428	1193	SFRL	2010-WTE-2963
17	40	56	52.23	84	41	42.68	765	428	1193	SFRL	2010-WTE-2962
19	40	56	4.83	84	41	41.62	770	428	1198	SFRL	2010-WTE-2961
20	40	55	59.45	84	41	29.17	770	428	1198	SFRL	2010-WTE-2960
21	40	56	33.71	84	41	8.80	765	428	1193	SFRL	2010-WTE-2959
22	40	57	4.82	84	40	29.42	765	428	1193	SFRL	2010-WTE-2958
24	40	56	33.34	84	40	27.17	765	428	1193	NONE	2010-WTE-3031
26	40	56	7.62	84	40	29.54	770	428	1198	NONE	2010-WTE-3030
27	40	55	59.37	84	40	23.35	770	428	1198	SFRL	2010-WTE-2957
28	40	55	32.29	84	40	41.28	765	428	1193	SFRL	2010-WTE-2956
29	40	55	24.35	84	40	35.32	770	428	1198	NONE	2010-WTE-3029
30	40	55	16.49	84	40	28.98	770	428	1198	SFRL	2010-WTE-2955
31	40	57	28.27	84	39	49.64	760	428	1188	SFRL	2010-WTE-2954
32	40	57	17.96	84	39	44.18	765	428	1193	NONE	2010-WTE-3028
33	40	57	8.08	84	39	33.60	760	428	1188	NONE	2010-WTE-3027
34	40	56	59.39	84	39	24.11	765	428	1193	NONE	2010-WTE-3026
35	40	56	37.67	84	39	42.20	765	428	1193	SFRL	2010-WTE-2953
36	40	56	3.74	84	39	48.83	765	428	1193	NONE	2010-WTE-3025
38	40	55	54.66	84	39	45.12	765	428	1193	NONE	2010-WTE-3024
39	40	56	8.80	84	39	19.32	765	428	1193	NONE	2010-WTE-3023
40	40	55	32.33	84	39	20.95	765	428	1193	SFRL	2010-WTE-2952
41	40	55	23.22	84	39	18.12	765	428	1193	NONE	2010-WTE-3022
42	40	55	13.88	84	39	15.25	765	428	1193	SFRL	2010-WTE-2951
43	40	54	47.61	84	39	38.12	765	428	1193	SFRL	2010-WTE-2950
44	40	54	41.92	84	39	25.88	765	428	1193	SFRL	2010-WTE-2949
46	40	55	31.34	84	38	33.27	760	428	1188	NONE	2010-WTE-3021
47	40	55	20.97	84	38	24.07	760	428	1188	SFRL	2010-WTE-2948
48	40	57	57.37	84	38	46.93	755	428	1183	SFRL	2010-WTE-2947
51	40	57	55.39	84	38	10.70	750	428	1178	NONE	2010-WTE-3020
52	40	57	45.36	84	38	2.34	755	428	1183	NONE	2010-WTE-3019

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Structure ID	LATITUDE			LONGITUDE			Elevation (AGL)(Ft)	Turbine Ht.(AGL)	Total Height	Recommended Marking/Lighting	FAA Aeronautical Study Number
	Deg	Min	Sec	Deg	Min	Sec					
53	40	57	30.80	84	38	46.89	755	428	1183	NONE	2010-WTE-3018
54	40	57	23.89	84	38	24.04	755	428	1183	NONE	2010-WTE-3017
55	40	57	0.10	84	38	46.52	760	428	1188	NONE	2010-WTE-3016
57	40	56	51.73	84	38	29.79	760	428	1188	SFRL	2010-WTE-2946
58	40	56	25.34	84	38	46.49	760	428	1188	SFRL	2010-WTE-2945
59	40	56	7.59	84	38	10.05	760	428	1188	NONE	2010-WTE-3015
60	40	55	59.26	84	38	5.51	760	428	1188	SFRL	2010-WTE-2944
61	40	57	16.70	84	37	24.79	750	428	1178	SFRL	2010-WTE-2943
62	40	57	7.17	84	37	21.41	750	428	1178	NONE	2010-WTE-3014
63	40	56	58.40	84	37	16.64	755	428	1183	NONE	2010-WTE-3013
64	40	55	57.17	84	38	38.72	760	428	1188	NONE	2010-WTE-3012
65	40	56	26.01	84	37	23.73	755	428	1183	SFRL	2010-WTE-2942
66	41	0	33.40	84	39	57.45	745	428	1173	SFRL	2010-WTE-2941
67	41	0	24.43	84	39	51.17	745	428	1173	SFRL	2010-WTE-2940
68	41	0	34.23	84	39	23.14	745	428	1173	SFRL	2010-WTE-2939
69	41	0	26.42	84	39	17.54	745	428	1173	SFRL	2010-WTE-2938
70	41	0	1.40	84	39	8.29	750	428	1178	SFRL	2010-WTE-2937
71	41	0	8.23	84	38	38.88	745	428	1173	SFRL	2010-WTE-2936
72	40	59	54.90	84	38	29.74	745	428	1173	NONE	2010-WTE-3011
73	41	0	33.89	84	38	15.16	745	428	1173	SFRL	2010-WTE-2935
74	41	0	26.93	84	38	1.36	740	428	1168	SFRL	2010-WTE-2934
76	41	0	4.64	84	38	1.17	745	428	1173	SFRL	2010-WTE-2933
77	40	59	38.62	84	38	15.29	750	428	1178	SFRL	2010-WTE-2932
79	40	58	49.81	84	38	13.93	750	428	1178	SFRL	2010-WTE-2931
81	40	59	1.91	84	37	34.05	745	428	1173	NONE	2010-WTE-3010
84	40	58	36.86	84	37	28.62	750	428	1178	NONE	2010-WTE-3009
85	40	59	13.62	84	37	3.96	745	428	1173	SFRL	2010-WTE-2930
86	40	59	4.74	84	37	0.04	745	428	1173	NONE	2010-WTE-3008
87	41	0	56.63	84	37	6.86	740	428	1168	SFRL	2010-WTE-2929
88	41	0	47.18	84	37	1.30	740	428	1168	NONE	2010-WTE-3007
89	41	0	37.42	84	36	55.48	740	428	1168	NONE	2010-WTE-3006
90	41	0	28.71	84	36	49.11	740	428	1168	SFRL	2010-WTE-2928
92	41	0	47.40	84	36	26.88	740	428	1168	SFRL	2010-WTE-2927
93	40	59	42.32	84	36	15.72	740	428	1168	SFRL	2010-WTE-2926
94	40	59	37.20	84	35	59.02	740	428	1168	NONE	2010-WTE-3005
96	40	59	32.14	84	35	40.64	740	428	1168	NONE	2010-WTE-3004
99	40	59	1.83	84	36	7.94	740	428	1168	SFRL	2010-WTE-2925
100	40	58	41.95	84	36	28.48	745	428	1173	SFRL	2010-WTE-2924
101	40	58	51.43	84	36	0.93	740	428	1168	NONE	2010-WTE-3003
103	40	58	42.05	84	35	45.46	745	428	1173	NONE	2010-WTE-3002
106	40	58	16.27	84	36	13.99	745	428	1173	SFRL	2010-WTE-2923
107	40	57	49.52	84	36	27.76	750	428	1178	NONE	2010-WTE-3001

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	Deg	Min	Sec	Deg	Min	Sec					
109	40	57	58.28	84	35	53.27	745	428	1173	NONE	2010-WTE-3000
110	40	57	51.83	84	35	43.74	745	428	1173	NONE	2010-WTE-2999
112	40	57	23.79	84	36	16.83	750	428	1178	SFRL	2010-WTE-2922
113	40	57	18.65	84	36	6.36	750	428	1178	NONE	2010-WTE-2998
115	40	57	10.82	84	35	56.13	750	428	1178	NONE	2010-WTE-2997
116	40	57	2.29	84	35	49.39	750	428	1178	NONE	2010-WTE-2996
118	40	56	23.79	84	36	23.44	755	428	1183	NONE	2010-WTE-2995
119	40	56	13.30	84	36	15.84	755	428	1183	SFRL	2010-WTE-2921
120	40	56	34.26	84	35	55.78	750	428	1178	NONE	2010-WTE-2994
121	40	56	26.42	84	35	49.66	750	428	1178	SFRL	2010-WTE-2920
122	40	56	27.15	84	35	8.55	750	428	1178	SFRL	2010-WTE-2919
123	40	58	21.32	84	35	16.82	745	428	1173	NONE	2010-WTE-2993
124	40	58	11.42	84	35	11.47	745	428	1173	NONE	2010-WTE-2992
126	40	57	32.16	84	35	11.03	745	428	1173	NONE	2010-WTE-2991
127	40	57	21.77	84	35	5.89	750	428	1178	SFRL	2010-WTE-2918
128	40	58	55.31	84	34	31.08	740	428	1168	SFRL	2010-WTE-2917
131	40	58	24.43	84	34	46.61	745	428	1173	NONE	2010-WTE-2990
132	40	58	11.66	84	34	40.71	745	428	1173	SFRL	2010-WTE-2916
135	40	58	47.87	84	34	10.55	740	428	1168	NONE	2010-WTE-2989
137	40	57	52.97	84	34	11.71	745	428	1173	SFRL	2010-WTE-2915
138	40	57	44.32	84	34	6.95	745	428	1173	NONE	2010-WTE-2988
139	40	56	32.85	84	34	2.64	745	428	1173	SFRL	2010-WTE-2914
140	40	56	22.79	84	33	54.53	750	428	1178	NONE	2010-WTE-2987
141	40	56	13.05	84	33	45.66	750	428	1178	SFRL	2010-WTE-2913
142	41	0	22.44	84	35	40.03	735	428	1163	SFRL	2010-WTE-2912
143	41	0	35.20	84	35	14.33	735	428	1163	SFRL	2010-WTE-2911
144	41	0	24.00	84	35	8.15	735	428	1163	NONE	2010-WTE-2986
145	40	59	55.98	84	35	7.18	735	428	1163	SFRL	2010-WTE-2910
146	41	0	30.85	84	34	37.89	730	428	1158	SFRL	2010-WTE-2909
147	41	0	23.41	84	34	32.42	735	428	1163	NONE	2010-WTE-2985
148	40	59	51.72	84	34	4.97	735	428	1163	NONE	2010-WTE-2984
149	40	59	41.61	84	33	57.76	735	428	1163	SFRL	2010-WTE-2908
151	40	59	13.10	84	33	58.76	740	428	1168	NONE	2010-WTE-2983
152	40	59	6.05	84	33	51.78	740	428	1168	SFRL	2010-WTE-2907
153	41	0	35.74	84	34	1.94	730	428	1158	SFRL	2010-WTE-2906
154	41	0	27.60	84	33	55.11	730	428	1158	NONE	2010-WTE-2982
155	41	0	5.30	84	33	37.20	735	428	1163	SFRL	2010-WTE-2905
156	40	59	56.19	84	33	29.66	735	428	1163	SFRL	2010-WTE-2904
157	41	0	50.82	84	33	21.32	730	428	1158	SFRL	2010-WTE-2903
159	41	0	25.09	84	33	3.30	730	428	1158	SFRL	2010-WTE-2902
161	41	0	8.61	84	32	52.90	730	428	1158	NONE	2010-WTE-2981
162	40	59	57.40	84	32	45.57	730	428	1158	SFRL	2010-WTE-2901

**IBERDROLA RENEWABLES
BLUE CREEK PROJECT
10-N-0521.OR.007 (A)
Scott, Ohio**

Structure ID	LATITUDE			LONGITUDE			Elevation (AGL)(Ft)	Turbine Ht.(AGL)	Total Height	Recommended Marking/Lighting	FAA Aeronautical Study Number
	Deg	Min	Sec	Deg	Min	Sec					
164	41	0	22.84	84	32	11.41	730	428	1158	SFRL	2010-WTE-2900
165	41	0	36.58	84	31	47.92	730	428	1158	SFRL	2010-WTE-2899
166	41	0	26.86	84	31	42.09	730	428	1158	SFRL	2010-WTE-2898
167	41	0	2.98	84	31	19.42	730	428	1158	SFRL	2010-WTE-2897
BCE-1	40	55	14.47	84	33	6.31	750	428	1178	SFRL	2010-WTE-2896
BCE-10	40	56	10.94	84	32	25.64	750	428	1178	NONE	2010-WTE-2980
BCE-11	40	56	3.44	84	31	34.11	745	428	1173	SFRL	2010-WTE-2895
BCE-12	40	56	12.09	84	31	43.15	750	428	1178	NONE	2010-WTE-2979
BCE-13	40	56	13.31	84	31	6.18	745	428	1173	SFRL	2010-WTE-2894
BCE-14	40	56	39.27	84	31	30.26	745	428	1173	SFRL	2010-WTE-2893
BCE-15	40	56	22.10	84	31	14.67	745	428	1173	NONE	2010-WTE-2978
BCE-16	40	56	30.29	84	31	22.76	745	428	1173	NONE	2010-WTE-2977
BCE-17	40	57	27.19	84	32	43.09	745	428	1173	SFRL	2010-WTE-2892
BCE-18	40	57	19.00	84	32	30.15	745	428	1173	NONE	2010-WTE-2976
BCE-19	40	57	27.15	84	31	51.69	745	428	1173	SFRL	2010-WTE-2891
BCE-2	40	55	35.20	84	33	34.55	755	428	1183	SFRL	2010-WTE-2890
BCE-20	40	57	18.87	84	31	37.82	740	428	1168	SFRL	2010-WTE-2889
BCE-21	40	56	59.20	84	31	51.93	745	428	1173	SFRL	2010-WTE-2888
BCE-22	40	57	50.28	84	32	41.08	740	428	1168	SFRL	2010-WTE-2887
BCE-23	40	58	17.78	84	32	49.55	740	428	1168	SFRL	2010-WTE-2886
BCE-24	40	58	49.87	84	32	26.33	740	428	1168	SFRL	2010-WTE-2885
BCE-25	40	58	18.79	84	31	52.03	735	428	1163	SFRL	2010-WTE-2884
BCE-26	40	59	12.00	84	31	35.79	735	428	1163	SFRL	2010-WTE-2883
BCE-27	40	58	47.93	84	31	37.36	735	428	1163	NONE	2010-WTE-2975
BCE-28	40	58	41.86	84	31	24.37	735	428	1163	SFRL	2010-WTE-2882
BCE-29	40	56	18.60	84	32	44.88	745	428	1173	NONE	2010-WTE-2974
BCE-3	40	55	19.95	84	33	28.69	755	428	1183	NONE	2010-WTE-3035
BCE-30	40	56	57.56	84	33	0.28	745	428	1173	SFRL	2010-WTE-2881
BCE-4	40	55	15.07	84	32	30.28	755	428	1183	NONE	2010-WTE-2972
BCE-5	40	55	8.85	84	32	13.30	755	428	1183	SFRL	2010-WTE-2880
BCE-6	40	55	16.36	84	31	1.54	750	428	1178	SFRL	2010-WTE-2879
BCE-7	40	55	23.07	84	31	17.12	745	428	1173	SFRL	2010-WTE-2878
BCE-9	40	56	1.07	84	32	16.44	750	428	1178	SFRL	2010-WTE-2877

All Turbine Structures are White.

SFRL - Simultaneously Flashing Red Lights/White Paint

NONE - Unlit/White Paint only.



**Federal Aviation
Administration**

« OE/AAA

Notice of Proposed Construction or Alteration - Off Airport












Project Name: IBERD-000141645-10

Sponsor: Iberdrola Renewables




















Project Summary : IBERD-000141645-10



















Structure	City, State	Lat/Long	Map	Actions	Latest Letter
T2 0521.OR.007 (A) Accepted 2010-WTE-2973-OE	Scott, OH	40° 59' 1.97" N 84° 41' 10.75" W	Show Map	Create Fax Cover Upload a PDF	None
T3 Accepted 2010-WTE-2971-OE	Scott, OH	40° 58' 17.03" N 84° 41' 21.37" W	Show Map	Create Fax Cover Upload a PDF	None
T4 Accepted 2010-WTE-2970-OE	Scott, OH	40° 59' 12.67" N 84° 41' 14.63" W	Show Map	Create Fax Cover Upload a PDF	None
T5 Accepted 2010-WTE-2969-OE	Scott, OH	40° 58' 51.49" N 84° 41' 5.77" W	Show Map	Create Fax Cover Upload a PDF	None
T7 Accepted 2010-WTE-2968-OE	Scott, OH	40° 59' 12.14" N 84° 40' 45.65" W	Show Map	Create Fax Cover Upload a PDF	None
T8 Accepted 2010-WTE-3034-OE	Scott, OH	40° 59' 3.81" N 84° 40' 41.58" W	Show Map	Create Fax Cover Upload a PDF	None
T9 Accepted 2010-WTE-2967-OE	Scott, OH	40° 58' 57.75" N 84° 40' 17.49" W	Show Map	Create Fax Cover Upload a PDF	None
T10 Accepted 2010-WTE-3033-OE	Scott, OH	40° 58' 40.51" N 84° 40' 48.29" W	Show Map	Create Fax Cover Upload a PDF	None
T11 Accepted 2010-WTE-2966-OE	Scott, OH	40° 58' 16.03" N 84° 40' 39.45" W	Show Map	Create Fax Cover Upload a PDF	None
T12 Accepted 2010-WTE-3032-OE	Scott, OH	40° 58' 5.68" N 84° 40' 33.15" W	Show Map	Create Fax Cover Upload a PDF	None
T13 Accepted 2010-WTE-2965-OE	Scott, OH	40° 57' 55.80" N 84° 40' 27.12" W	Show Map	Create Fax Cover Upload a PDF	None
T15 Accepted 2010-WTE-2964-OE	Scott, OH	40° 57' 26.45" N 84° 41' 43.41" W	Show Map	Create Fax Cover Upload a PDF	None
T16 Accepted 2010-WTE-2963-OE	Scott, OH	40° 57' 1.53" N 84° 41' 48.95" W	Show Map	Create Fax Cover Upload a PDF	None
T17 Accepted 2010-WTE-2962-OE	Scott, OH	40° 56' 52.23" N 84° 41' 42.68" W	Show Map	Create Fax Cover Upload a PDF	None





T19 Accepted 2010-WTE-2961-OE	Scott, OH	40° 56' 4.83" N 84° 41' 41.62" W	 Show Map	Create Fax Cover Upload a PDF	None
T20 Accepted 2010-WTE-2960-OE	Scott, OH	40° 55' 59.45" N 84° 41' 29.17" W	 Show Map	Create Fax Cover Upload a PDF	None
T21 Accepted 2010-WTE-2959-OE	Scott, OH	40° 56' 33.71" N 84° 41' 8.80" W	 Show Map	Create Fax Cover Upload a PDF	None
T22 Accepted 2010-WTE-2958-OE	Scott, OH	40° 57' 4.82" N 84° 40' 29.42" W	 Show Map	Create Fax Cover Upload a PDF	None
T24 Accepted 2010-WTE-3031-OE	Scott, OH	40° 56' 33.34" N 84° 40' 27.17" W	 Show Map	Create Fax Cover Upload a PDF	None
T26 Accepted 2010-WTE-3030-OE	Scott, OH	40° 56' 7.62" N 84° 40' 29.54" W	 Show Map	Create Fax Cover Upload a PDF	None
T27 Accepted 2010-WTE-2957-OE	Scott, OH	40° 55' 59.37" N 84° 40' 23.35" W	 Show Map	Create Fax Cover Upload a PDF	None
T28 Accepted 2010-WTE-2956-OE	Scott, OH	40° 55' 32.29" N 84° 40' 41.28" W	 Show Map	Create Fax Cover Upload a PDF	None
T29 Accepted 2010-WTE-3029-OE	Scott, OH	40° 55' 24.35" N 84° 40' 35.32" W	 Show Map	Create Fax Cover Upload a PDF	None
T30 Accepted 2010-WTE-2955-OE	Scott, OH	40° 55' 16.49" N 84° 40' 28.98" W	 Show Map	Create Fax Cover Upload a PDF	None
T31 Accepted 2010-WTE-2954-OE	Scott, OH	40° 57' 28.27" N 84° 39' 49.64" W	 Show Map	Create Fax Cover Upload a PDF	None
T32 Accepted 2010-WTE-3028-OE	Scott, OH	40° 57' 17.96" N 84° 39' 44.18" W	 Show Map	Create Fax Cover Upload a PDF	None
T33 Accepted 2010-WTE-3027-OE	Scott, OH	40° 57' 8.08" N 84° 39' 33.60" W	 Show Map	Create Fax Cover Upload a PDF	None
T34 Accepted 2010-WTE-3026-OE	Scott, OH	40° 56' 59.39" N 84° 39' 24.11" W	 Show Map	Create Fax Cover Upload a PDF	None
T35 Accepted 2010-WTE-2953-OE	Scott, OH	40° 56' 37.67" N 84° 39' 42.20" W	 Show Map	Create Fax Cover Upload a PDF	None
T36 Accepted 2010-WTE-3025-OE	Scott, OH	40° 56' 3.74" N 84° 39' 48.83" W	 Show Map	Create Fax Cover Upload a PDF	None
T38 Accepted 2010-WTE-3024-OE	Scott, OH	40° 55' 54.66" N 84° 39' 45.12" W	 Show Map	Create Fax Cover Upload a PDF	None
T39 Accepted 2010-WTE-3023-OE	Scott, OH	40° 56' 8.80" N 84° 39' 19.32" W	 Show Map	Create Fax Cover Upload a PDF	None
T40 Accepted 2010-WTE-2952-OE	Scott, OH	40° 55' 32.33" N 84° 39' 20.95" W	 Show Map	Create Fax Cover Upload a PDF	None

T41 Accepted 2010-WTE-3022-OE	Scott, OH	40° 55' 23.22" N 84° 39' 18.12" W	 Show Map	Create Fax Cover Upload a PDF	None
T42 Accepted 2010-WTE-2951-OE	Scott, OH	40° 55' 13.88" N 84° 39' 15.25" W	 Show Map	Create Fax Cover Upload a PDF	None
T43 Accepted 2010-WTE-2950-OE	Scott, OH	40° 54' 47.61" N 84° 39' 38.12" W	 Show Map	Create Fax Cover Upload a PDF	None
T44 Accepted 2010-WTE-2949-OE	Scott, OH	40° 54' 41.92" N 84° 39' 25.88" W	 Show Map	Create Fax Cover Upload a PDF	None
T46 Accepted 2010-WTE-3021-OE	Scott, OH	40° 55' 31.34" N 84° 38' 33.27" W	 Show Map	Create Fax Cover Upload a PDF	None
T47 Accepted 2010-WTE-2948-OE	Scott, OH	40° 55' 20.97" N 84° 38' 24.07" W	 Show Map	Create Fax Cover Upload a PDF	None
T48 Accepted 2010-WTE-2947-OE	Scott, OH	40° 57' 57.37" N 84° 38' 46.93" W	 Show Map	Create Fax Cover Upload a PDF	None
T51 Accepted 2010-WTE-3020-OE	Scott, OH	40° 57' 55.39" N 84° 38' 10.70" W	 Show Map	Create Fax Cover Upload a PDF	None
T52 Accepted 2010-WTE-3019-OE	Scott, OH	40° 57' 45.36" N 84° 38' 2.34" W	 Show Map	Create Fax Cover Upload a PDF	None
T53 Accepted 2010-WTE-3018-OE	Scott, OH	40° 57' 30.80" N 84° 38' 46.89" W	 Show Map	Create Fax Cover Upload a PDF	None
T54 Accepted 2010-WTE-3017-OE	Scott, OH	40° 57' 23.89" N 84° 38' 24.04" W	 Show Map	Create Fax Cover Upload a PDF	None
T55 Accepted 2010-WTE-3016-OE	Scott, OH	40° 57' 0.10" N 84° 38' 46.52" W	 Show Map	Create Fax Cover Upload a PDF	None
T57 Accepted 2010-WTE-2946-OE	Scott, OH	40° 56' 51.73" N 84° 38' 29.79" W	 Show Map	Create Fax Cover Upload a PDF	None
T58 Accepted 2010-WTE-2945-OE	Scott, OH	40° 56' 25.34" N 84° 38' 46.49" W	 Show Map	Create Fax Cover Upload a PDF	None
T59 Accepted 2010-WTE-3015-OE	Scott, OH	40° 56' 7.59" N 84° 38' 10.05" W	 Show Map	Create Fax Cover Upload a PDF	None
T60 Accepted 2010-WTE-2944-OE	Scott, OH	40° 55' 59.26" N 84° 38' 5.51" W	 Show Map	Create Fax Cover Upload a PDF	None
T61 Accepted 2010-WTE-2943-OE	Scott, OH	40° 57' 16.70" N 84° 37' 24.79" W	 Show Map	Create Fax Cover Upload a PDF	None
T62 Accepted 2010-WTE-3014-OE	Scott, OH	40° 57' 7.17" N 84° 37' 21.41" W	 Show Map	Create Fax Cover Upload a PDF	None
T63 Accepted 2010-WTE-3013-OE	Scott, OH	40° 56' 58.40" N 84° 37' 16.64" W	 Show Map	Create Fax Cover Upload a PDF	None













T64 Accepted 2010-WTE-3012-OE	Scott, OH	40° 55' 57.17" N 84° 38' 38.72" W	 Show Map	Create Fax Cover Upload a PDF	None
T65 Accepted 2010-WTE-2942-OE	Scott, OH	40° 56' 26.01" N 84° 37' 23.73" W	 Show Map	Create Fax Cover Upload a PDF	None
T66 Accepted 2010-WTE-2941-OE	Scott, OH	41° 0' 33.40" N 84° 39' 57.45" W	 Show Map	Create Fax Cover Upload a PDF	None
T67 Accepted 2010-WTE-2940-OE	Scott, OH	41° 0' 24.43" N 84° 39' 51.17" W	 Show Map	Create Fax Cover Upload a PDF	None
T68 Accepted 2010-WTE-2939-OE	Scott, OH	41° 0' 34.23" N 84° 39' 23.14" W	 Show Map	Create Fax Cover Upload a PDF	None
T69 Accepted 2010-WTE-2938-OE	Scott, OH	41° 0' 26.42" N 84° 39' 17.54" W	 Show Map	Create Fax Cover Upload a PDF	None
T70 Accepted 2010-WTE-2937-OE	Scott, OH	41° 0' 1.40" N 84° 39' 8.29" W	 Show Map	Create Fax Cover Upload a PDF	None
T71 Accepted 2010-WTE-2936-OE	Scott, OH	41° 0' 8.23" N 84° 38' 38.88" W	 Show Map	Create Fax Cover Upload a PDF	None
T72 Accepted 2010-WTE-3011-OE	Scott, OH	40° 59' 54.90" N 84° 38' 29.74" W	 Show Map	Create Fax Cover Upload a PDF	None
T73 Accepted 2010-WTE-2935-OE	Scott, OH	41° 0' 33.89" N 84° 38' 15.16" W	 Show Map	Create Fax Cover Upload a PDF	None
T74 Accepted 2010-WTE-2934-OE	Scott, OH	41° 0' 26.93" N 84° 38' 1.36" W	 Show Map	Create Fax Cover Upload a PDF	None
T76 Accepted 2010-WTE-2933-OE	Scott, OH	41° 0' 4.64" N 84° 38' 1.17" W	 Show Map	Create Fax Cover Upload a PDF	None
T77 Accepted 2010-WTE-2932-OE	Scott, OH	40° 59' 38.62" N 84° 38' 15.29" W	 Show Map	Create Fax Cover Upload a PDF	None
T79 Accepted 2010-WTE-2931-OE	Scott, OH	40° 58' 49.81" N 84° 38' 13.93" W	 Show Map	Create Fax Cover Upload a PDF	None
T81 Accepted 2010-WTE-3010-OE	Scott, OH	40° 59' 1.91" N 84° 37' 34.05" W	 Show Map	Create Fax Cover Upload a PDF	None
T84 Accepted 2010-WTE-3009-OE	Scott, OH	40° 58' 36.86" N 84° 37' 28.62" W	 Show Map	Create Fax Cover Upload a PDF	None
T85 Accepted 2010-WTE-2930-OE	Scott, OH	40° 59' 13.62" N 84° 37' 3.96" W	 Show Map	Create Fax Cover Upload a PDF	None
T86 Accepted 2010-WTE-3008-OE	Scott, OH	40° 59' 4.74" N 84° 37' 0.04" W	 Show Map	Create Fax Cover Upload a PDF	None
T87 Accepted 2010-WTE-2929-OE	Scott, OH	41° 0' 56.63" N 84° 37' 6.86" W	 Show Map	Create Fax Cover Upload a PDF	None

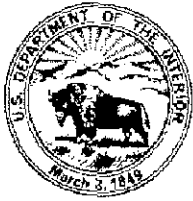
T88 Accepted 2010-WTE-3007-OE	Scott, OH	41° 0' 47.18" N 84° 37' 1.30" W	 Show Map	Create Fax Cover Upload a PDF	None
T89 Accepted 2010-WTE-3006-OE	Scott, OH	41° 0' 37.42" N 84° 36' 55.48" W	 Show Map	Create Fax Cover Upload a PDF	None
T90 Accepted 2010-WTE-2928-OE	Scott, OH	41° 0' 28.71" N 84° 36' 49.11" W	 Show Map	Create Fax Cover Upload a PDF	None
T92 Accepted 2010-WTE-2927-OE	Scott, OH	41° 0' 47.40" N 84° 36' 26.88" W	 Show Map	Create Fax Cover Upload a PDF	None
T93 Accepted 2010-WTE-2926-OE	Scott, OH	40° 59' 42.32" N 84° 36' 15.72" W	 Show Map	Create Fax Cover Upload a PDF	None
T94 Accepted 2010-WTE-3005-OE	Scott, OH	40° 59' 37.20" N 84° 35' 59.02" W	 Show Map	Create Fax Cover Upload a PDF	None
T96 Accepted 2010-WTE-3004-OE	Scott, OH	40° 59' 32.14" N 84° 35' 40.64" W	 Show Map	Create Fax Cover Upload a PDF	None
T99 Accepted 2010-WTE-2925-OE	Scott, OH	40° 59' 1.83" N 84° 36' 7.94" W	 Show Map	Create Fax Cover Upload a PDF	None
T100 Accepted 2010-WTE-2924-OE	Scott, OH	40° 58' 41.95" N 84° 36' 28.48" W	 Show Map	Create Fax Cover Upload a PDF	None
T101 Accepted 2010-WTE-3003-OE	Scott, OH	40° 58' 51.43" N 84° 36' 0.93" W	 Show Map	Create Fax Cover Upload a PDF	None
T103 Accepted 2010-WTE-3002-OE	Scott, OH	40° 58' 42.05" N 84° 35' 45.46" W	 Show Map	Create Fax Cover Upload a PDF	None
T106 Accepted 2010-WTE-2923-OE	Scott, OH	40° 58' 16.27" N 84° 36' 13.99" W	 Show Map	Create Fax Cover Upload a PDF	None
T107 Accepted 2010-WTE-3001-OE	Scott, OH	40° 57' 49.52" N 84° 36' 27.76" W	 Show Map	Create Fax Cover Upload a PDF	None
T109 Accepted 2010-WTE-3000-OE	Scott, OH	40° 57' 58.28" N 84° 35' 53.27" W	 Show Map	Create Fax Cover Upload a PDF	None
T110 Accepted 2010-WTE-2999-OE	Scott, OH	40° 57' 51.83" N 84° 35' 43.74" W	 Show Map	Create Fax Cover Upload a PDF	None
T112 Accepted 2010-WTE-2922-OE	Scott, OH	40° 57' 23.79" N 84° 36' 16.83" W	 Show Map	Create Fax Cover Upload a PDF	None
T113 Accepted 2010-WTE-2998-OE	Scott, OH	40° 57' 18.65" N 84° 36' 6.36" W	 Show Map	Create Fax Cover Upload a PDF	None
T115 Accepted 2010-WTE-2997-OE	Scott, OH	40° 57' 10.82" N 84° 35' 56.13" W	 Show Map	Create Fax Cover Upload a PDF	None
T116 Accepted 2010-WTE-2996-OE	Scott, OH	40° 57' 2.29" N 84° 35' 49.39" W	 Show Map	Create Fax Cover Upload a PDF	None

T118 Accepted 2010-WTE-2995-OE	Scott, OH	40° 56' 23.79" N 84° 36' 23.44" W	 Show Map	Create Fax Cover Upload a PDF	None
T119 Accepted 2010-WTE-2921-OE	Scott, OH	40° 56' 13.30" N 84° 36' 15.84" W	 Show Map	Create Fax Cover Upload a PDF	None
T120 Accepted 2010-WTE-2994-OE	Scott, OH	40° 56' 34.26" N 84° 35' 55.78" W	 Show Map	Create Fax Cover Upload a PDF	None
T121 Accepted 2010-WTE-2920-OE	Scott, OH	40° 56' 26.42" N 84° 35' 49.66" W	 Show Map	Create Fax Cover Upload a PDF	None
T122 Accepted 2010-WTE-2919-OE	Scott, OH	40° 56' 27.15" N 84° 35' 8.55" W	 Show Map	Create Fax Cover Upload a PDF	None
T123 Accepted 2010-WTE-2993-OE	Scott, OH	40° 58' 21.32" N 84° 35' 16.82" W	 Show Map	Create Fax Cover Upload a PDF	None
T124 Accepted 2010-WTE-2992-OE	Scott, OH	40° 58' 11.42" N 84° 35' 11.47" W	 Show Map	Create Fax Cover Upload a PDF	None
T126 Accepted 2010-WTE-2991-OE	Scott, OH	40° 57' 32.16" N 84° 35' 11.03" W	 Show Map	Create Fax Cover Upload a PDF	None
T127 Accepted 2010-WTE-2918-OE	Scott, OH	40° 57' 21.77" N 84° 35' 5.89" W	 Show Map	Create Fax Cover Upload a PDF	None
T128 Accepted 2010-WTE-2917-OE	Scott, OH	40° 58' 55.31" N 84° 34' 31.08" W	 Show Map	Create Fax Cover Upload a PDF	None
T131 Accepted 2010-WTE-2990-OE	Scott, OH	40° 58' 24.43" N 84° 34' 46.61" W	 Show Map	Create Fax Cover Upload a PDF	None
T132 Accepted 2010-WTE-2916-OE	Scott, OH	40° 58' 11.66" N 84° 34' 40.71" W	 Show Map	Create Fax Cover Upload a PDF	None
T135 Accepted 2010-WTE-2989-OE	Scott, OH	40° 58' 47.87" N 84° 34' 10.55" W	 Show Map	Create Fax Cover Upload a PDF	None
T137 Accepted 2010-WTE-2915-OE	Scott, OH	40° 57' 52.97" N 84° 34' 11.71" W	 Show Map	Create Fax Cover Upload a PDF	None
T138 Accepted 2010-WTE-2988-OE	Scott, OH	40° 57' 44.32" N 84° 34' 6.95" W	 Show Map	Create Fax Cover Upload a PDF	None
T139 Accepted 2010-WTE-2914-OE	Scott, OH	40° 56' 32.85" N 84° 34' 2.64" W	 Show Map	Create Fax Cover Upload a PDF	None
T140 Accepted 2010-WTE-2987-OE	Scott, OH	40° 56' 22.79" N 84° 33' 54.53" W	 Show Map	Create Fax Cover Upload a PDF	None
T141 Accepted 2010-WTE-2913-OE	Scott, OH	40° 56' 13.05" N 84° 33' 45.66" W	 Show Map	Create Fax Cover Upload a PDF	None
T142 Accepted 2010-WTE-2912-OE	Scott, OH	41° 0' 22.44" N 84° 35' 40.03" W	 Show Map	Create Fax Cover Upload a PDF	None

T143 Accepted 2010-WTE-2911-OE	Scott, OH	41° 0' 35.20" N 84° 35' 14.33" W	 Show Map	Create Fax Cover Upload a PDF	None
T144 Accepted 2010-WTE-2986-OE	Scott, OH	41° 0' 24.00" N 84° 35' 8.15" W	 Show Map	Create Fax Cover Upload a PDF	None
T145 Accepted 2010-WTE-2910-OE	Scott, OH	40° 59' 55.98" N 84° 35' 7.18" W	 Show Map	Create Fax Cover Upload a PDF	None
T146 Accepted 2010-WTE-2909-OE	Scott, OH	41° 0' 30.85" N 84° 34' 37.89" W	 Show Map	Create Fax Cover Upload a PDF	None
T147 Accepted 2010-WTE-2985-OE	Scott, OH	41° 0' 23.41" N 84° 34' 32.42" W	 Show Map	Create Fax Cover Upload a PDF	None
T148 Accepted 2010-WTE-2984-OE	Scott, OH	40° 59' 51.72" N 84° 34' 4.97" W	 Show Map	Create Fax Cover Upload a PDF	None
T149 Accepted 2010-WTE-2908-OE	Scott, OH	40° 59' 41.61" N 84° 33' 57.76" W	 Show Map	Create Fax Cover Upload a PDF	None
T151 Accepted 2010-WTE-2983-OE	Scott, OH	40° 59' 13.10" N 84° 33' 58.76" W	 Show Map	Create Fax Cover Upload a PDF	None
T152 Accepted 2010-WTE-2907-OE	Scott, OH	40° 59' 6.05" N 84° 33' 51.78" W	 Show Map	Create Fax Cover Upload a PDF	None
T153 Accepted 2010-WTE-2906-OE	Scott, OH	41° 0' 35.74" N 84° 34' 1.94" W	 Show Map	Create Fax Cover Upload a PDF	None
T154 Accepted 2010-WTE-2982-OE	Scott, OH	41° 0' 27.60" N 84° 33' 55.11" W	 Show Map	Create Fax Cover Upload a PDF	None
T155 Accepted 2010-WTE-2905-OE	Scott, OH	41° 0' 5.30" N 84° 33' 37.20" W	 Show Map	Create Fax Cover Upload a PDF	None
T156 Accepted 2010-WTE-2904-OE	Scott, OH	40° 59' 56.19" N 84° 33' 29.66" W	 Show Map	Create Fax Cover Upload a PDF	None
T157 Accepted 2010-WTE-2903-OE	Scott, OH	41° 0' 50.82" N 84° 33' 21.32" W	 Show Map	Create Fax Cover Upload a PDF	None
T159 Accepted 2010-WTE-2902-OE	Scott, OH	41° 0' 25.09" N 84° 33' 3.30" W	 Show Map	Create Fax Cover Upload a PDF	None
T161 Accepted 2010-WTE-2981-OE	Scott, OH	41° 0' 8.61" N 84° 32' 52.90" W	 Show Map	Create Fax Cover Upload a PDF	None
T162 Accepted 2010-WTE-2901-OE	Scott, OH	40° 59' 57.40" N 84° 32' 45.57" W	 Show Map	Create Fax Cover Upload a PDF	None
T164 Accepted 2010-WTE-2900-OE	Scott, OH	41° 0' 22.84" N 84° 32' 11.41" W	 Show Map	Create Fax Cover Upload a PDF	None
T165 Accepted 2010-WTE-2899-OE	Scott, OH	41° 0' 36.58" N 84° 31' 47.92" W	 Show Map	Create Fax Cover Upload a PDF	None

T166 Accepted 2010-WTE-2898-OE	Scott, OH	41° 0' 26.86" N 84° 31' 42.09" W	 Show Map	Create Fax Cover Upload a PDF	None
T167 Accepted 2010-WTE-2897-OE	Scott, OH	41° 0' 2.98" N 84° 31' 19.42" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-1 Accepted 2010-WTE-2896-OE	Scott, OH	40° 55' 14.47" N 84° 33' 6.31" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-10 Accepted 2010-WTE-2980-OE	Scott, OH	40° 56' 10.94" N 84° 32' 25.64" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-11 Accepted 2010-WTE-2895-OE	Scott, OH	40° 56' 3.44" N 84° 31' 34.11" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-12 Accepted 2010-WTE-2979-OE	Scott, OH	40° 56' 12.09" N 84° 31' 43.15" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-13 Accepted 2010-WTE-2894-OE	Scott, OH	40° 56' 13.31" N 84° 31' 6.18" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-14 Accepted 2010-WTE-2893-OE	Scott, OH	40° 56' 39.27" N 84° 31' 30.26" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-15 Accepted 2010-WTE-2978-OE	Scott, OH	40° 56' 22.10" N 84° 31' 14.67" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-16 Accepted 2010-WTE-2977-OE	Scott, OH	40° 56' 30.29" N 84° 31' 22.76" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-17 Accepted 2010-WTE-2892-OE	Scott, OH	40° 57' 27.19" N 84° 32' 43.09" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-18 Accepted 2010-WTE-2976-OE	Scott, OH	40° 57' 19.00" N 84° 32' 30.15" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-19 Accepted 2010-WTE-2891-OE	Scott, OH	40° 57' 27.15" N 84° 31' 51.69" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-2 Accepted 2010-WTE-2890-OE	Scott, OH	40° 55' 35.20" N 84° 33' 34.55" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-20 Accepted 2010-WTE-2889-OE	Scott, OH	40° 57' 18.87" N 84° 31' 37.82" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-21 Accepted 2010-WTE-2888-OE	Scott, OH	40° 56' 59.20" N 84° 31' 51.93" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-22 Accepted 2010-WTE-2887-OE	Scott, OH	40° 57' 50.28" N 84° 32' 41.08" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-23 Accepted 2010-WTE-2886-OE	Scott, OH	40° 58' 17.78" N 84° 32' 49.55" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-24 Accepted 2010-WTE-2885-OE	Scott, OH	40° 58' 49.87" N 84° 32' 26.33" W	 Show Map	Create Fax Cover Upload a PDF	None

TBCE-25 Accepted 2010-WTE-2884-OE	Scott, OH	40° 58' 18.79" N 84° 31' 52.03" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-26 Accepted 2010-WTE-2883-OE	Scott, OH	40° 59' 12.00" N 84° 31' 35.79" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-27 Accepted 2010-WTE-2975-OE	Scott, OH	40° 58' 47.93" N 84° 31' 37.36" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-28 Accepted 2010-WTE-2882-OE	Scott, OH	40° 58' 41.86" N 84° 31' 24.37" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-29 Accepted 2010-WTE-2974-OE	Scott, OH	40° 56' 18.60" N 84° 32' 44.88" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-3 Accepted 2010-WTE-3035-OE	Scott, OH	40° 55' 19.95" N 84° 33' 28.69" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-30 Accepted 2010-WTE-2881-OE	Scott, OH	40° 56' 57.56" N 84° 33' 0.28" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-4 Accepted 2010-WTE-2972-OE	Scott, OH	40° 55' 15.07" N 84° 32' 30.28" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-5 Accepted 2010-WTE-2880-OE	Scott, OH	40° 55' 8.85" N 84° 32' 13.30" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-6 Accepted 2010-WTE-2879-OE	Scott, OH	40° 55' 16.36" N 84° 31' 1.54" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-7 Accepted 2010-WTE-2878-OE	Scott, OH	40° 55' 23.07" N 84° 31' 17.12" W	 Show Map	Create Fax Cover Upload a PDF	None
TBCE-9 Accepted 2010-WTE-2877-OE	Scott, OH	40° 56' 1.07" N 84° 32' 16.44" W	 Show Map	Create Fax Cover Upload a PDF	None



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
4625 Morse Road, Suite 104
Columbus, Ohio 43230
(614) 416-8993 / FAX (614) 416-8994

January 26, 2010

TAILS # 31420-2010-TA-0136

Mr. Jim O'Dell
Ohio Power Siting Board
180 East Broad St.
Columbus, OH 43215-3793

Re: Blue Creek Wind Farm, 09-1066-EL-BGN

Dear Mr. O'Dell:

This is in reference to the proposed Blue Creek Wind Farm, proposed by Heartland Wind, LLC, whose sole member and manager is Iberdrola Renewables, Inc. The proposed project will be located in Van Wert and Paulding Counties, Ohio. The Service received your December 22, 2009 letter requesting our review of the Application for informational completeness, and we are providing this written response.

The proposed project involves the construction and operation of a 350 megawatt (MW) wind power development, including the installation of up to 175 individual wind turbines of between 1.5 and 2.4 MW (total number of turbines will depend on the capacity of the model selected, but the entire facility will generate 350 MW). In addition to the turbines, access roads, collection lines, three substations, one interconnect substation, two permanent meteorological facilities, a temporary concrete batch plant and a operation and maintenance building will also be constructed. The project is located within an approximately 40,500 acre area in Benton, Blue Creek and Latty townships in Paulding County, and in Tully, Union, and Hoaglin Townships, in VanWert County, Ohio.

The Service, Iberdrola Renewables, Inc., their representatives, and the Ohio Department of Natural Resources (ODNR) have been involved in site planning and review of the proposal for approximately one year. We have participated in meetings, we conducted a site visit on November 21, 2008, and engaged in multiple discussions and e-mails regarding proposed wildlife (bird and bat) survey protocols for this project. We submitted a letter on February 3, 2009 regarding the proposed pre-construction wildlife survey protocol for the proposed project, and general wildlife concerns relative to the project area and provided another letter on November 17, 2009 describing the survey results. We submit this information to you to document that Heartland Wind, LLC and Iberdrola Renewables, Inc. have been working collaboratively with the Service to address potential wildlife, habitat, and natural resource issues in advance of applying to the Ohio Power Siting Board for certification of this proposed project.

Below are our comments regarding completeness of the Application:

Wildlife surveys for both birds and bats have been completed, following the "minimum" standard protocol as recommended by ODNR's On-Shore Bird and Bat Pre- and Post-Construction Monitoring Protocol for Commercial Wind Energy Facilities in Ohio. Bird surveys consisted of a raptor nest search; no breeding bird surveys were required. A final report for the bird surveys was submitted to the Service for review and comment in late 2009. The Service responded with a letter dated November 17, 2009 and stated that,

"overall, the intense agricultural use of the project area, the lack of significant habitat areas, and the low density of inhabited raptor nests within the project area indicate low potential risk to nesting raptors." Further, no bald or golden eagle nests occur within 5 miles of the project site, therefore no impact on these species are anticipated.

To further minimize the potential for impacts to birds, the Application describes minimization measures that will be implemented onsite, including installation of two permanent meteorological towers that do not require guy wires (pg. 3-9) and following the Avian Power Line Interaction Committee's guidelines for raptor protection on power lines (pg. 5-23). These measures should help to abate potential bird mortality. Page 5-45 of the application is the only reference to lighting that was found in the document, and this indicates that lighting of the turbines will be consistent with FAA guidelines. We request that additional information regarding the lighting protocol be provided. Turbines and meteorological towers should have the fewest number of lights permitted by the Federal Aviation Administration (FAA). Preferably these will be white lights with the minimum intensity, and number of flashes per minute (longest strobe) allowable by the FAA. Lights around substations or auxiliary structures should be down-shielded, equipped with motion sensors, or turned off when not in use. We request a list and/or map of the turbines that will be lit, and the lighting protocol for each.

Based on the location of the site, the agricultural nature of the project area, and the extremely limited availability of natural habitat, the Service believes that, while some limited bird mortality of birds is likely to occur, substantial mortality is unlikely. However we do request that pages 4-6 and 2-8 of the application be updated to include some discussion of impacts to wildlife from operational mortality at the facility.

The Migratory Bird Treaty Act prohibits the taking, killing, possession, transportation, and importation of migratory birds, their eggs, parts, and nests, except when specifically authorized by the Department of the Interior. While the MBTA has no provision for allowing unauthorized take, the FWS recognizes that some birds may be taken during activities such as wind turbine construction and operation even if all reasonable measures to avoid take are implemented. There is no threshold as to the number of birds incidentally killed by wind power sites, or other industry, past which the Service will seek to initiate enforcement action. However, the Service is less likely to prioritize enforcement action against a site operator that is cooperative in seeking and implementing measures to mitigate takes of protected wildlife. The Service's Office of Law Enforcement carries out its mission to protect migratory birds not only through investigation and enforcement, but also through fostering relationships with individuals and industries that proactively seek to eliminate their impacts on migratory birds. Although it is not possible under the MBTA to absolve individuals, companies, or agencies from liability (even if they implement avian mortality avoidance or similar conservation measures), the Office of Law Enforcement focuses on those individuals, companies, or agencies that take migratory birds with disregard for their actions and the law, especially when conservation measures have been developed but are not properly implemented.

As noted in the Application, bat acoustic surveys have been completed, however a final report will not be available until spring 2010. A final report on the results of the surveys should be submitted to the Service for our review. Until this final report is submitted, we are unable to provide substantial feedback regarding potential impacts to bats. However, the Service has indicated previously in our November 17, 2009 letter that potential impacts to the federally endangered Indiana bat are unlikely to occur.

Page 3-7 indicates that the preferred wind turbine generator will begin producing electricity when wind speed reaches approximately 3 meters per second. Does this mean that the turbine blades will not spin at all when wind speeds are below 3 m/s? This should be further described in the application, as it has potential implications for bat conservation.

Page 5-26 describes that a 40-foot wide corridor will be cleared for access roads, a 20-foot wide corridor will be cleared for collection lines below ground, and a 100-foot corridor will be cleared for collection lines above ground. We note and appreciate that the below ground collection line and access road corridor

widths are considerably smaller than some other projects we have reviewed. However we have several concerns relative to the corridor widths:

1. We note and appreciate that impacts to forested habitat are being avoided as much as possible by siting all turbines outside of wooded areas, however, impacts to 4.7 acres of woodlots from installation of roads and collection lines is proposed. The Service strongly recommends against siting of infrastructure in wooded areas. If wooded areas are to be cleared, we request additional information on tree species composition, average tree diameter, and acreage of impact for each forested parcel.
2. We note that many of the proposed turbines have collection lines and access roads on separate alignments, necessitating a larger impact area than if these two corridors were collocated. This is particularly of concern where either the access road or collection line would result in impacts to streams, wetlands, or forest areas. Several examples of this include: collection line from turbine 14; access road between turbines 26 and 37; collection line from turbine 95; collection line from turbine 90, and the collection line from turbine 132. Please document if it is possible to adjust access roads and collection lines to preserve additional wildlife habitat by minimizing impacts to forest habitat.

We note and appreciate that a complete stream and wetland delineation was conducted prior to submittal of this application. Page 4-11 should indicate that a "stream and wetland delineation" was completed (as opposed to a "jurisdictional wetland and waterbody survey"). While the Application provides a description of the water resources within the project area, it does not quantify any proposed impacts to these water resources. The application notes on page 4-11 that access roads and collection lines may cross streams or wetlands, that large streams will be avoided as much as possible, and that wetland impacts to only Category 1 wetlands, and totaling less than 0.5 acres are anticipated. Further, it states that open-cut collection line installation will be used within farmed and linear wetlands, and horizontal directional drilling (HDD) techniques will be used for collection lines crossing larger streams. We request a summary of the crossing technique for each stream or wetland, for all roads and collection lines. Further, we request a summary of total proposed impacts to waters of the United States. This should be included on or near page 7-19 of the application. In general, we recommend that HDD be used for perennial stream crossings and for those stream crossing locations that support a forested riparian zone to protect the water quality and wildlife habitat functions these areas support. Tree clearing along stream banks should be minimized as much as possible, to maintain channel stability. HDD should incorporate the stream, the riparian area, and any designated 100 year floodplains.

The wetland delineation describes the highest quality wetlands within the project area located along the forested riparian zone of Hoaglin Creek at the south end of the project area. Wetlands WMAINCF, WAMINCH, WMAINCI, WMAINCJ, and WMAINCK are located in this area. We are concerned with the proposed impact of the collection line crossing at this location. Could the line be relocated to a crossing spot south or north of this riparian zone to minimize the potential for fill and forest fragmentation? Or will HDD be implemented at this location to avoid impacts?

We are concerned with the proposed installation of a 115 kV collection line on/along Taylor Road between Leitner and Fife, which crosses through a forest/wetland complex. Please describe how this forest/wetland area will be impacted, and any avoidance or minimization measures, such as HDD, that will be implemented.

Page 7-22 of the application describes mitigation requirements, but only relative to the Storm Water Pollution Prevention Plan. No discussion of compensatory mitigation for stream or wetland impacts is provided. We request a description of any anticipated compensatory mitigation, relative to proposed fill within waters of the United States.

We note and appreciate that page 8-53 describes that a post-construction wildlife monitoring protocol will be developed in conjunction with ODNR and the Service. Implementation of the post-construction monitoring protocol should be made a condition of any issued certificate.

Page 8-50 indicates that tree clearing in large forest stands will occur from November 1 through April 1 where deemed necessary. The Service typically recommends that any clearing of forested habitat within the proposed project area be conducted between October 1 and April 1 to protect bats and migratory birds that may be using that habitat. This clearing should also not occur until all required permits (ex, Section 404 permit from Corps of Engineers, Certificate of Environmental Compatibility and Need from OPSB) are obtained.

Page 5-23 states that the 6 miles of above-ground collection line will require a 100-foot wide corridor of clearing, but that these vegetation impacts are only temporary. We note that typically above-ground electric lines have maintained right-of-ways where vegetation is maintained at low heights. We request a description of the long-term maintenance planned for the 100-foot above ground collection line corridors. As a general comment, we note that the maps provided in exhibits 5-2 and 5-3 were not in color and hence it was very difficult to distinguish between various land cover types and symbols on the maps. In the future, it would be helpful to have color maps or grayscale maps with clearer symbology.

The Service appreciates the opportunity to comment on this application, and looks forward to continued collaboration on this project. If you have questions, or if we may be of further assistance in this matter, please contact Megan Seymour at extension 16 in this office.

Sincerely,

Mary Knapp, Ph.D.
Field Supervisor

cc: Keith Lott, ODNR, 2514 Cleveland Road East, Huron, OH 44839

Appendix Z – Archaeology and Architecture Reports

Potential impacts on cultural resources for the revised Project layout presented on Figure 5-10 (see Appendix DD) are currently being evaluated via additional surveys. A final report presenting the finding for these surveys will be provided upon completion of surveys and consultation with the Ohio Historical Society.

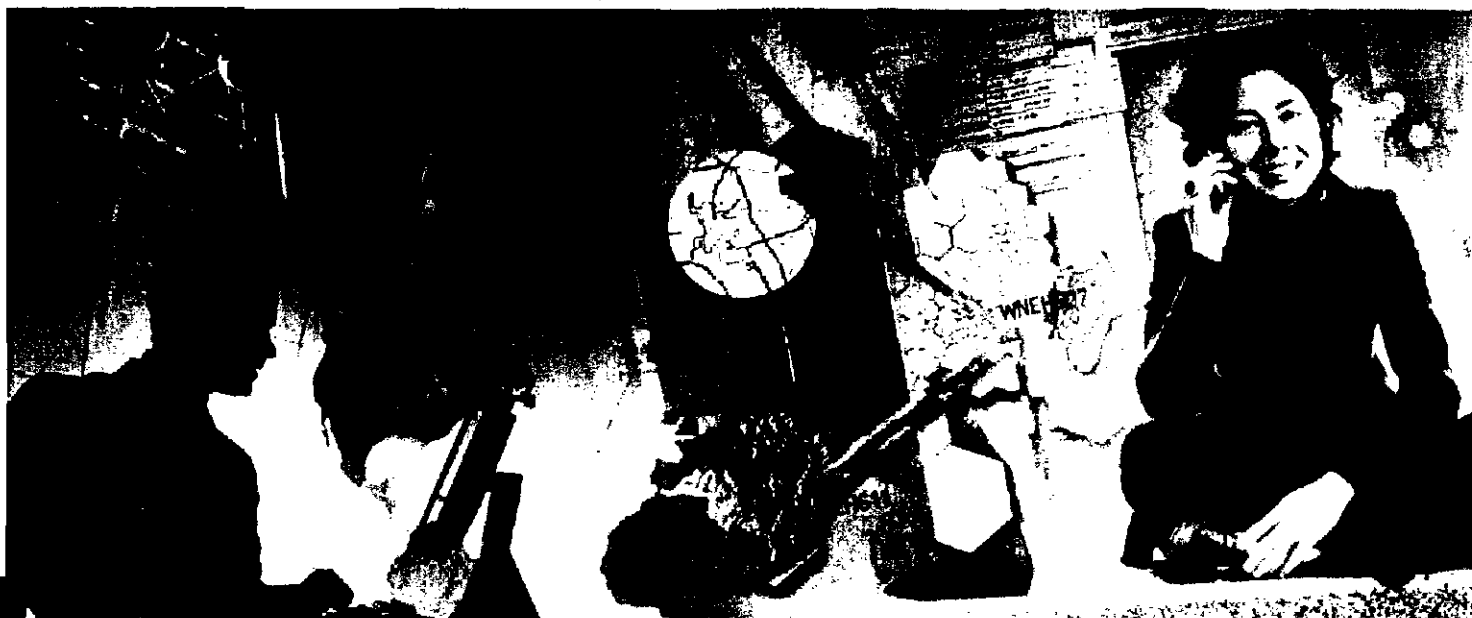
Appendix BB – COMSEARCH Studies and Communications with NTIA

The final COMSEARCH report titled “TV BROADCAST OFF-AIR RECEPTION MEASUREMENT REPORT” for the Blue Creek, Dog Creek and Prairie Creek Wind Farms is included in this appendix.



COMSEARCH

An Andrew Company



**TV BROADCAST
OFF-AIR RECEPTION
MEASUREMENT REPORT**

Prepared For

Iberdola Renewables

For their proposed

Dog Creek, Blue Creek and Prairie Creek Wind Farms

December 2009

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ATTACHMENTS

1: Title 47—Telecommunications Part 73—Radio Broadcast Services

SECTION

ONE

SECTION 1

INTRODUCTION AND BACKGROUND

1.1 Introduction

On-site TV Broadcast Off-Air measurements were performed on behalf of Iberdola Renewables of Portland, Oregon for their proposed Dog Creek, Blue Creek and Prairie Creek Wind Farms on December 1, 2009 at twenty site locations.

The purpose of these measurements was to identify and document Off-Air Television (TV) reception (TV channels). These measurements establish baseline conditions for the reception of each Off-Air TV channel by determining each TV channel signal strength reception level and evaluating the video and audio quality at each selected site. The purpose of this report is to document the results of these measurements. The analysis in this report is based upon the following:

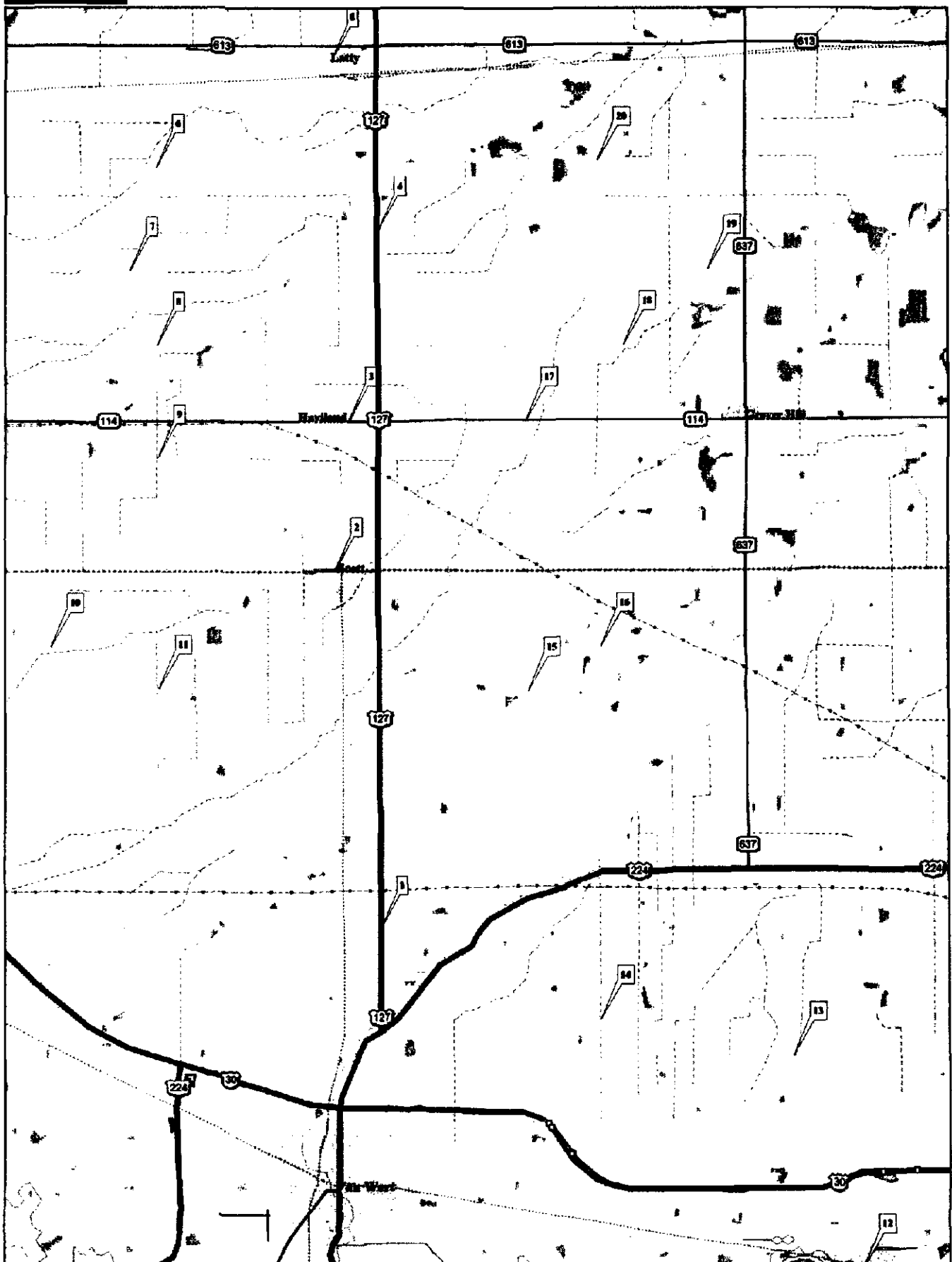
- Video Quality Rating
- Code of Federal Regulations Title 47, Part 73, Section 73.685 (Attachment 1)
- Television channels
- Type of Reception: Analog and Digital
- Measured Centerline: The test antenna was mounted 6 feet above ground level

1.2 Background

Comsearch was contracted by Iberdola Renewables, of Portland, Oregon to establish the baseline conditions of Off-Air TV reception in the study area. Twenty locations were selected to provide a broad coverage of the study area. The test site locations are shown in Figure 1.2-1.

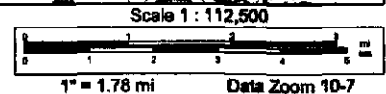
To determine which areas to be measured, Comsearch performed an analysis using the FCC and its own database to determine the TV broadcasters in the area surrounding The Wind Farms and identified areas which could potentially be affected by the construction of the wind turbines (propagation obstruction, ghosting and multipath). Figure 1.2-1 shows the test locations in relation to the wind energy area.

After the wind energy facility is built measurements can be made at all sites where signal blockage, multi-path, ghosting and/or electromagnetic noise is reported and/or suspected. These measurements will be compared to the baseline measurements reported here to determine whether the degraded affects are the result of the presence of the wind turbines. If the measurements and analysis verify signal blockage, multipath, ghosting and/or electromagnetic noise due to the wind turbines, Comsearch can provide consulting services to Iberdola Renewables to mitigate the conditions.



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FIGURE 1.2-1



1.3 Constraints

The analysis in this report is based upon the following assumptions and constraints.

- The test antenna gains are based on the information supplied by WinStar's RV-2000 VHF/FM/UHF antenna.
- It is assumed that during the measurement period all of the TV broadcast transmitters were active and operating at full transmit power for the licensed frequencies unless otherwise noted.
- The signal identification and channels analyzed are based upon information obtained from CEA Antenna Web Selector Site.
- All azimuths are in degrees true north.
- The Video Quality was rated using the following criteria:

Analog Video Quality Criteria

- 1 Cable Quality- Perfect.
- 2 Some noise but excellent picture.
- 3 Good quality, but noticeable sparkles. Good but not excellent.
- 4 Fair quality, noticeable noise, sparkles, and distortion.
- 5 Intermittent video. Not viewable, unacceptable.
- 6 No detected video.

Digital Video Quality Criteria

- 1 Cable Quality – Perfect
- 2 Some video blocking/freezing occurring
- 3 No video detected

SECTION

TWO

SECTION 2

TEST PROCEDURE

2.1 Calibration

Figure 2.1-1 is the block diagram of the TV broadcast test set. All test equipment used was allowed a proper warm-up period prior to calibration. The test set was calibrated by the signal substitution method, utilizing the signal generator output from the HP86630L. The calibrated reference at (-10 dBm) from the signal generator was injected into the end of the coaxial cable of the test set at the point that normally connects to the test antenna. An HP E4407B spectrum analyzer then measures the reference signal level after passing through the test set. At this point, the HP E4407B spectrum analyzer is calibrated such that the displayed signal on the spectrum analyzer displays the losses of the testing system at each individual frequency. Upon completion of the calibration process, a known reference level is obtained for the measurements that correspond to a given set of spectrum analyzer readings.

The following formula is used to transform the measured signal level as initially viewed on the spectrum analyzer display (dBm) as seen at the point and time of testing to an isotropic reference signal level (dBm_i) as adjusted by the Dell computer software program in the output display of the spectrum photographs.

$$\text{dBm}_i = \text{LI} - \text{GA}$$

Where: dBm_i = Isotropic level in dBm

LI = Level (dBm) of injected signal

GA = Test antenna gain

For TV channels 2 to 13:

$$\begin{aligned}\text{dBm}_i &= -10 \text{ dBm} - 15.5 \text{ dB} \\ &= -25.5 \text{ dBm}_i\end{aligned}$$

For TV channels 14 to 69:

$$\begin{aligned}\text{dBm}_i &= -10 \text{ dBm} - 19.5 \text{ dB} \\ &= -29.5 \text{ dBm}_i\end{aligned}$$

Therefore, the proper gain needs to be applied dependent on the TV broadcast channel measured. The gains have been applied to each spectrum photograph included in this report. Figures 2.1-2 (A) (B) (C) display the spectrum photographs of the described calibration procedures employed during the TV broadcast measurements.

2.2 Methodology

Upon arriving at the measurement site, coordinates were obtained using GPS instrumentation. Photographs were taken to document the site and are included in this report.

After site coordinates were verified, the test equipment was set up to measure the RF environment. Measurements were conducted at 20 locations in the vicinity of the wind projects. After the equipment set up was completed, the test antenna was mounted on an extendable tower and elevated to a height of 6 feet above the ground level. The antenna was rotated 360 degrees (scanning) while in the horizontal plane while monitoring the TV monitor and spectrum analyzer. The test antenna was peaked on each channel of interest and the azimuth, signal level and the video quality rating was recorded and included in this report (Tables 4.1-1 through 4.20-1, Video Quality). Video recording of each TV channel was performed for a 5 second period. These video recordings will be retained with Comsearch.

Upon completion of the RF testing, the measured signal levels were transposed from dBm to dBuV/m after accounting for the gain of the test antenna, and the bandwidth factor of the spectrum analyzer.

The following is a description on how the conversion of the data from dBm to dBuV/m (dB above one $\mu\text{V/m}$) was accomplished. The data was converted to dBuV/m to compare it with the minimum field strength levels outlined in FCC 47CFR73.685 (a). Below is set of two formulas that were used to convert the measured signals in dBm to field strength measurements in dBuV/m.

First the isotropic receive level in dBm was converted to field strength in V/m using the formula below:

$$E = (480 * \pi^2 * P_m / \lambda^2)^{1/2}$$

Where: λ = the wavelength (= c/f)

c = speed of light

f = frequency in Hz

P_m = Power measured in Watts

$$\text{Watts} = (10^{(P_{\text{dBm}}/10)})/1000$$

P_{dBm} = Power in dBm

E = Field Strength in V/m

Last the field strength in V/m was converted to field strength in dBuV/m (dB above 1μV/m) using the formula below:

$$E_{dB} = 20 \log (E * 1 \times 10^6)$$

Where: E = Field Strength in V/m

E_{dB} = Field Strength in dBuV/m

1×10^6 = is the conversion factor used to covert from V/m to μV/m

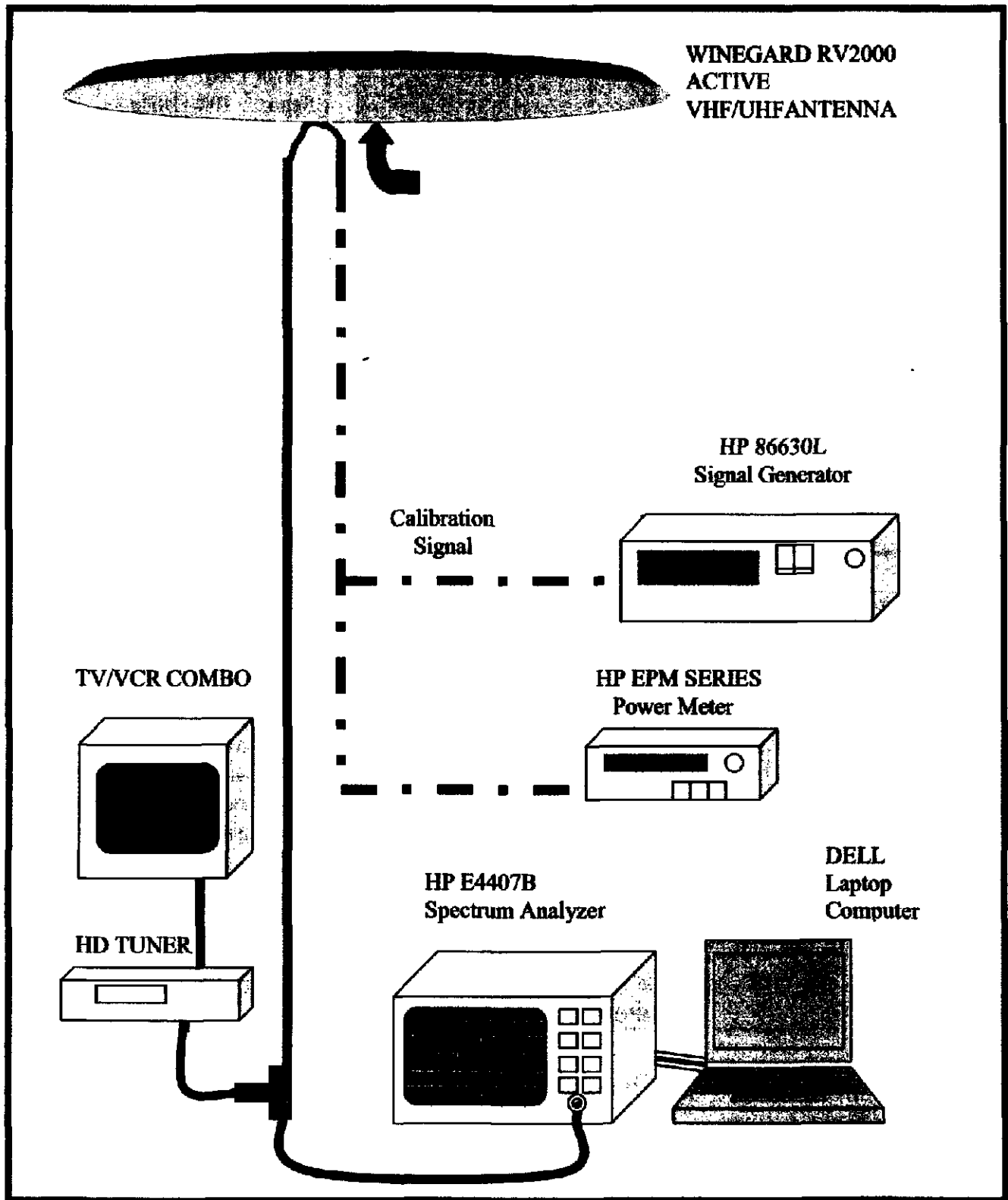
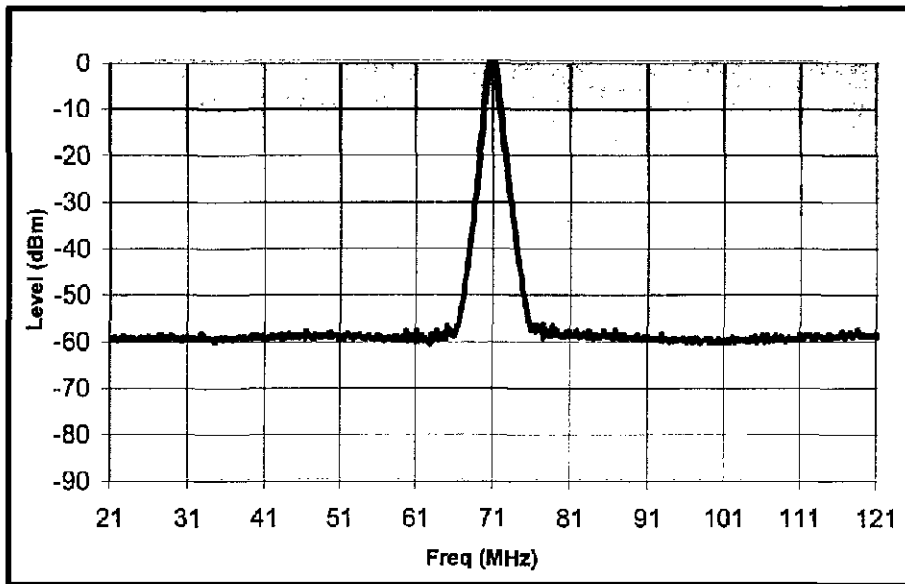


Figure 2.1-1 Test Equipment Block Diagram

Dog Creek, Blue Creek and Prairie Creek Wind Farms

Iberdola Renewables



(A)

Date: 11/30/2009
Center Freq: 71 MHz
Span: 100 MHz
Res. Bandwidth: 1 MHz

0 dBm, 71 MHz signal indication on the spectrum photograph represents a -10 dBm signal being injected at the point where the test cable connects to the output of the test antenna

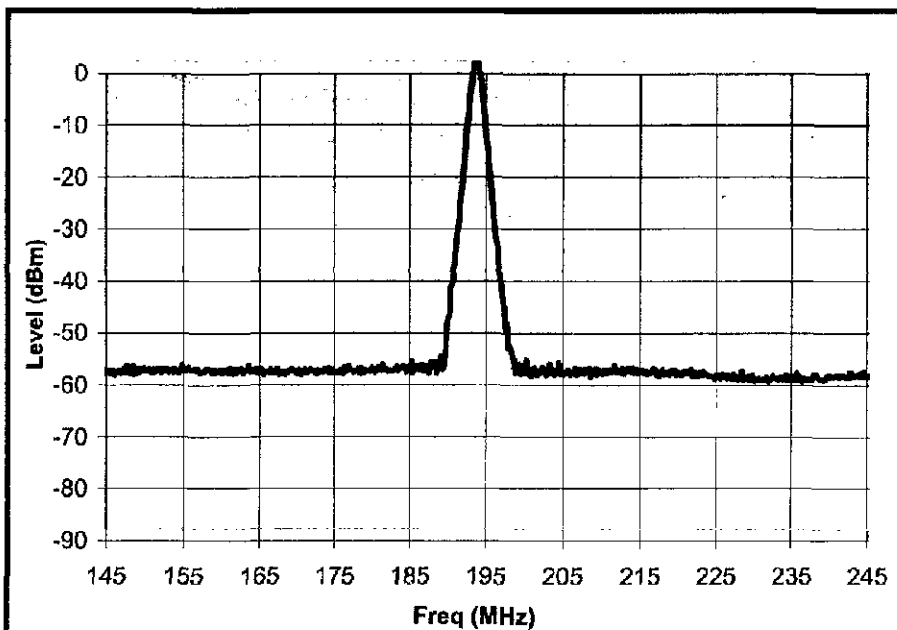
Displayed reference level is equal:

Channels 2-6

-10.0 dBm injected signal

-15.5 dB antenna gain

-25.5 dBm; therefore, a displayed signal level of -10 dBm equals an isotropic level of -25.5 dBm



(B)

Date: 11/30/2009
Center Freq: 195 MHz
Span: 100 MHz
Res. Bandwidth: 1 MHz

0 dBm, 195 MHz signal indication on the spectrum photograph represents a -10 dBm signal being injected at the point where the test cable connects to the output of the test antenna

Displayed reference level is equal:

Channels 7-13

-10.0 dBm injected signal

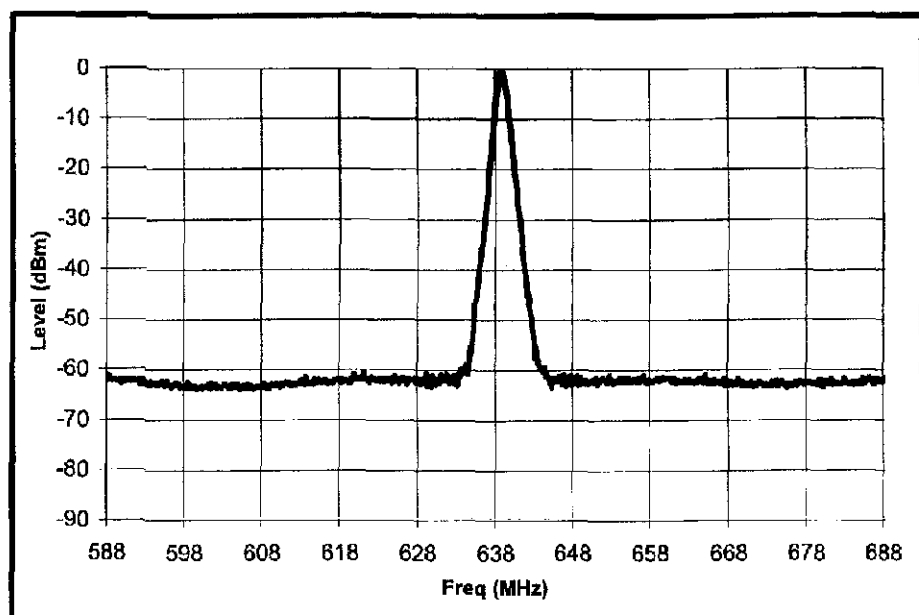
-15.5 dB antenna gain

-25.5 dBm; therefore, a displayed signal level of -10 dBm equals an isotropic level of -25.5 dBm

Figure 2.1-2 RF Calibration Photographs

Dog Creek, Blue Creek, and Prairie Creek Wind Farms

Iberdola Renewables



Date: 11/12/2009

Center Freq: 638 MHz

Span: 100 MHz

Res. Bandwidth: 1 MHz

0 dBm, 638 MHz signal indication on the spectrum photograph represents a -10 dBm signal being injected at the point where the test cable connects to the output of the test antenna

Displayed reference level is equal:

Channels 14-69

-10.0 dBm injected signal

-19.5 dB antenna gain

-29.5 dBm; therefore, a displayed signal level of -10 dBm equals an isotropic level of -29.5 dBm

(C)

Figure 2.1-2 RF Calibration Photographs (Continued)

SECTION

THREE

SECTION THREE

DATA PRESENTATION

The following section contains the Topographical representation, Site Photograph and the Spectrum Photographs. All coordinates are NAD 83.

3.1 Test Point One South of Blue Creek

Coordinates: N40° 55' 12.99" W84° 34' 20.00"

- Figure 3.1-1 is a Topographical representation of the Test Site.
- Figure 3.1-2 is the Site Photograph depicting the measurement location.
- Figures 3.1-3 through 3.1-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.2 Test Point Two Scott, Ohio

Coordinates: N40° 59' 23.44" W84° 35' 2.90"

- Figure 3.2-1 is a Topographical representation of the Test Site.
- Figure 3.2-2 is the Site Photograph depicting the measurement location.
- Figures 3.2-3 through 3.2-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.3 Test Point Three Haviland, Ohio

Coordinates: N41° 01' 8.35" W84° 34' 49.92"

- Figure 3.3-1 is a Topographical representation of the Test Site.
- Figure 3.3-2 is the Site Photograph depicting the measurement location.
- Figures 3.3-3 through 3.3-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.4 Test Point Four Center of Prairie Creek

Coordinates: N41° 03' 20.83" W84° 34' 22.85"

- Figure 3.4-1 is a Topographical representation of the Test Site.
- Figure 3.4-2 is the Site Photograph depicting the measurement location.
- Figures 3.4-3 through 3.4-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.5 Test Point Five Latty, Ohio

Coordinates: N41° 05' 19.11" W84° 35' 6.40"

- Figure 3.5-1 is a Topographical representation of the Test Site.
- Figure 3.5-2 is the Site Photograph depicting the measurement location.
- Figures 3.5-3 through 3.5-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.6 Test Point Six Northwest Prairie Creek

Coordinates: N41° 04' 4.23" W84° 37' 50.91"

- Figure 3.6-1 is a Topographical representation of the Test Site.
- Figure 3.6-2 is the Site Photograph depicting the measurement location.
- Figures 3.6-3 through 3.6-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.7 Test Point Seven West of Prairie Creek

Coordinates: N41° 02' 52.63" W84° 38' 15.67"

- Figure 3.7-1 is a Topographical representation of the Test Site.
- Figure 3.7-2 is the Site Photograph depicting the measurement location.
- Figures 3.7-3 through 3.7-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.8 Test Point Eight Southwest Prairie Creek

Coordinates: N41° 02' 0.23" W84° 37' 50.23"

- Figure 3.8-1 is a Topographical representation of the Test Site.
- Figure 3.8-2 is the Site Photograph depicting the measurement location.
- Figures 3.8-3 through 3.8-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.9 Test Point Nine Northwest Blue Creek

Coordinates: N41° 00' 41.54" W84° 37' 50.20"

- Figure 3.9-1 is a Topographical representation of the Test Site.
- Figure 3.9-2 is the Site Photograph depicting the measurement location.
- Figures 3.9-3 through 3.9-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.10 Test Point Ten West of Blue Creek

Coordinates: N40° 58' 29.66" W84° 39' 29.07"

- Figure 3.10-1 is a Topographical representation of the Test Site.
- Figure 3.10-2 is the Site Photograph depicting the measurement location.
- Figures 3.10-3 through 3.10-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.11 Test Point Eleven Southwest Blue Creek

Coordinates: N40° 58' 1.12" W84° 37' 48.33"

- Figure 3.11-1 is a Topographical representation of the Test Site.
- Figure 3.11-2 is the Site Photograph depicting the measurement location.
- Figures 3.11-3 through 3.11-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.12 Test Point Twelve South of Dog Creek Middle Point, Ohio

Coordinates: N40° 51' 16.28" W84° 26' 45.11"

- Figure 3.12-1 is a Topographical representation of the Test Site.
- Figure 3.12-2 is the Site Photograph depicting the measurement location.
- Figures 3.12-3 through 3.12-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.13 Test Point Thirteen Southeast Dog Creek

Coordinates: N40° 53' 44.42" W84° 27' 50.23"

- Figure 3.13-1 is a Topographical representation of the Test Site.
- Figure 3.13-2 is the Site Photograph depicting the measurement location.
- Figures 3.13-3 through 3.13-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.14 Test Point Fourteen Southwest Dog Creek

Coordinates: N40° 54' 10.61" W84° 30' 51.67"

- Figure 3.14-1 is a Topographical representation of the Test Site.
- Figure 3.14-2 is the Site Photograph depicting the measurement location.
- Figures 3.14-3 through 3.14-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.15 Test Point Fifteen Northwest Dog Creek

Coordinates: N40° 57' 59.98" W84° 32' 0.35"

- Figure 3.15-1 is a Topographical representation of the Test Site.
- Figure 3.15-2 is the Site Photograph depicting the measurement location.
- Figures 3.15-3 through 3.15-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.16 Test Point Sixteen Northeast Dog Creek

Coordinates: N40° 58' 30.64" W84° 30' 51.65"

- Figure 3.16-1 is a Topographical representation of the Test Site.
- Figure 3.16-2 is the Site Photograph depicting the measurement location.
- Figures 3.16-3 through 3.16-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.17 Test Point Seventeen Northeast Blue Creek

Coordinates: N41° 01' 8.46" W84° 32' 3.07"

- Figure 3.17-1 is a Topographical representation of the Test Site.
- Figure 3.17-2 is the Site Photograph depicting the measurement location.
- Figures 3.17-3 through 3.17-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.18 Test Point Eighteen Southeast Prairie Creek

Coordinates: N41° 02' 1.18" W84° 30' 29.90"

- Figure 3.18-1 is a Topographical representation of the Test Site.
- Figure 3.18-2 is the Site Photograph depicting the measurement location.
- Figures 3.18-3 through 3.18-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.19 Test Point Nineteen East of Prairie Creek

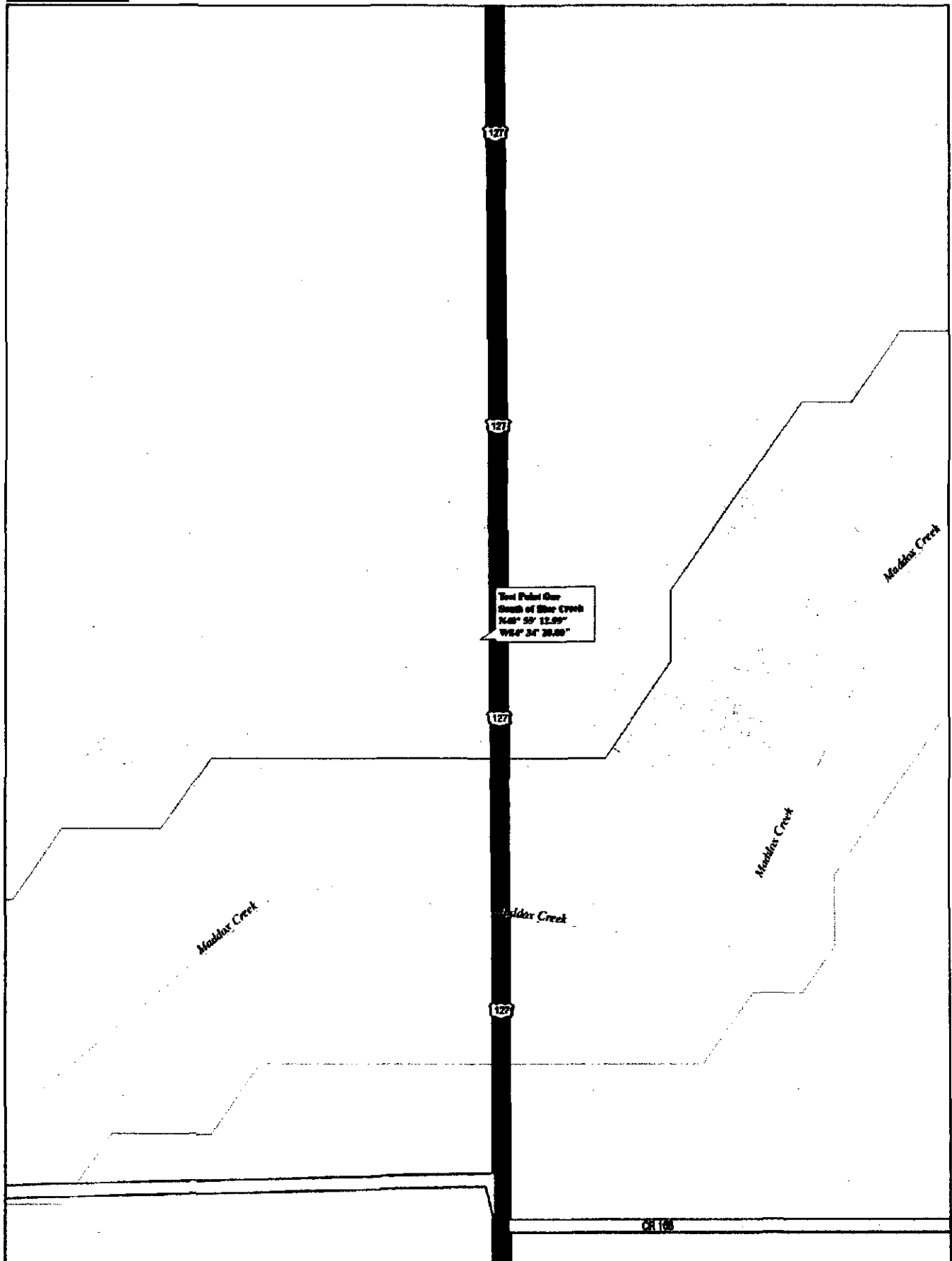
Coordinates: N41° 02' 53.85" W84° 29' 10.61"

- Figure 3.19-1 is a Topographical representation of the Test Site.
- Figure 3.19-2 is the Site Photograph depicting the measurement location.
- Figures 3.19-3 through 3.19-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.

3.20 Test Point Twenty Northeast Prairie Creek

Coordinates: N41° 04' 9.43" W84° 30' 54.55"

- Figure 3.20-1 is a Topographical representation of the Test Site.
- Figure 3.20-2 is the Site Photograph depicting the measurement location.
- Figures 3.20-3 through 3.20-6 are the actual Spectrum Photographs detailing the TV channels and the ambient RF background.



The following images were scanned as received

Test Point One South of Blue Creek

Dog Creek, Blue Creek, and Prairie Creek Wind Farms

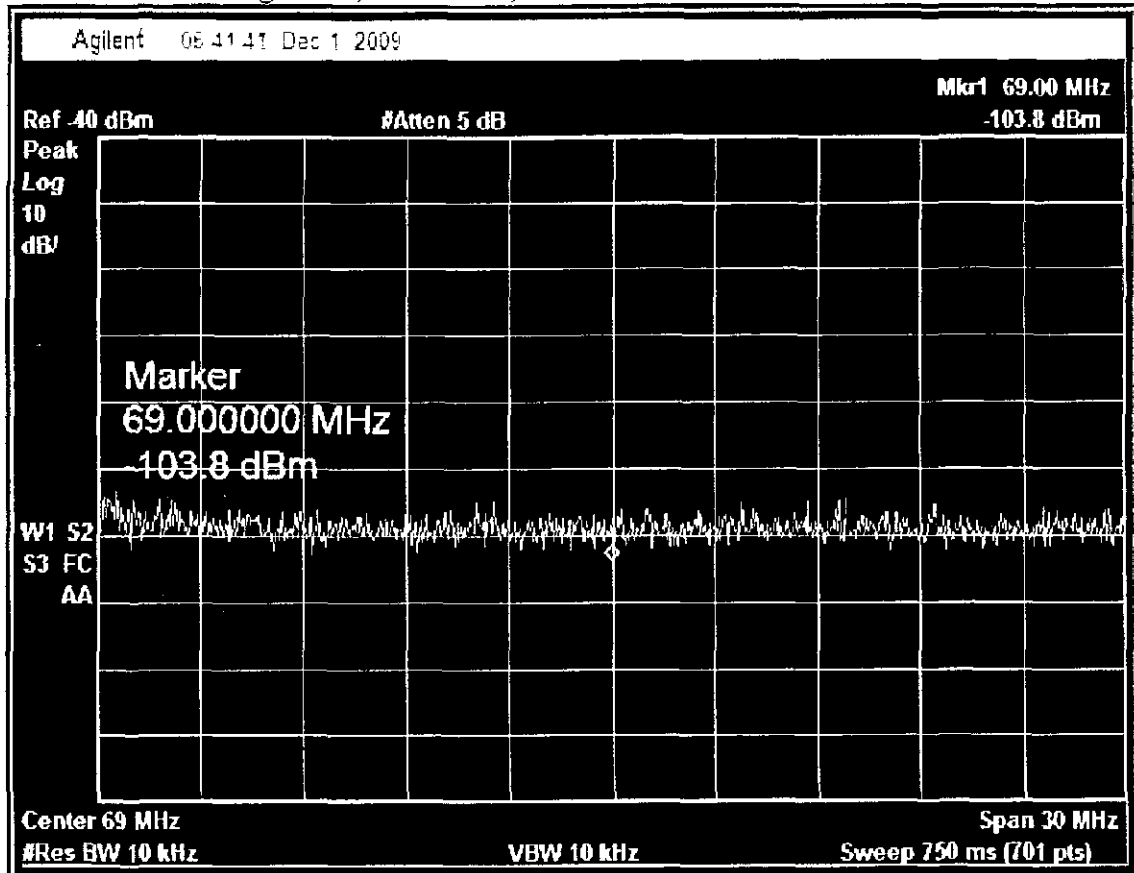


Figure 3.1-2 Site Photograph

Test Point One South of Blue Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 55' 12.99" W84° 34' 20.00"

VHF Low Band Channels 2-6

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

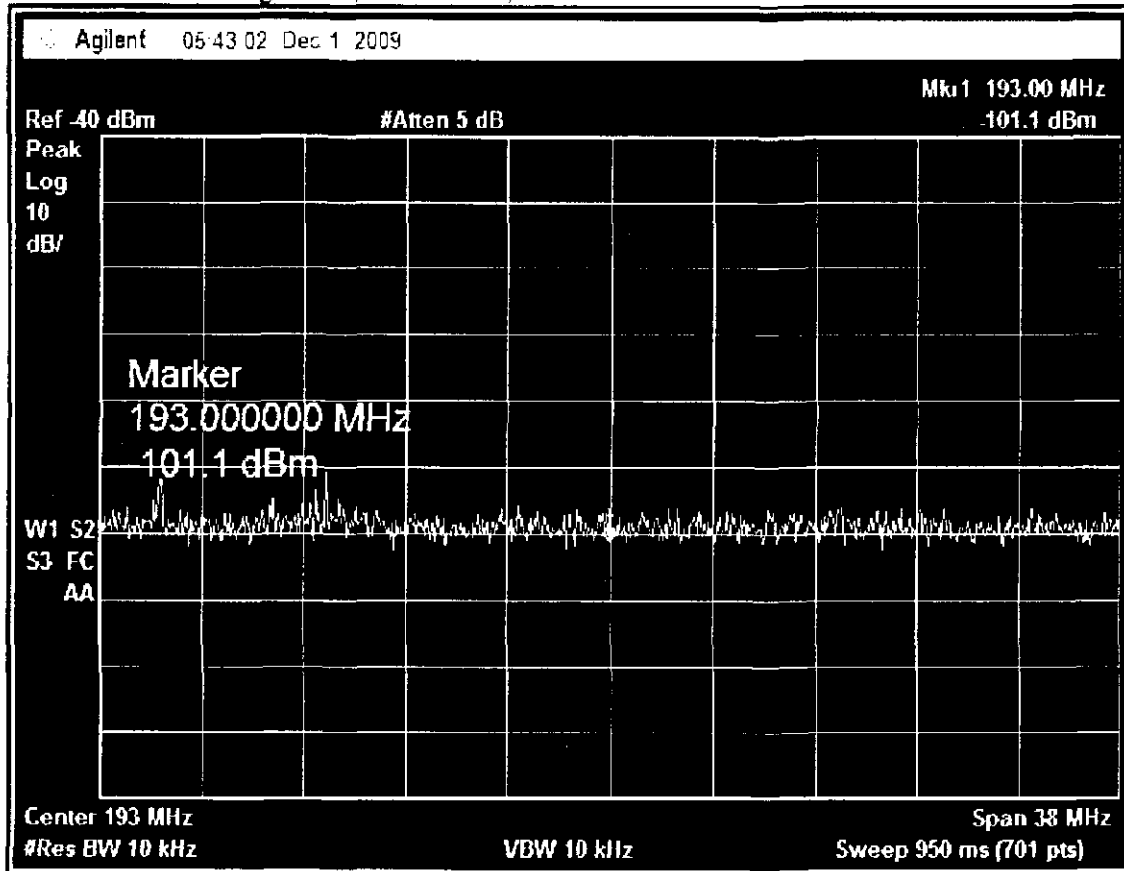
Azimuth: 0-360°

Figure 3.1-3 Spectrum Photographs

Test Point One South of Blue Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 55' 12.99" W84° 34' 20.00"

VHF High Band Channels 7-13

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

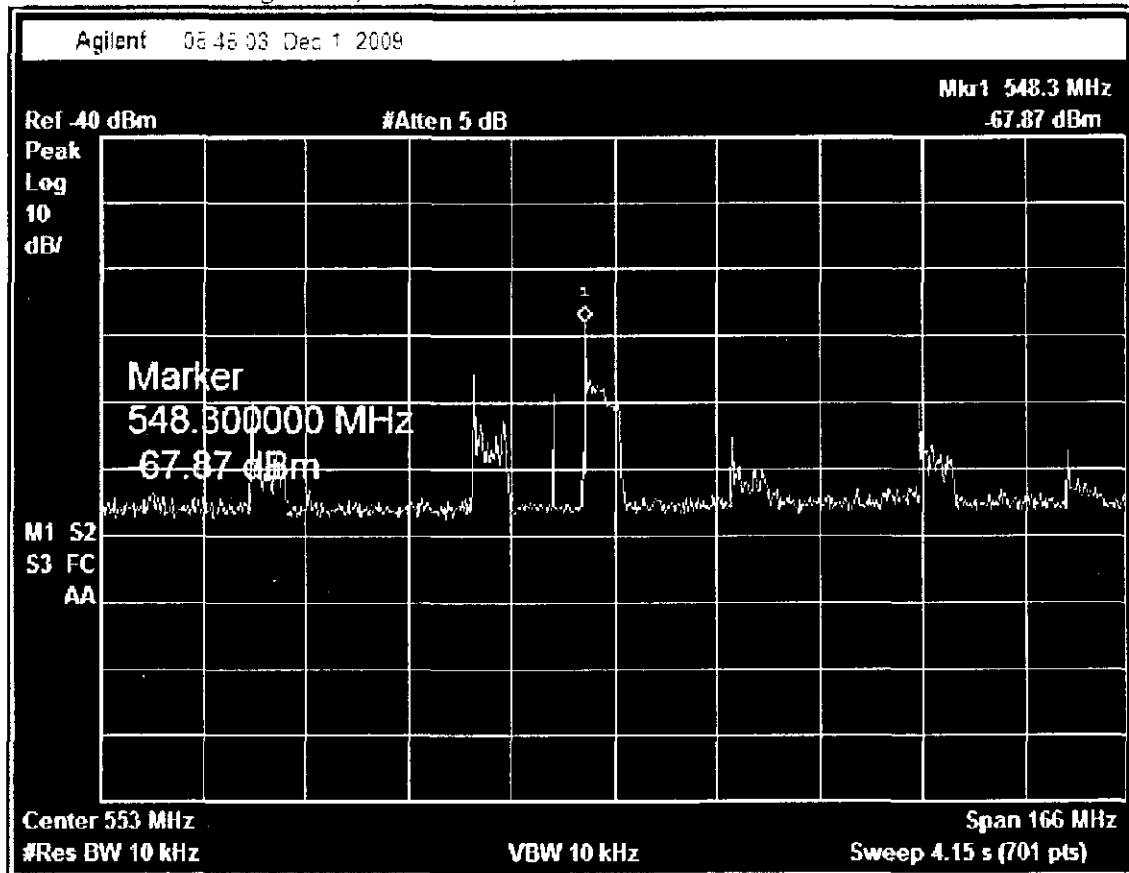
Azimuth: 0-360°

Figure 3.1-4 Spectrum Photographs

Test Point One South of Blue Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 55' 12.99" W84° 34' 20.00"

UHF Band Channels 14-41

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)
548.3 -67.87

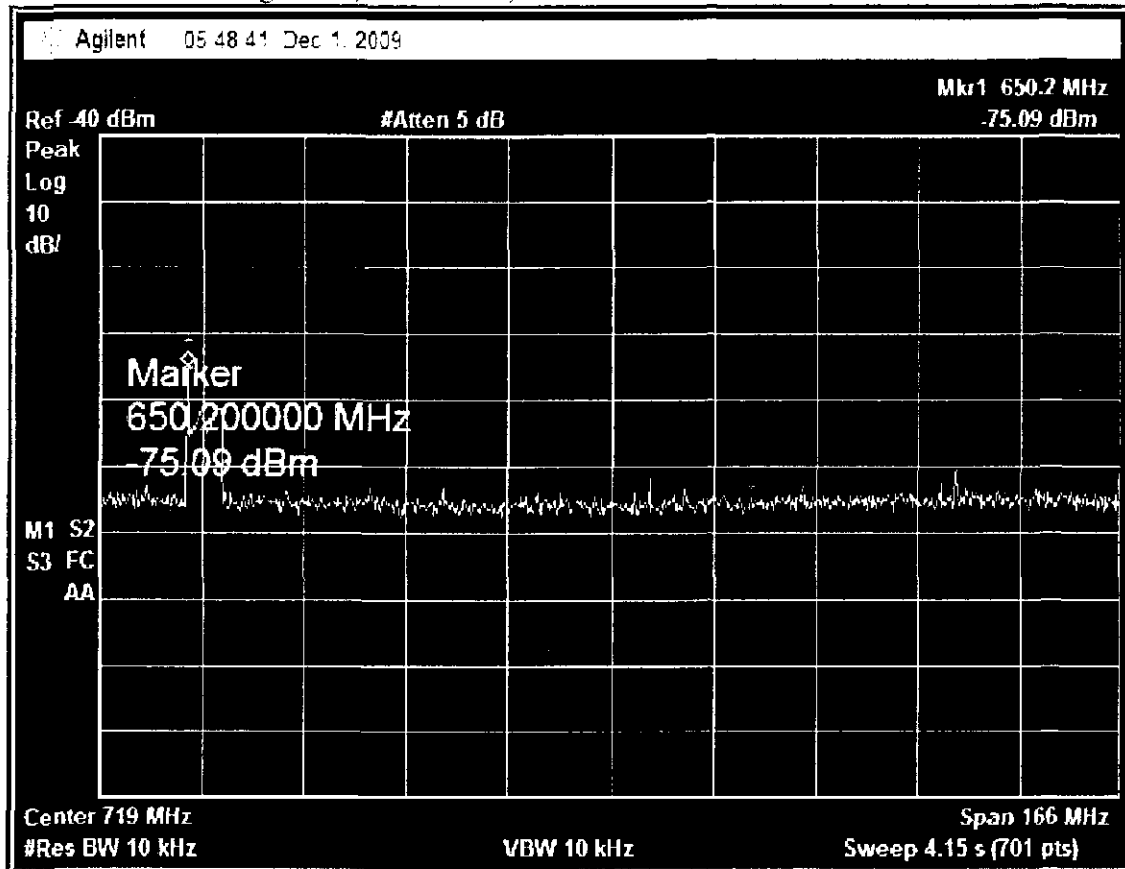
Azimuth: 0-360°

Figure 3.1-5 Spectrum Photographs

Test Point One South of Blue Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 55' 12.99" W84° 34' 20.00"

UHF Band Channels 42-69

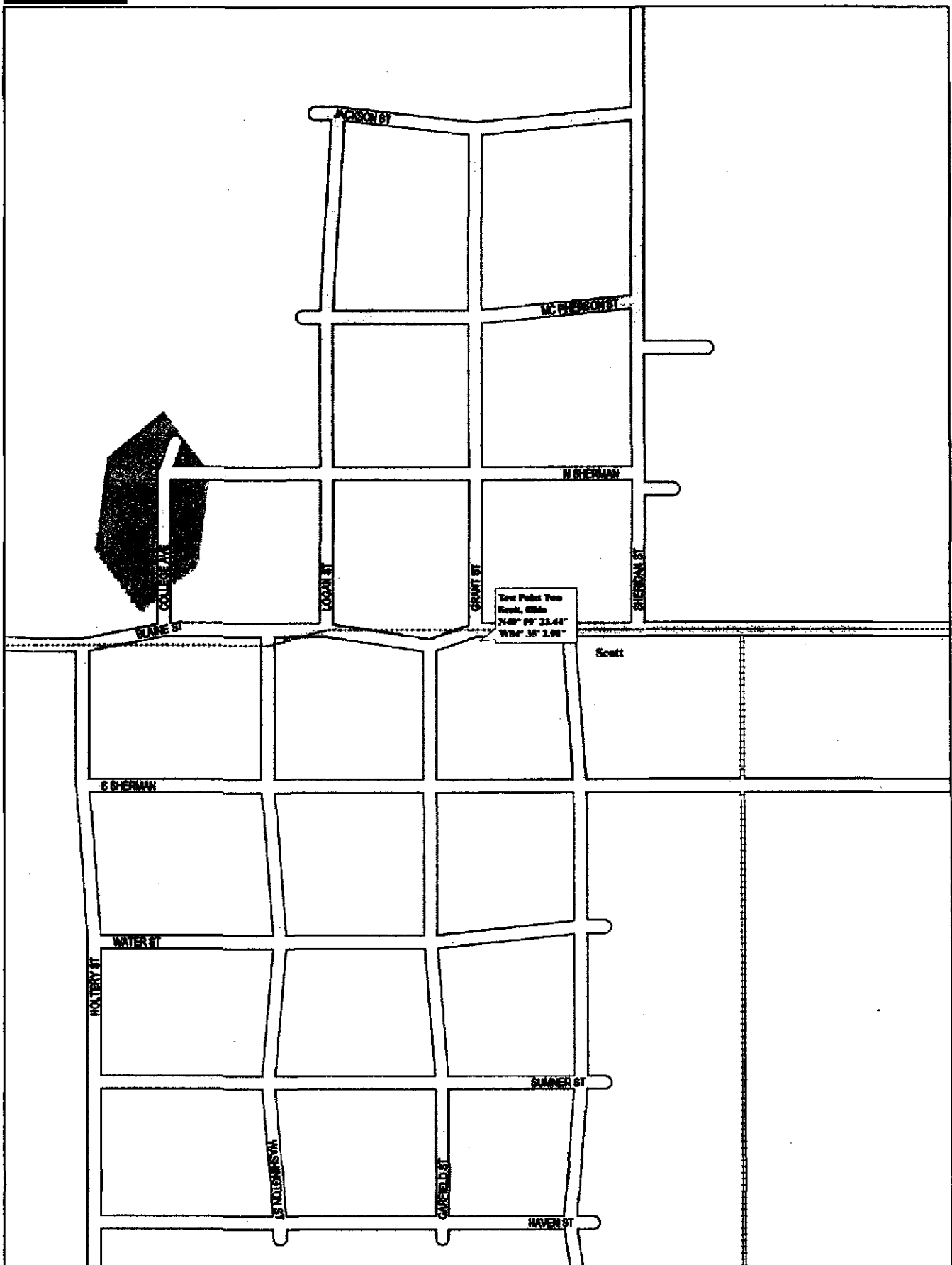
TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
650.2	-75.09

Azimuth: 0-360°

Figure 3.1-6 Spectrum Photographs



The following images were scanned as received

Test Point Two Scott, Ohio

Dog Creek, Blue Creek, and Prairie Creek Wind Farms

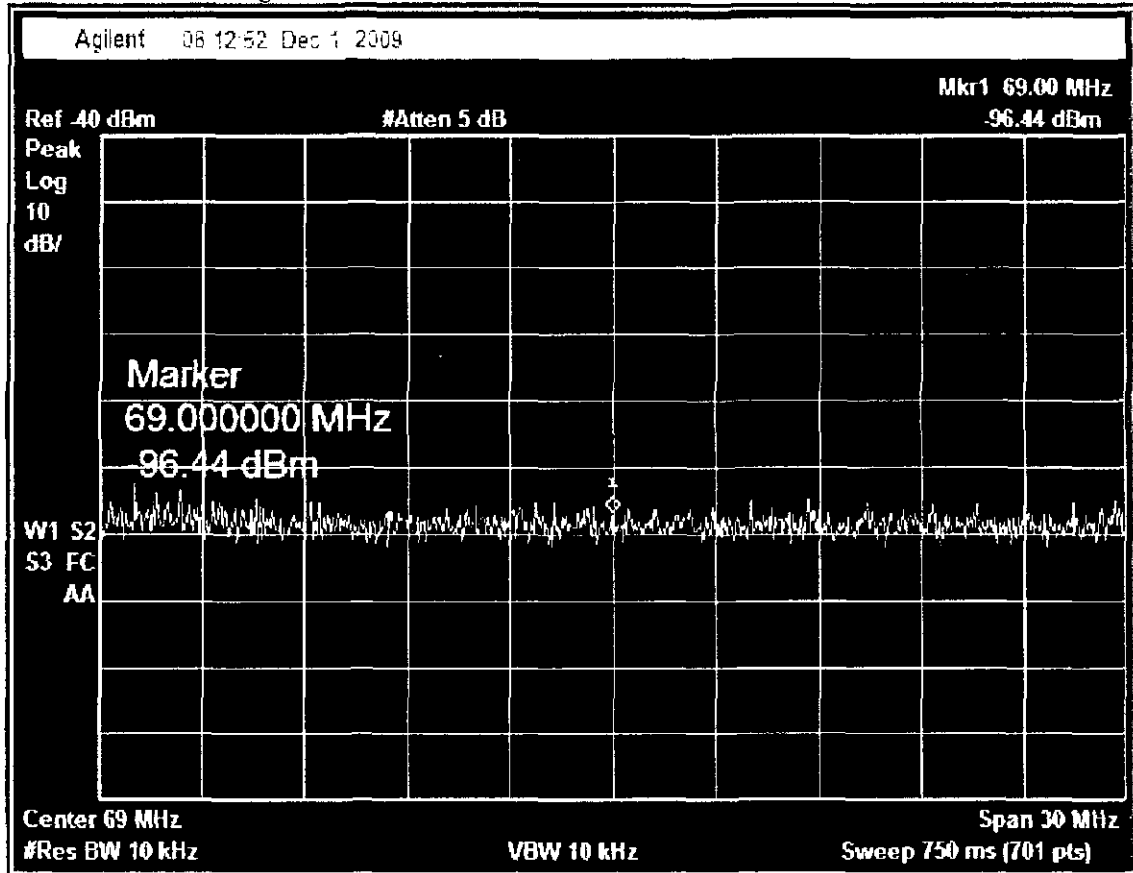


Figure 3.2-2 Site Photograph

Test Point Two Scott, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 59' 23.44" W84° 35' 2.90"

VHF Low Band Channels 2-6

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

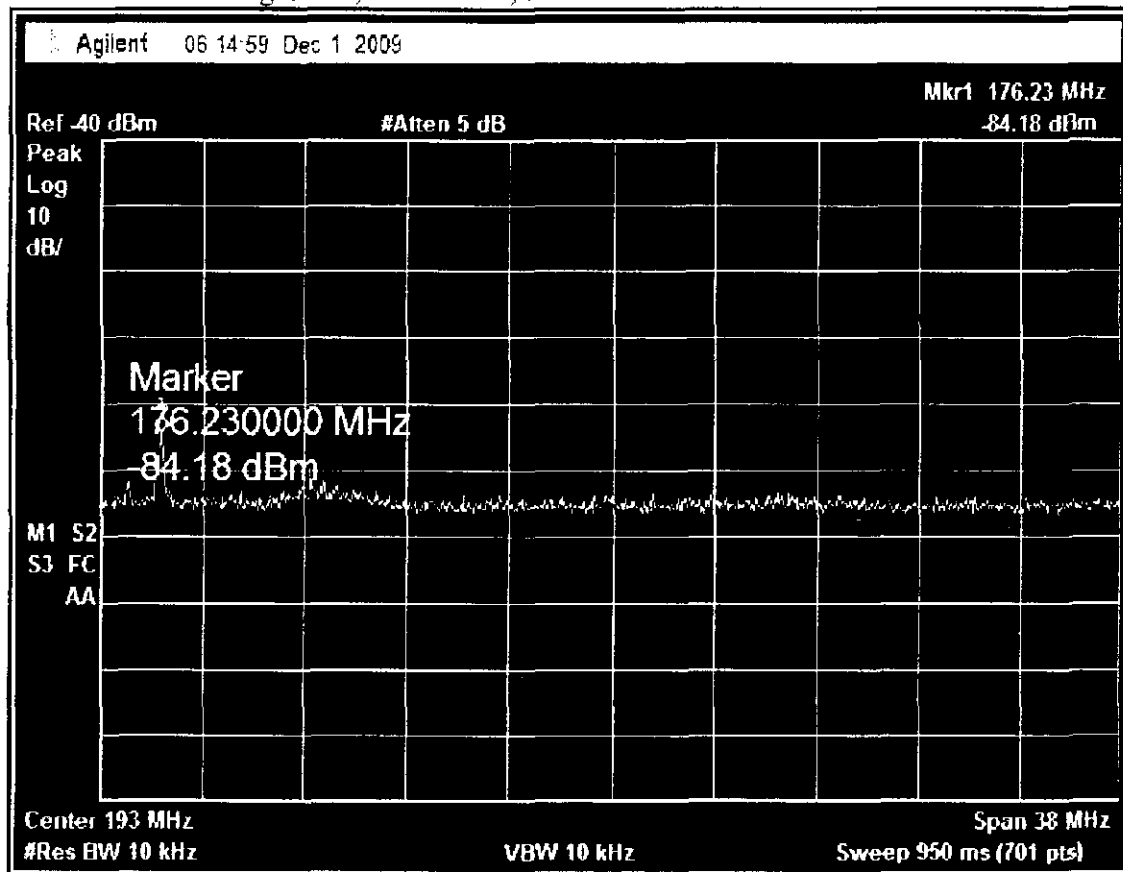
Azimuth: 0-360°

Figure 3.2-3 Spectrum Photographs

Test Point Two Scott, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 59' 23.44" W84° 35' 2.90"

VHF High Band Channels 7-13

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

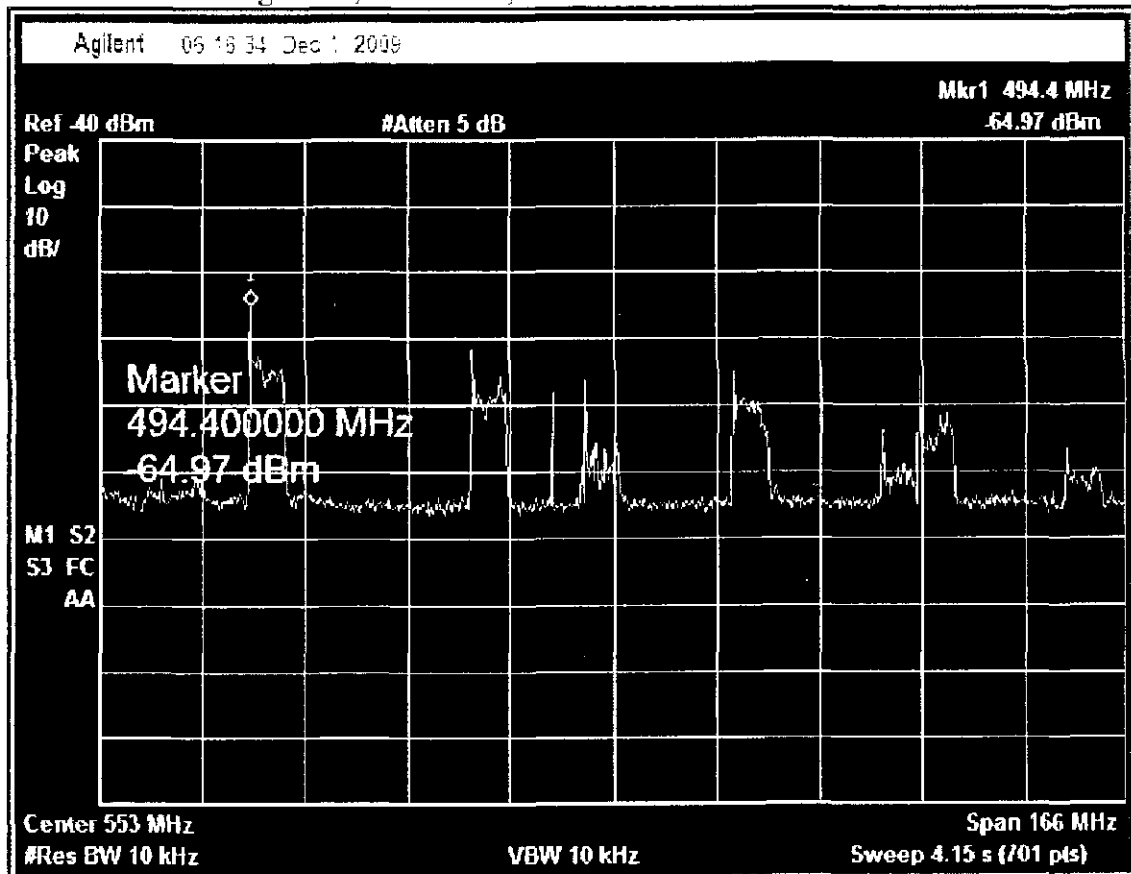
Azimuth: 0-360°

Figure 3.2-4 Spectrum Photographs

Test Point Two Scott, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 59' 23.44" W84° 35' 2.90"

UHF Band Channels 14-41

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
494.4	-64.97

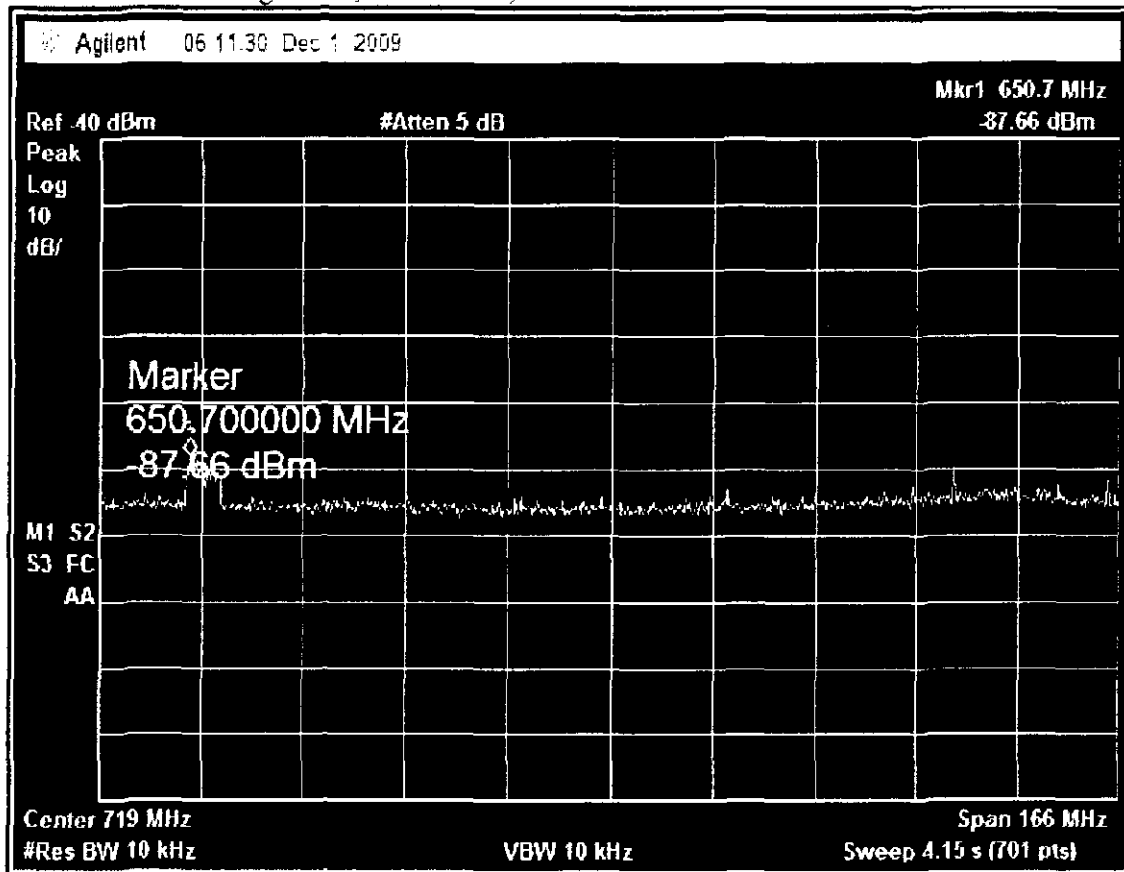
Azimuth: 0-360°

Figure 3.2-5 Spectrum Photographs

Test Point Two Scott, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N40° 59' 23.44" W84° 35' 2.90"

UHF Band Channels 42-69

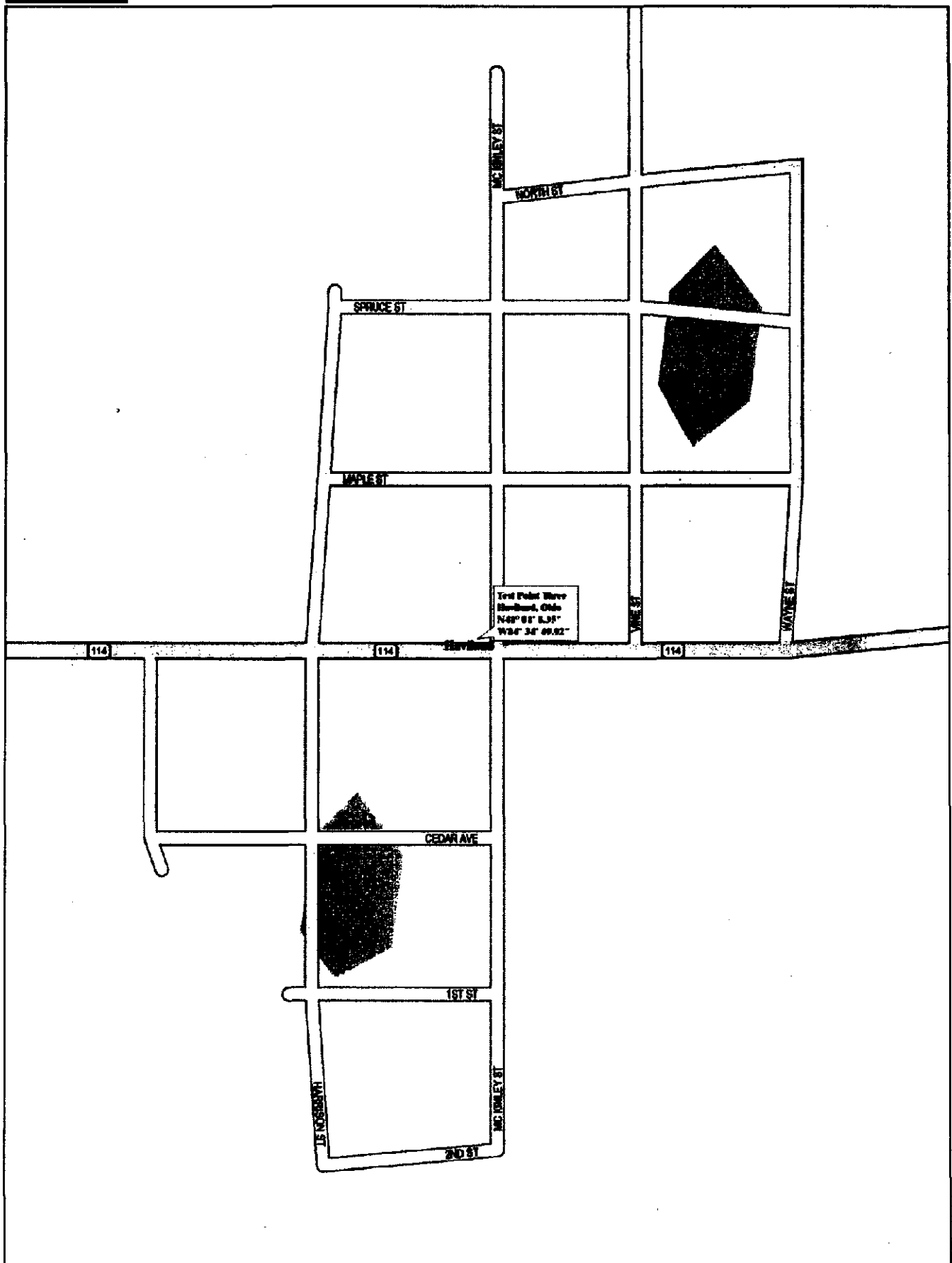
TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
650.7	-87.66

Azimuth: 0-360°

Figure 3.2-6 Spectrum Photographs



The following images were scanned as received

Test Point Three Haviland, Ohio

Dog Creek, Blue Creek, and Prairie Creek Wind Farms

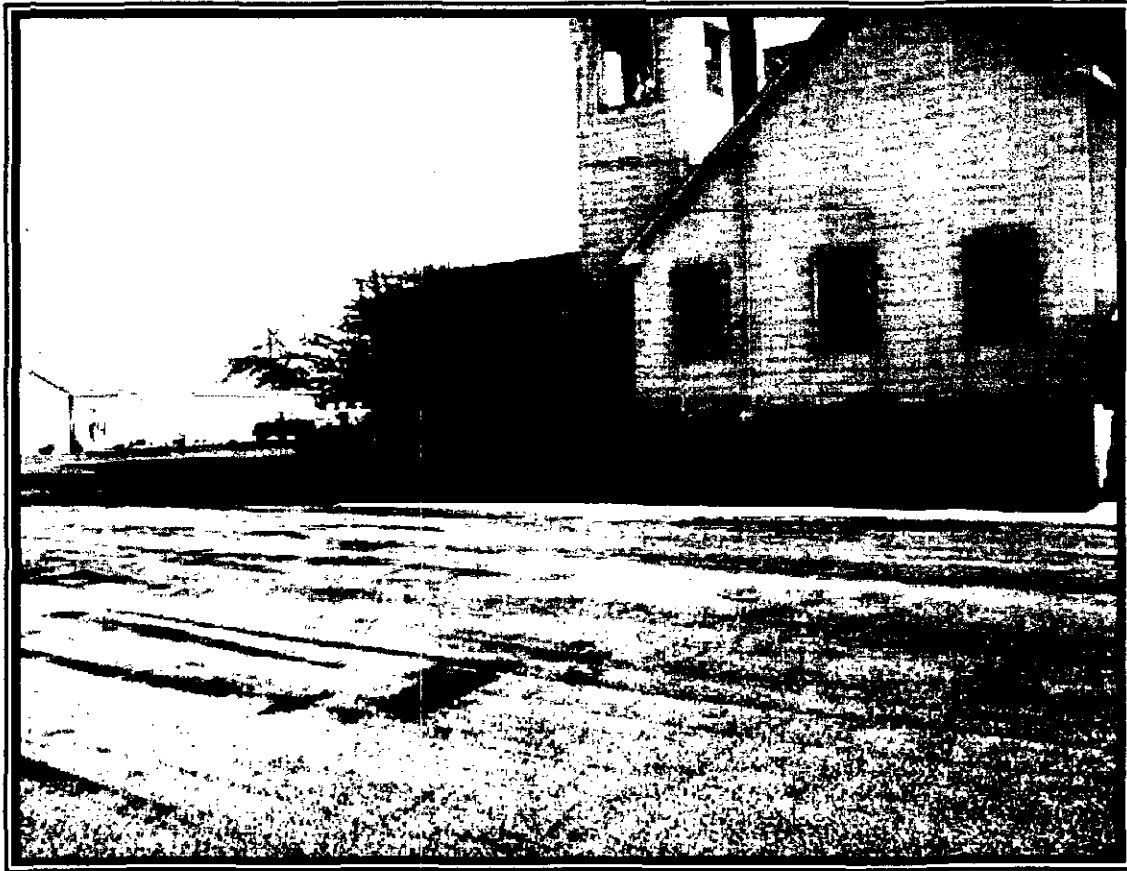
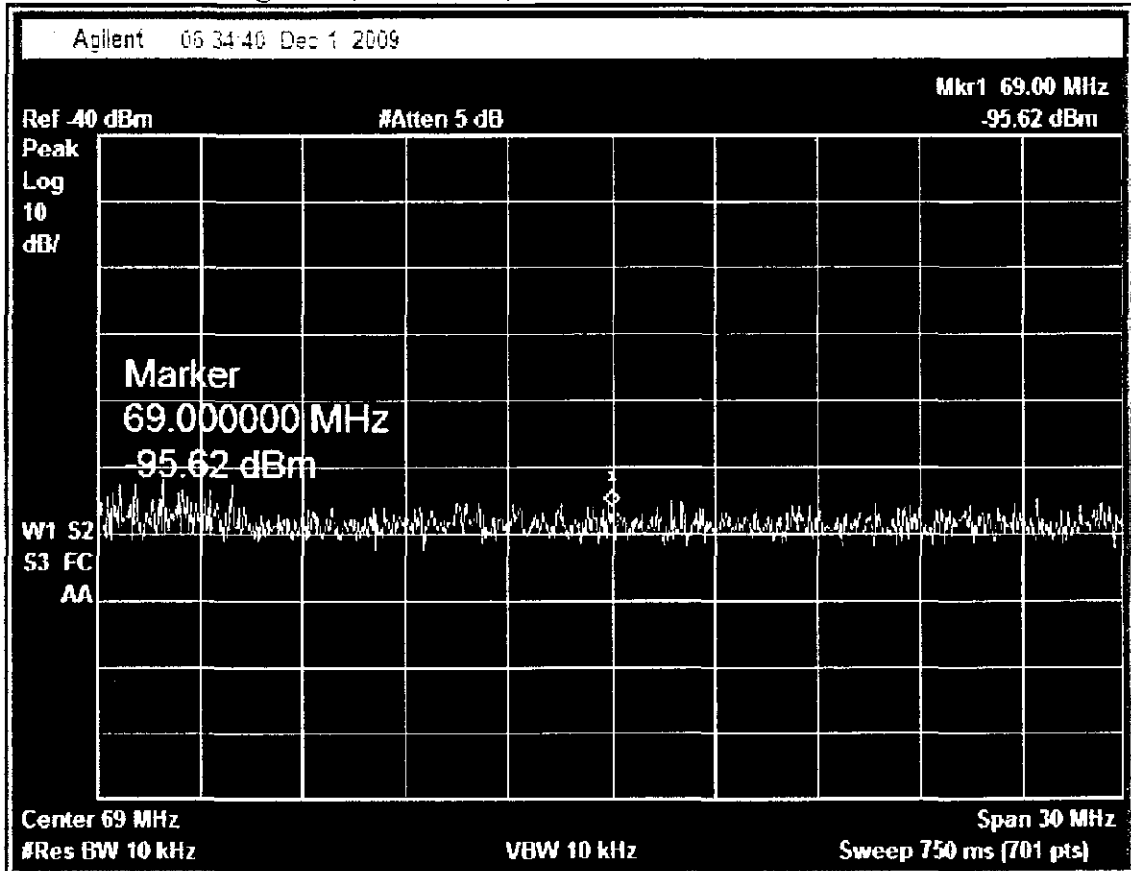


Figure 3.3-2 Site Photograph

Test Point Three Haviland, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 01' 8.35" W84° 34' 49.92"

VHF Low Band Channels 2-6

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

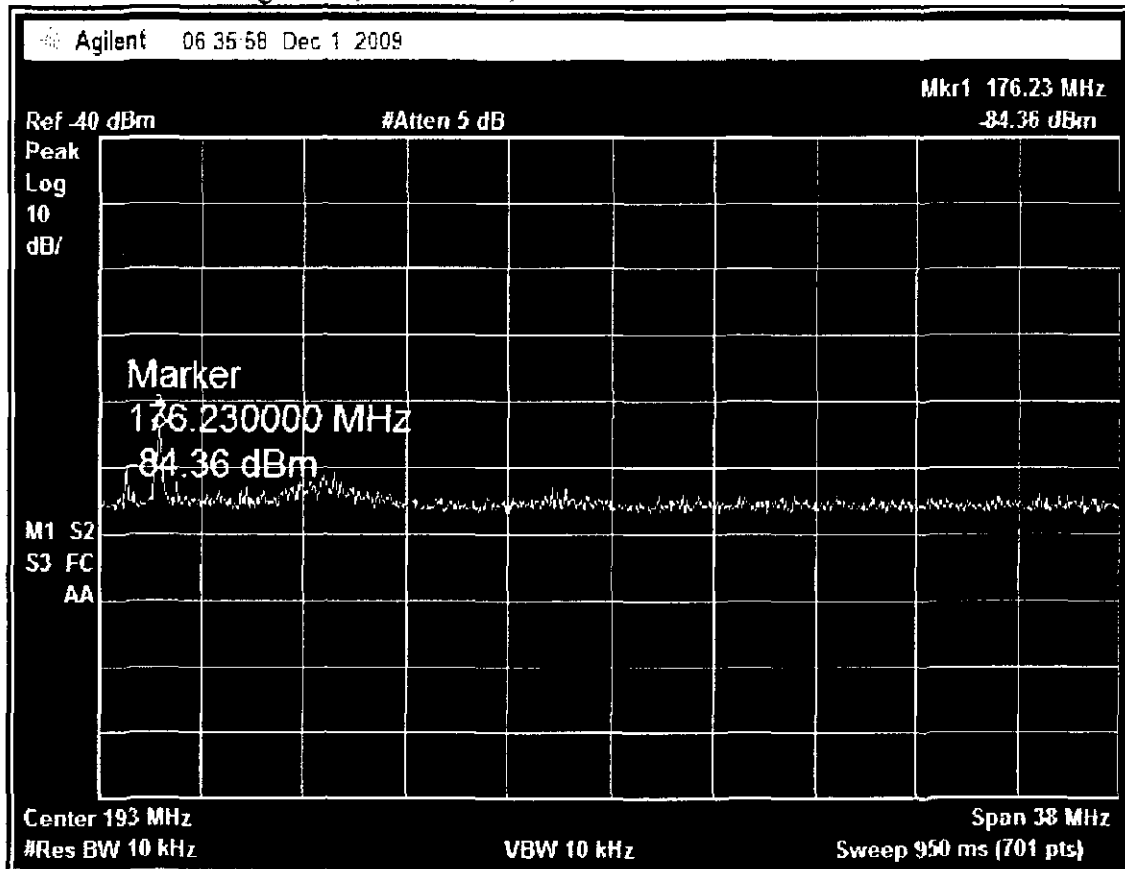
Azimuth: 0-360°

Figure 3.3-3 Spectrum Photographs

Test Point Three Haviland, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 01' 8.35" W84° 34' 49.92"

VHF High Band Channels 7-13

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

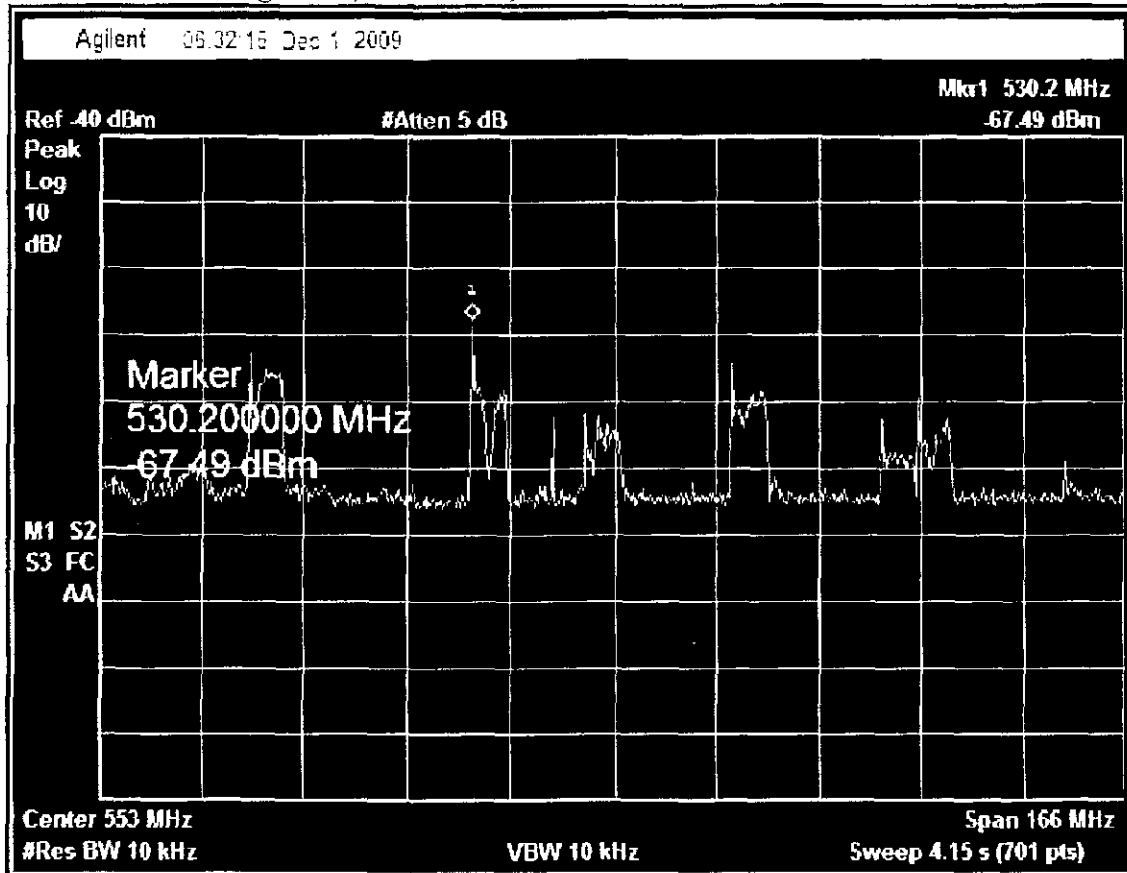
Azimuth: 0-360°

Figure 3.3-4 Spectrum Photographs

Test Point Three Haviland, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 01' 8.35" W84° 34' 49.92"

UHF Band Channels 14-41

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
530.2	-67.49

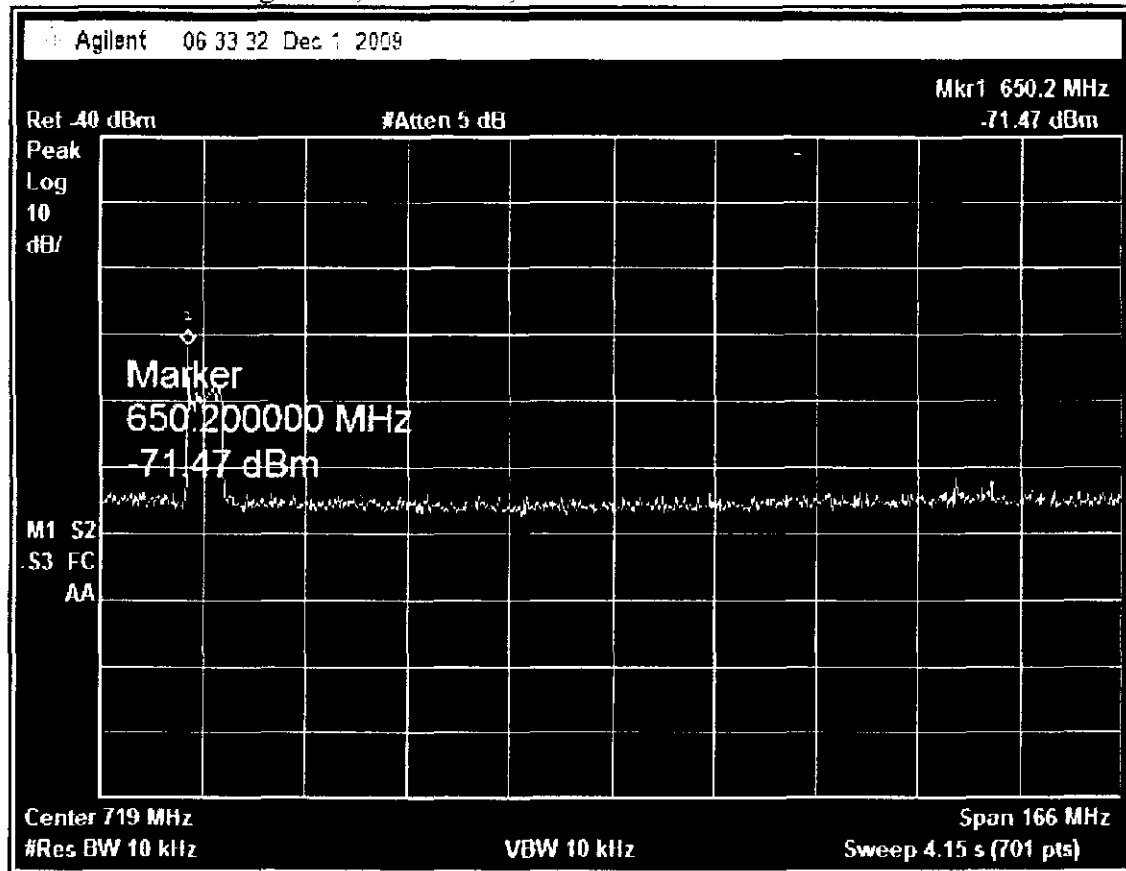
Azimuth: 0-360°

Figure 3.3-5 Spectrum Photographs

Test Point Three Haviland, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 01' 8.35" W84° 34' 49.92"

UHF Band Channels 42-69

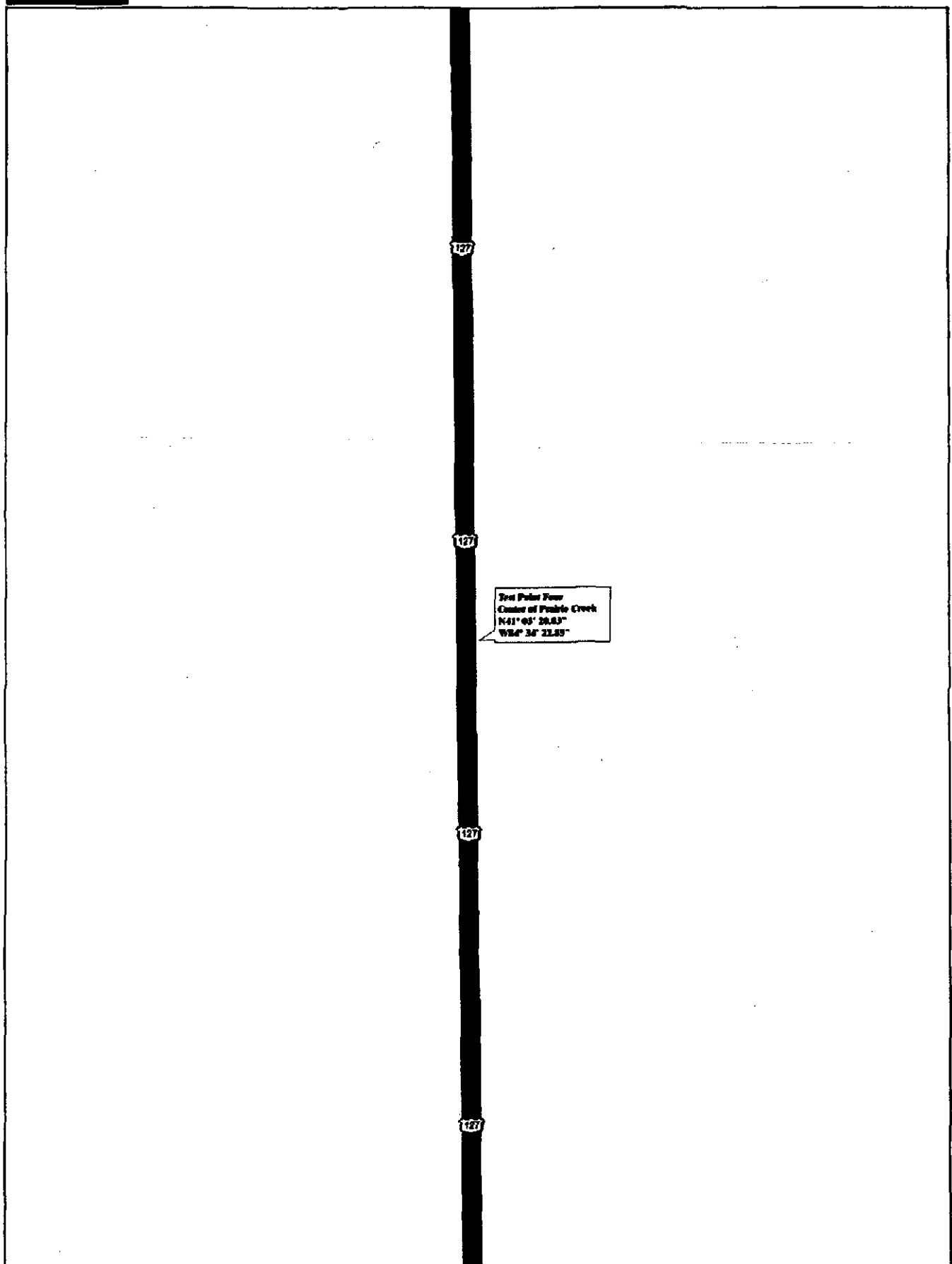
TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
650.2	-71.47

Azimuth: 0-360°

Figure 3.3-6 Spectrum Photographs



Test Point Four Center of Prairie Creek

Dog Creek, Blue Creek, and Prairie Creek Wind Farms

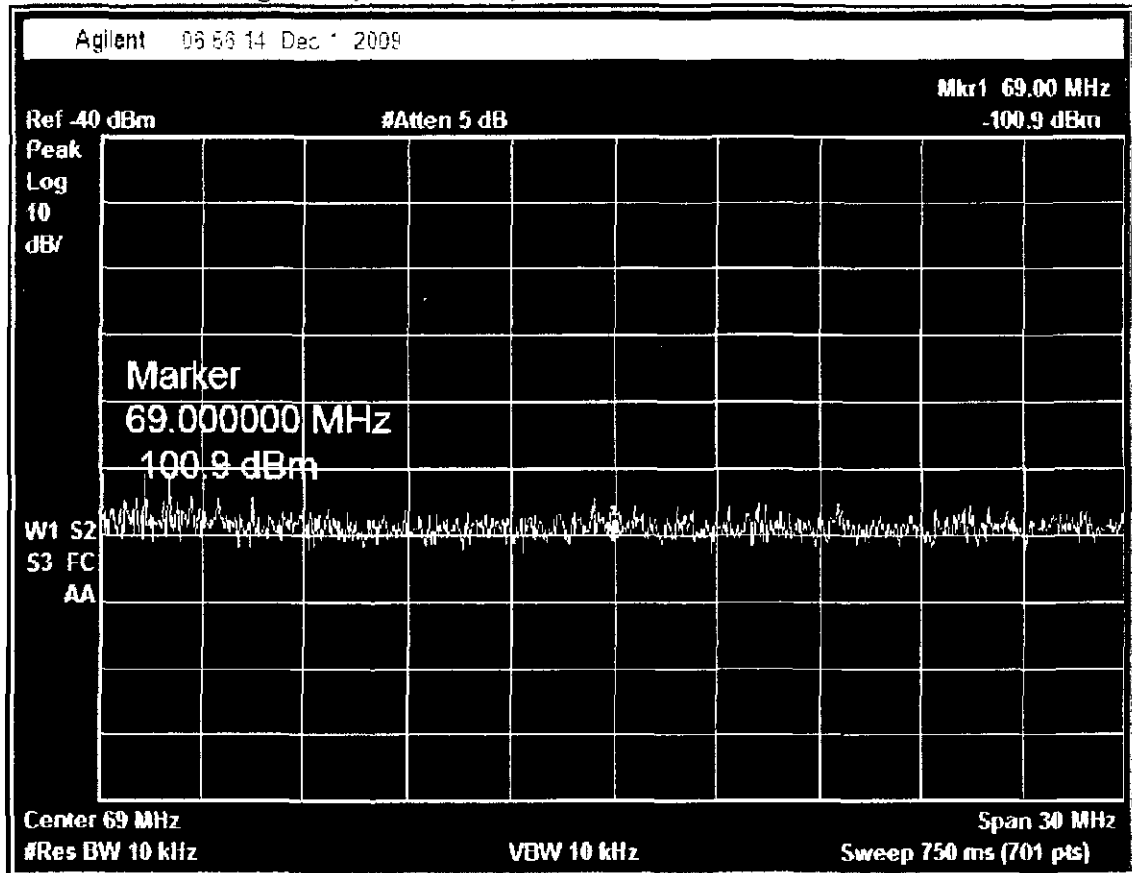


Figure 3.4-2 Site Photograph

Test Point Four Center of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 03' 20.83" W84° 34' 22.85"

VHF Low Band Channels 2-6

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)
None noted

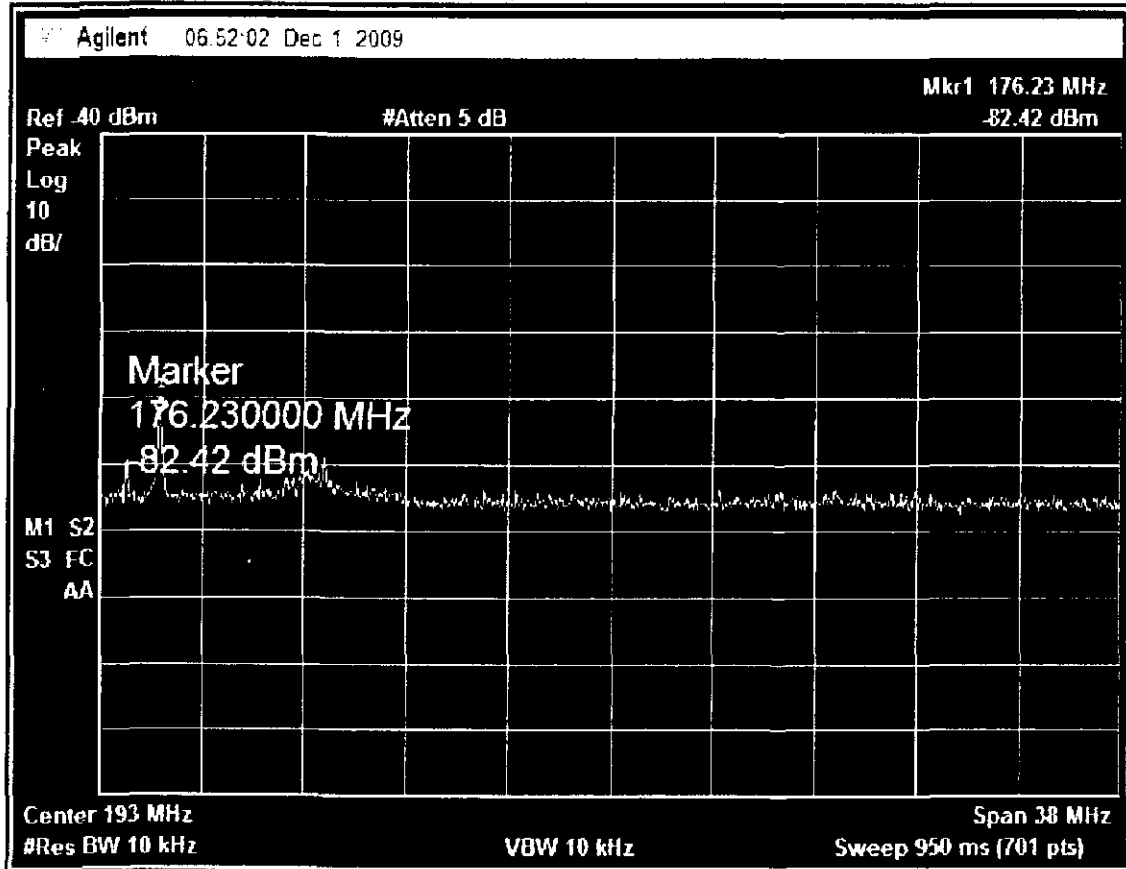
Azimuth: 0-360°

Figure 3.4-3 Spectrum Photographs

Test Point Four Center of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 03' 20.83" W84° 34' 22.85"

VHF High Band Channels 7-13

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

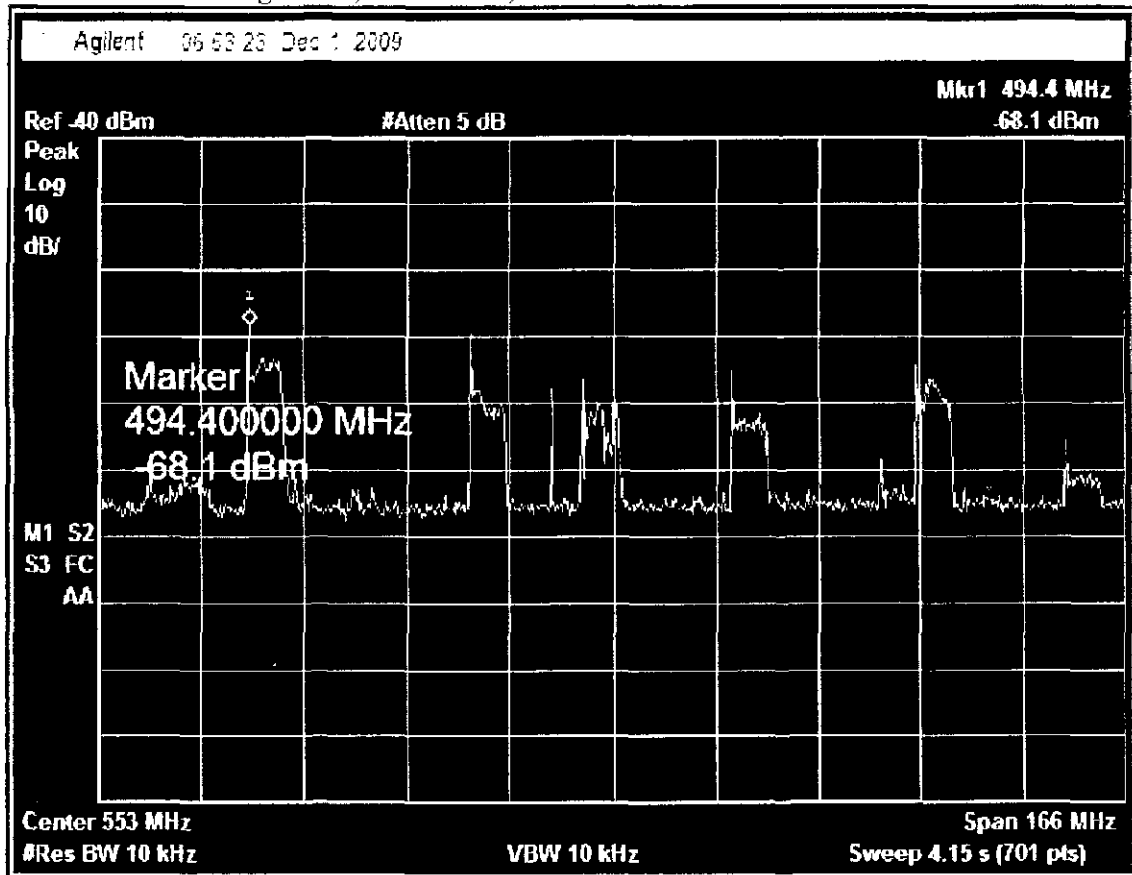
Azimuth: 0-360°

Figure 3.4-4 Spectrum Photographs

Test Point Four Center of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 03' 20.83" W84° 34' 22.85"

UHF Band Channels 14-41

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
494.4	-68.1

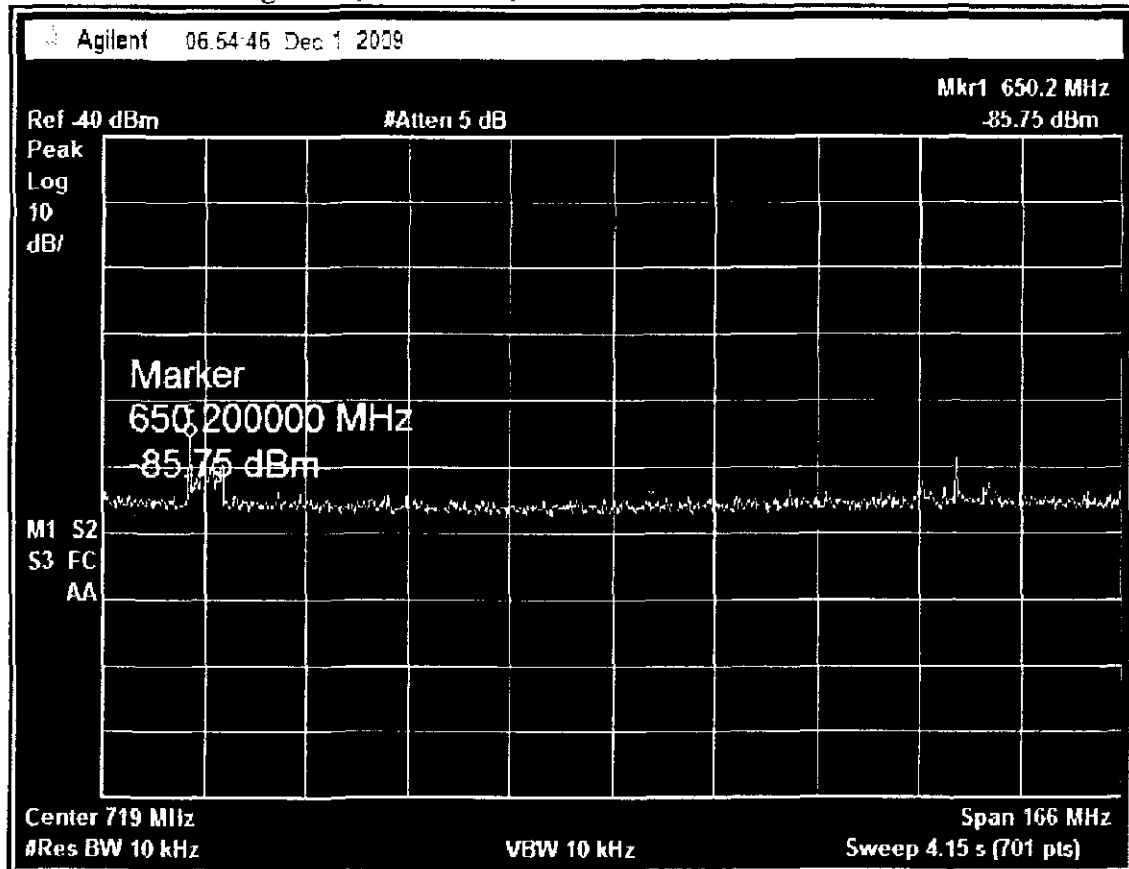
Azimuth: 0-360°

Figure 3.4-5 Spectrum Photographs

Test Point Four Center of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 03' 20.83" W84° 34' 22.85"

UHF Band Channels 42-69

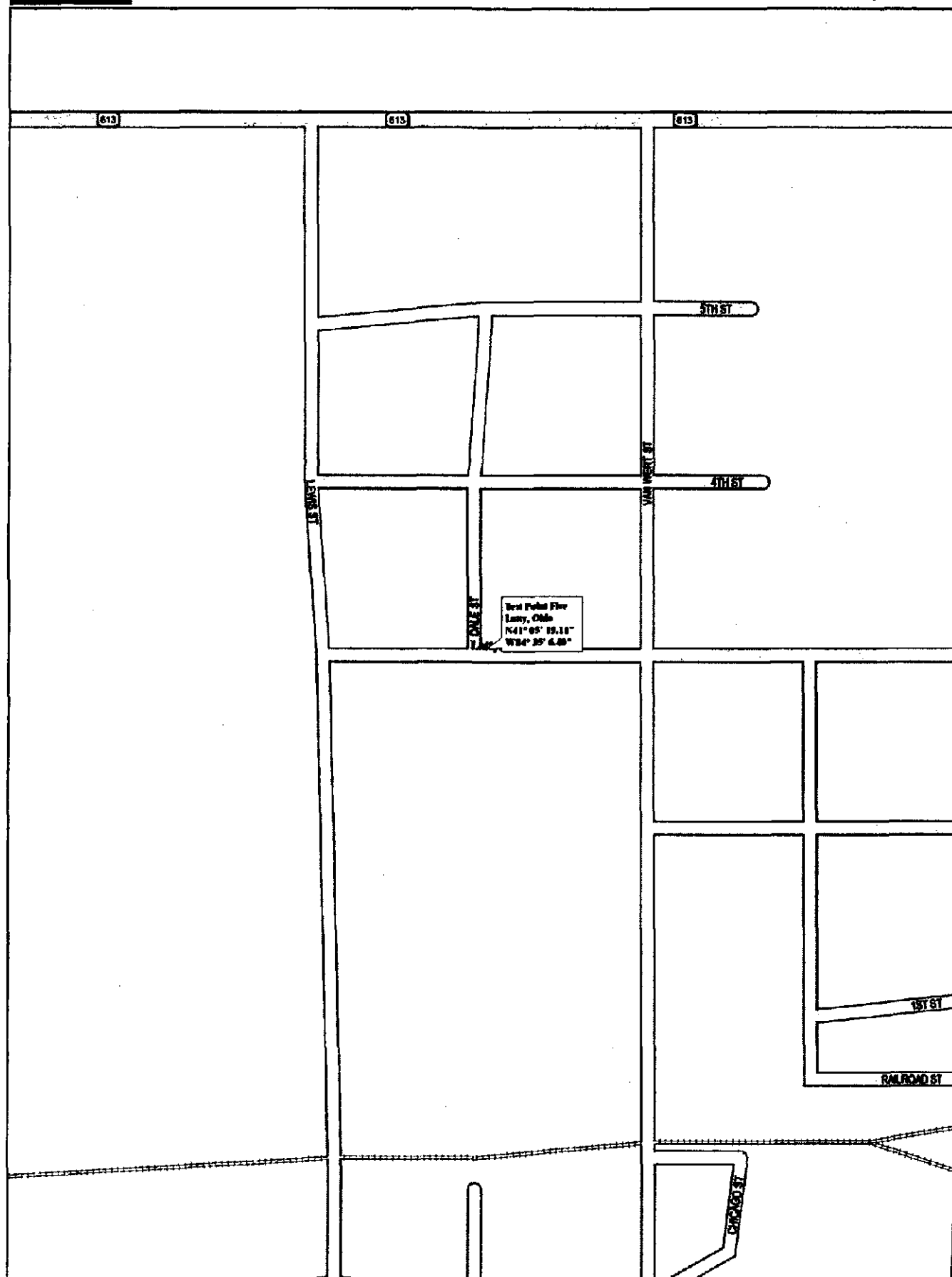
TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
650.2	-85.75

Azimuth: 0-360°

Figure 3.4-6 Spectrum Photographs



The following images were scanned as received

Test Point Five Latty, Ohio

Dog Creek, Blue Creek, and Prairie Creek Wind Farms

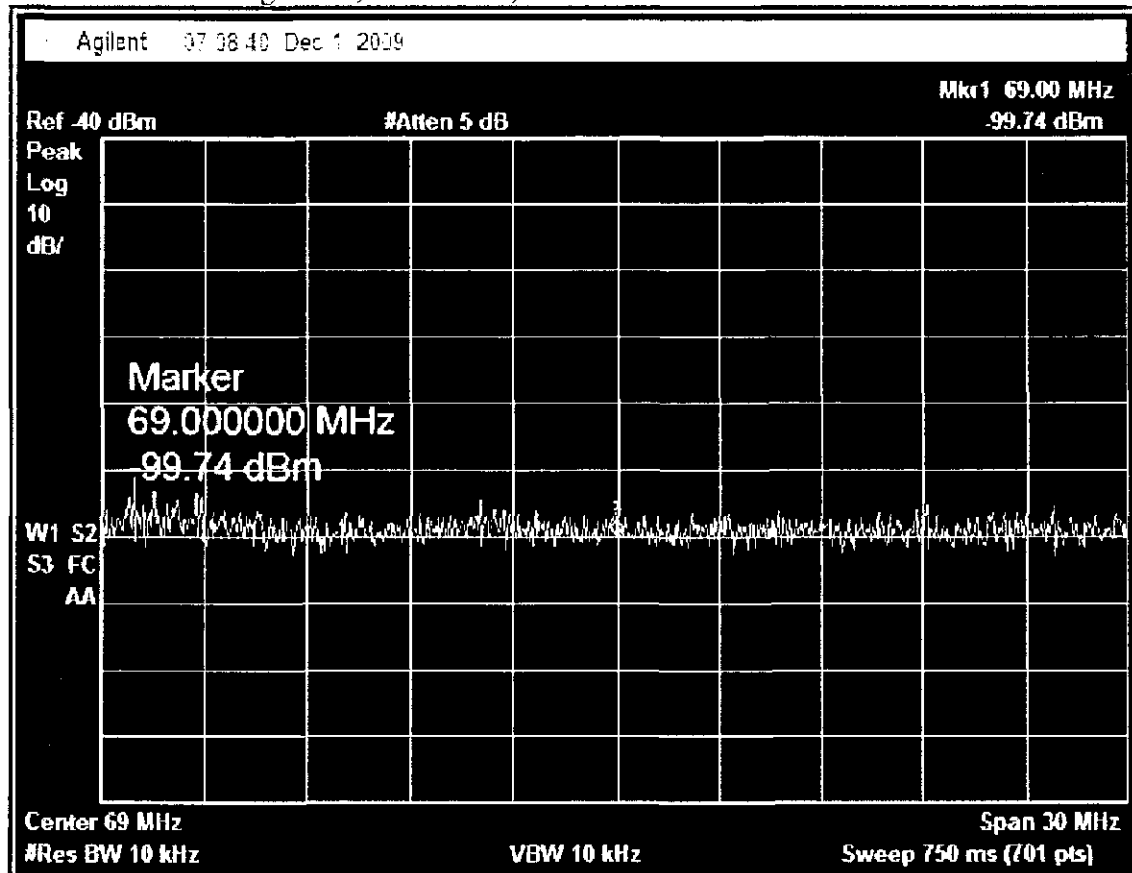


Figure 3.5-2 Site Photograph

Test Point Five Latty, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 05' 19.11" W84° 35' 6.40"

VHF Low Band Channels 2-6

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

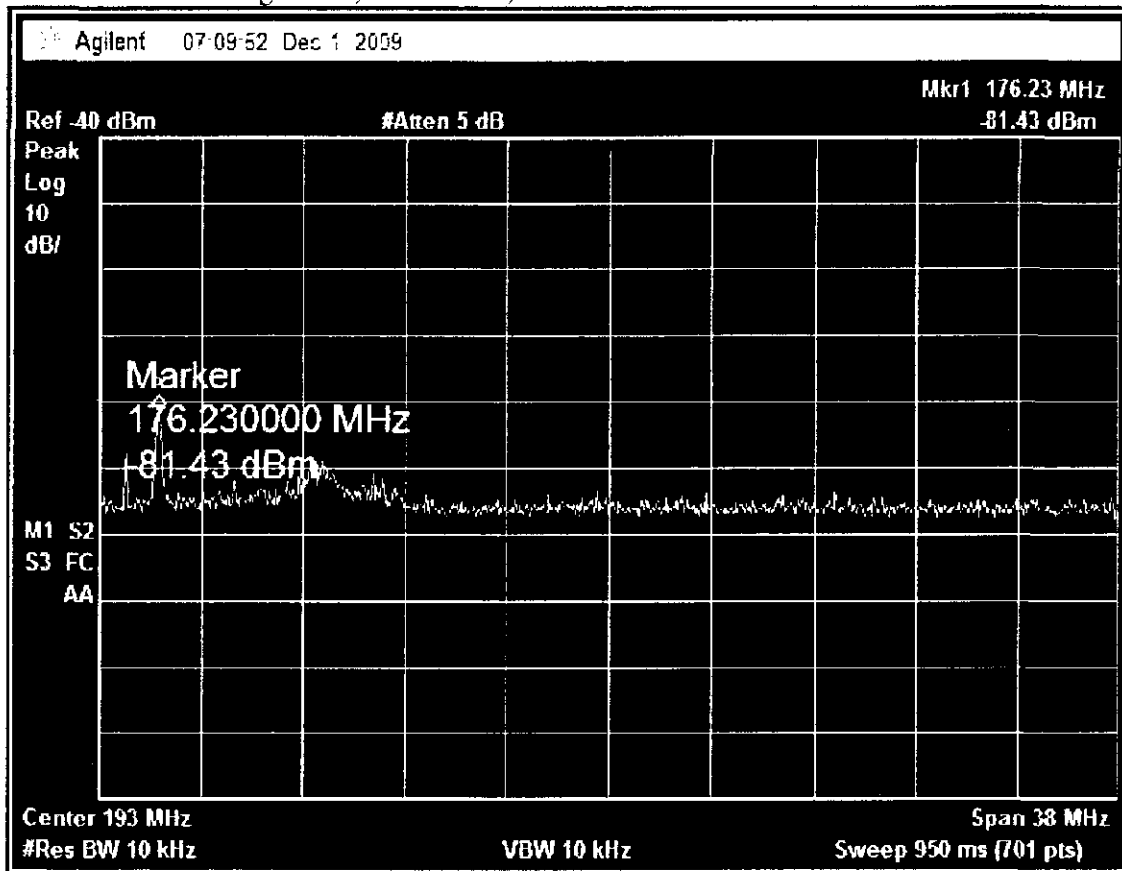
Azimuth: 0-360°

Figure 3.5-3 Spectrum Photographs

Test Point Five Latty, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 05' 19.11" W84° 35' 6.40"

VHF High Band Channels 7-13

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

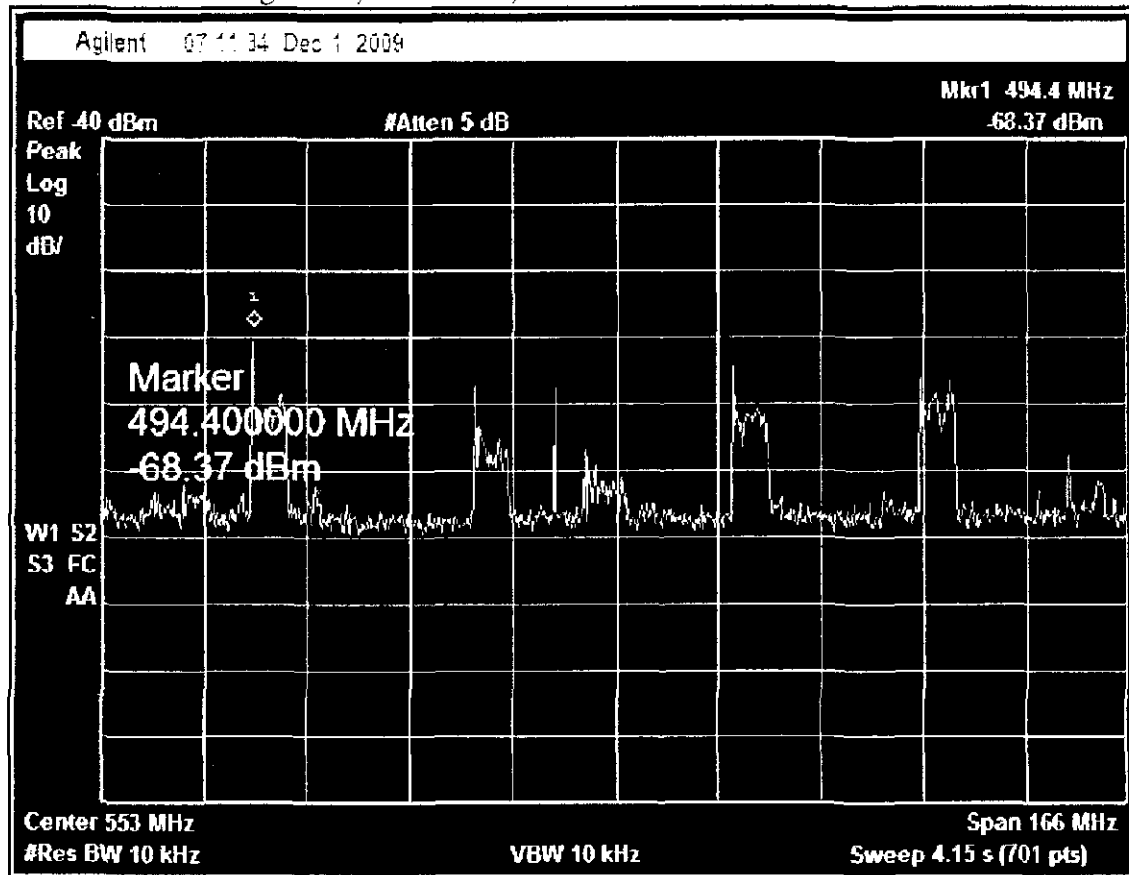
Azimuth: 0-360°

Figure 3.5-4 Spectrum Photographs

Test Point Five Latty, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 05' 19.11" W84° 35' 6.40"

UHF Band Channels 14-41

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
494.4	-68.37

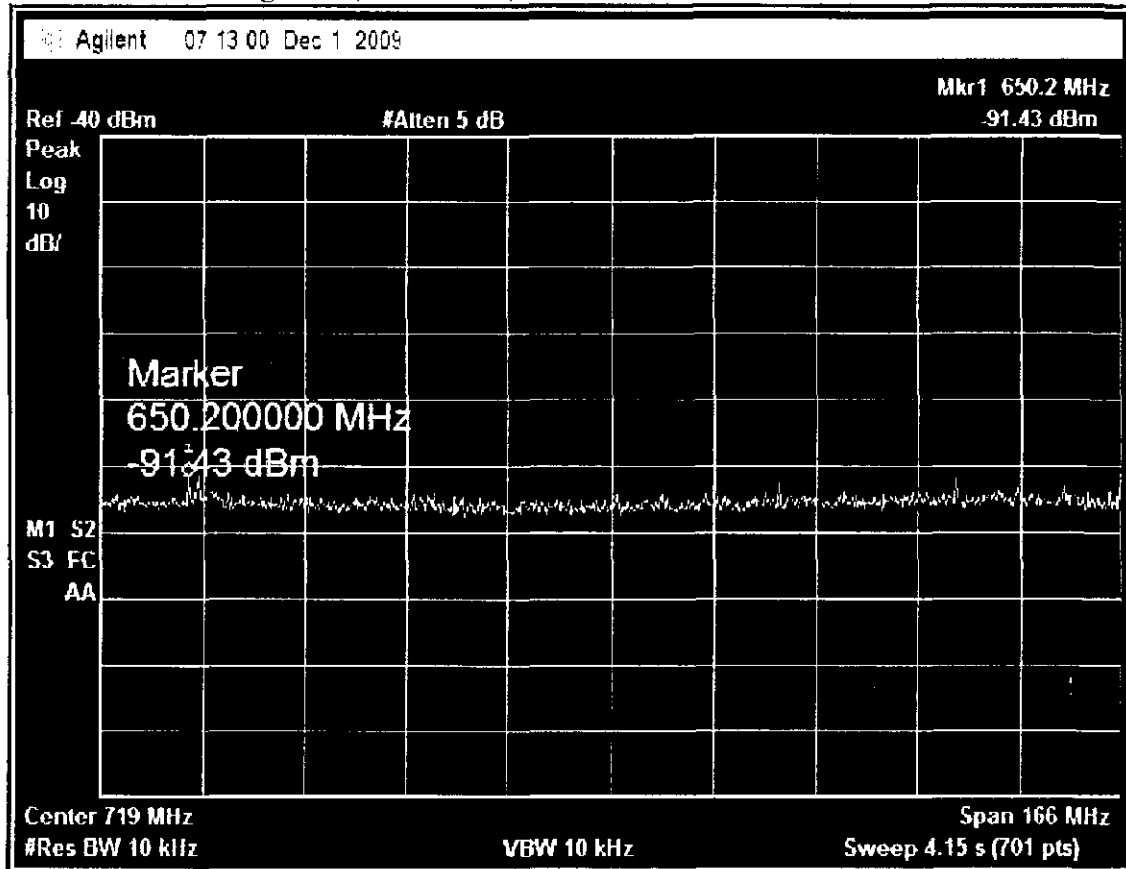
Azimuth: 0-360°

Figure 3.5-5 Spectrum Photographs

Test Point Five Latty, Ohio

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 05' 19.11" W84° 35' 6.40"

UHF Band Channels 42-69

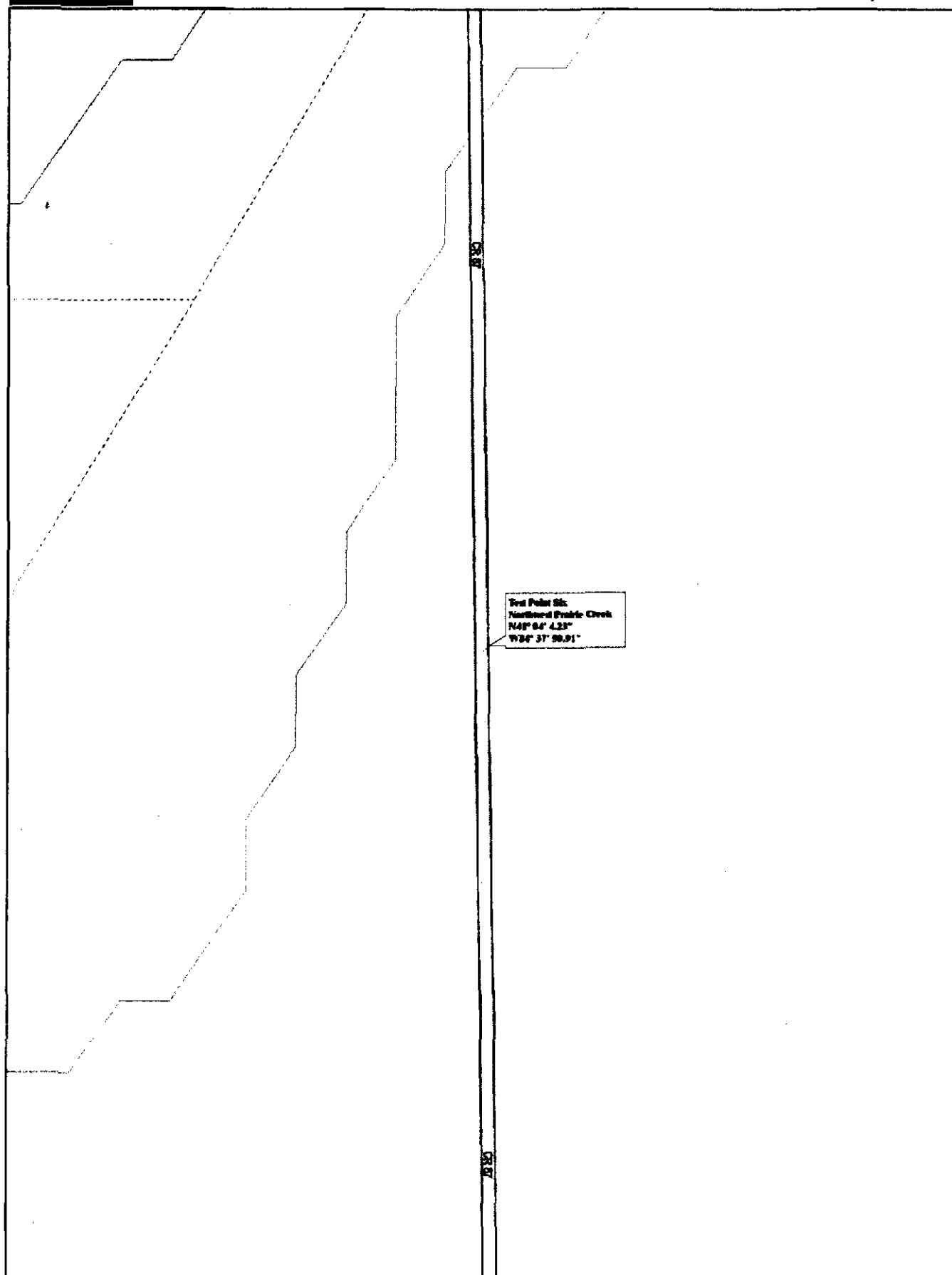
TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
650.2	-91.43

Azimuth: 0-360°

Figure 3.5-6 Spectrum Photographs



The following images were scanned as received

Test Point Six Northwest Prairie Creek

Dog Creek, Blue Creek, and Prairie Creek Wind Farms

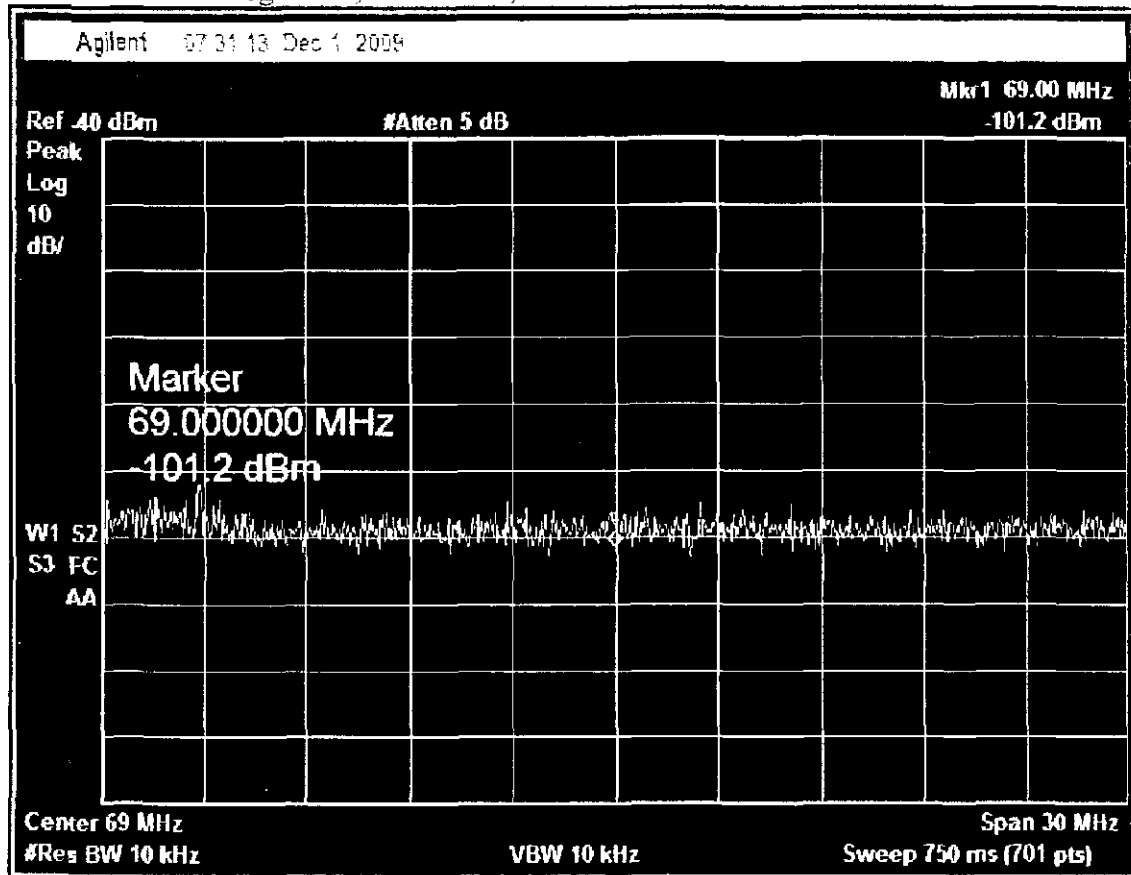


Figure 3.6-2 Site Photograph

Test Point Six Northwest Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 04' 4.23" W84° 37' 50.91"

VHF Low Band Channels 2-6

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

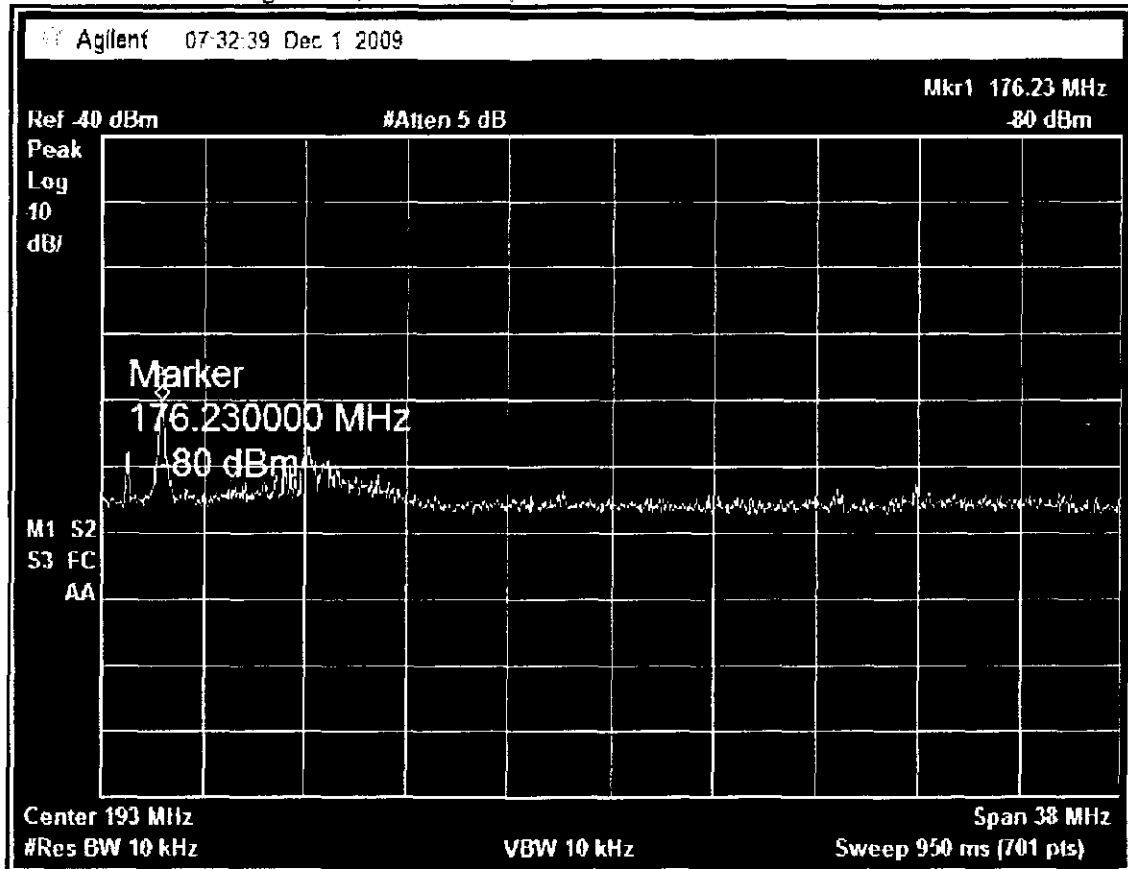
Azimuth: 0-360°

Figure 3.6-3 Spectrum Photographs

Test Point Six Northwest Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 04' 4.23" W84° 37' 50.91"

VHF High Band Channels 7-13

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

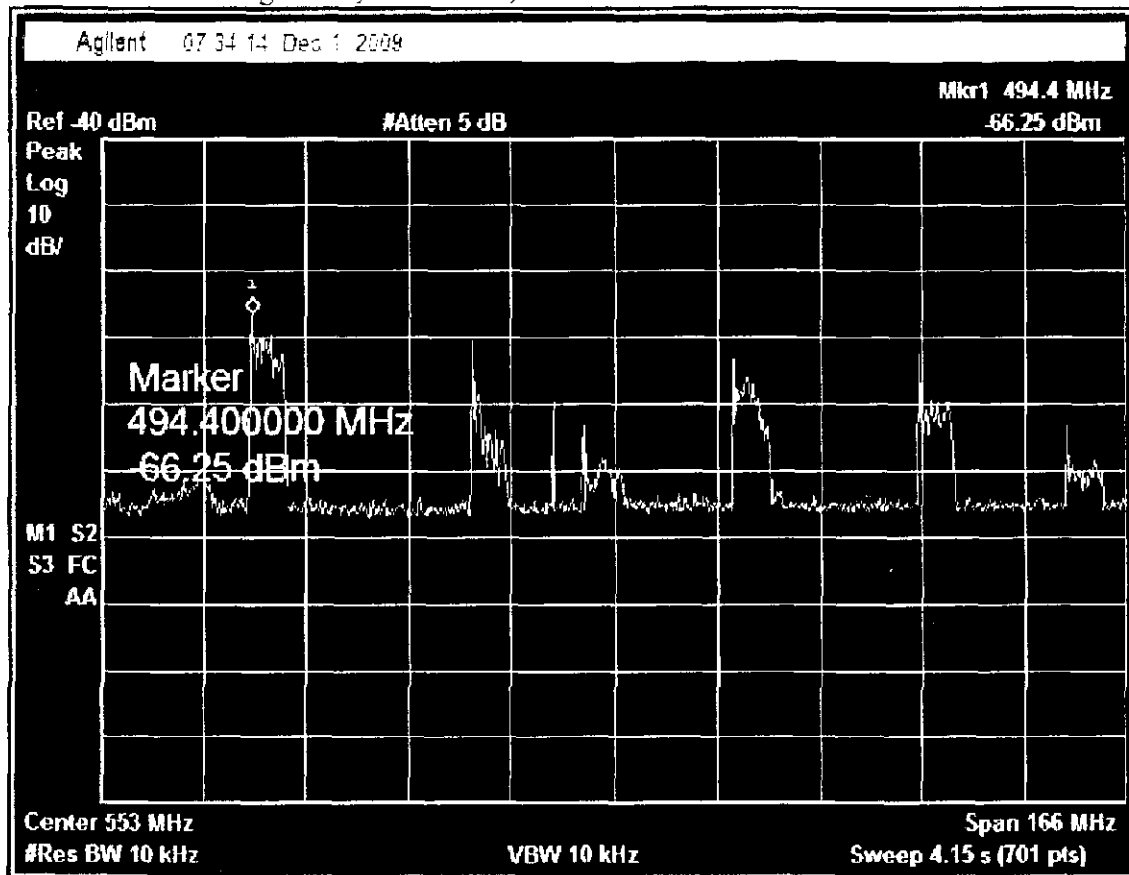
Azimuth: 0-360°

Figure 3.6-4 Spectrum Photographs

Test Point Six Northwest Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 04' 4.23" W84° 37' 50.91"

UHF Band Channels 14-41

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
494.4	-66.25

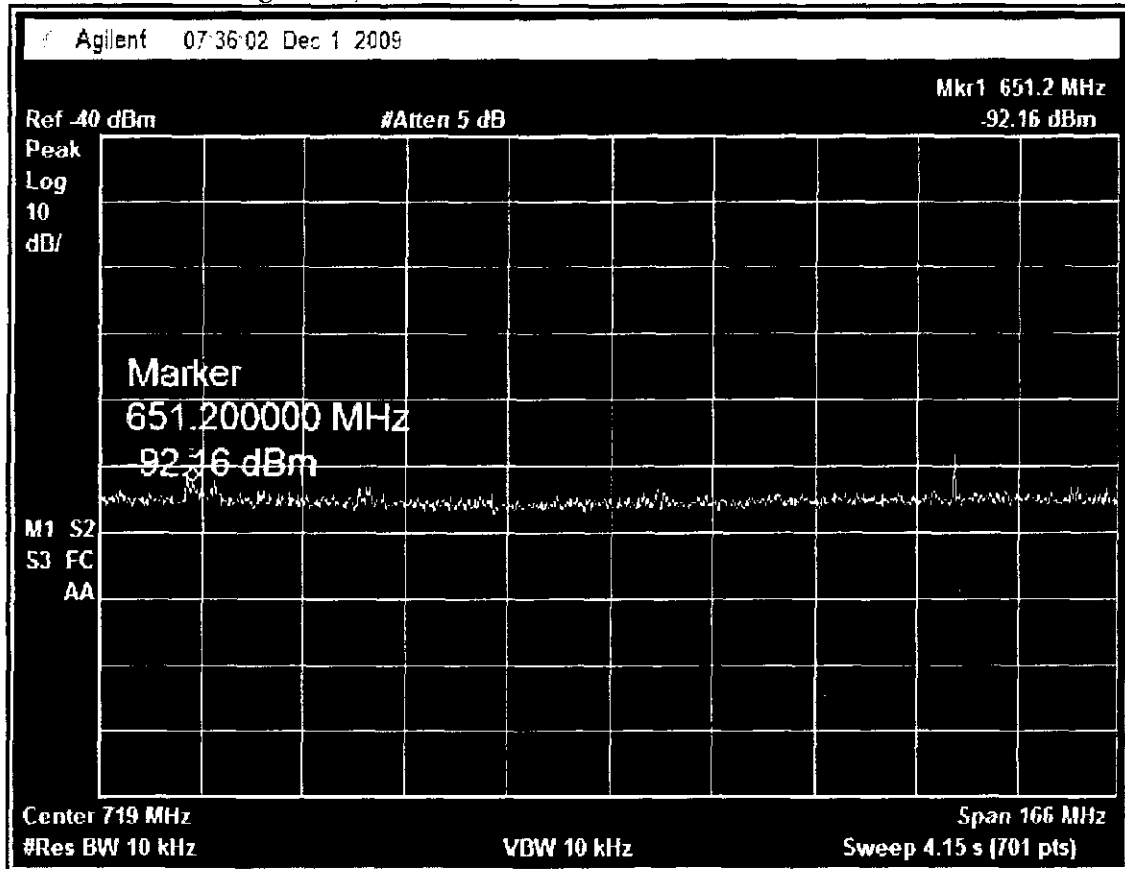
Azimuth: 0-360°

Figure 3.6-5 Spectrum Photographs

Test Point Six Northwest Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 04' 4.23" W84° 37' 50.91"

UHF Band Channels 42-69

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
651.2	-92.16

Azimuth: 0-360°

Figure 3.6-6 Spectrum Photographs

Low Point Screen
West of Peabody Creek
N41° 02' 52.63"
W84° 38' 15.67"

ROAD

Test Point Seven West of Prairie Creek

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



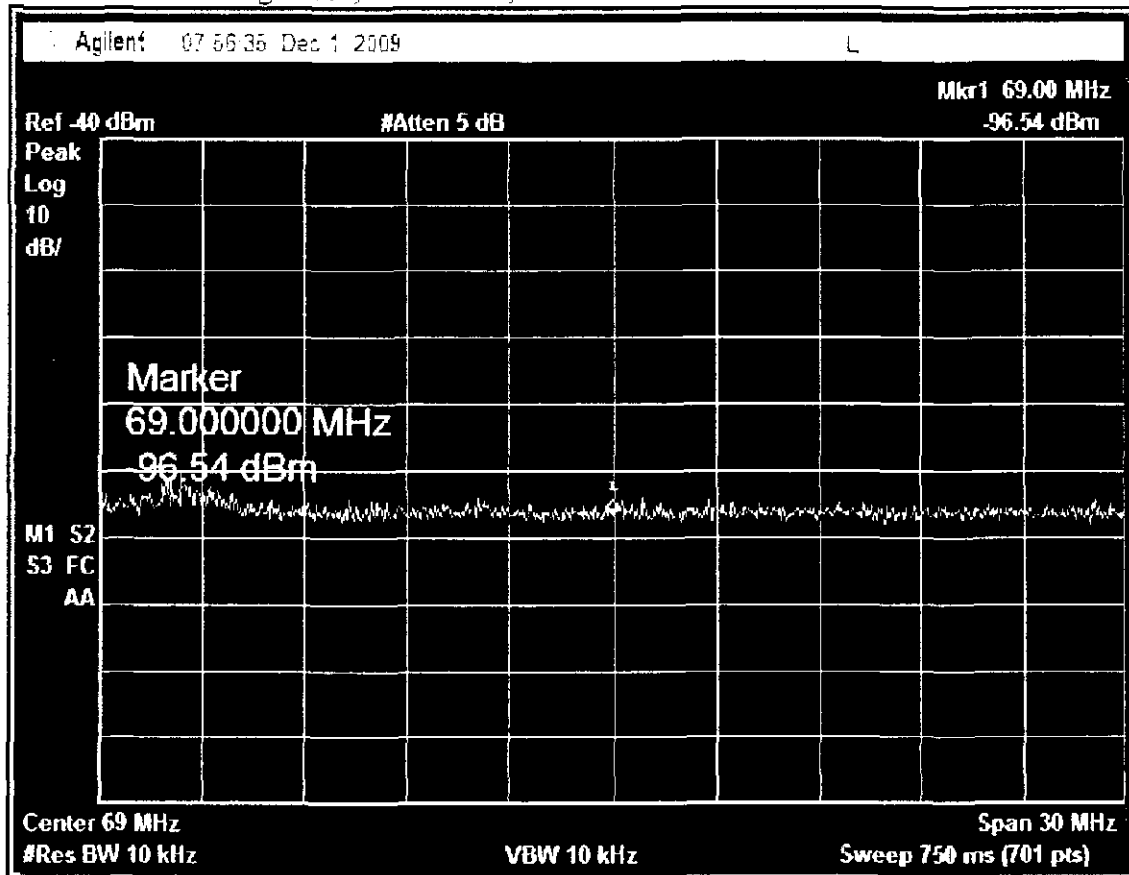
Figure 3.7-2 Site Photograph

The following images were scanned as received

Test Point Seven West of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 02' 52.63" W84° 38' 15.67"

VHF Low Band Channels 2-6

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)

None noted

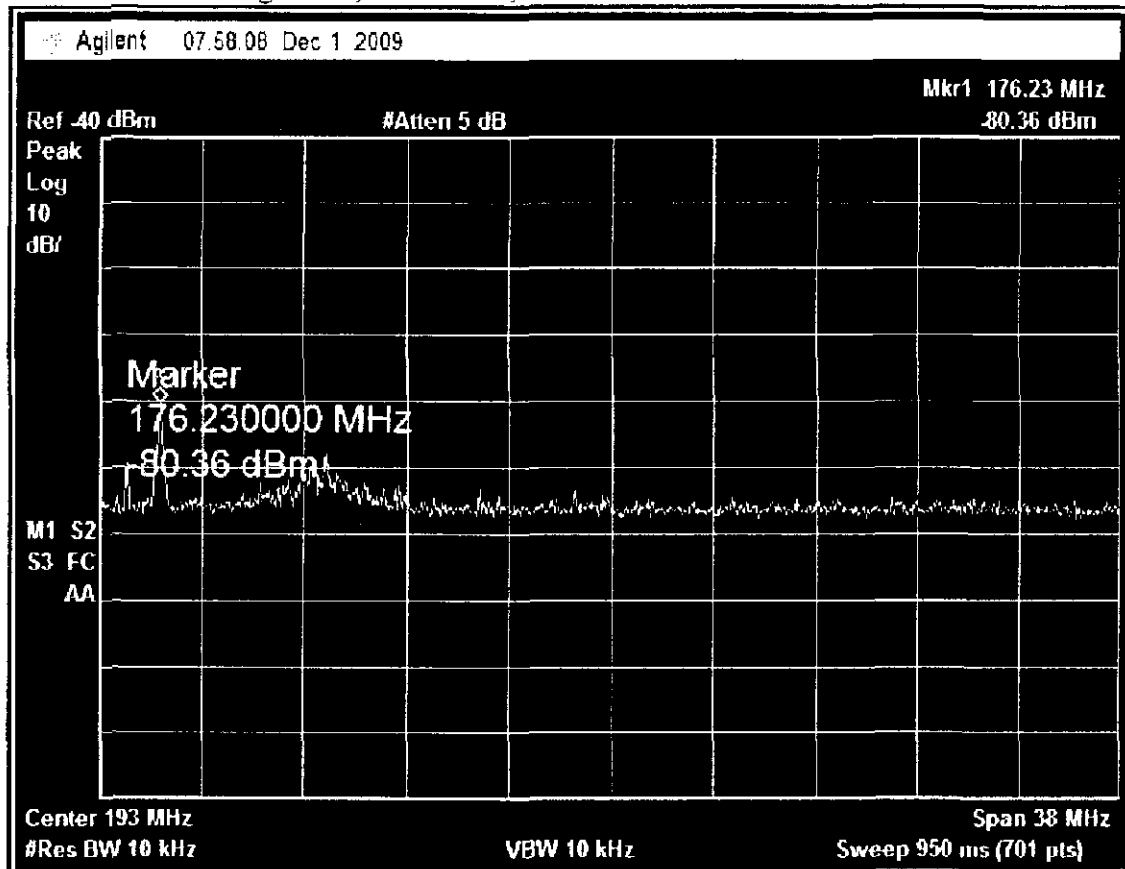
Azimuth: 0-360°

Figure 3.7-3 Spectrum Photographs

Test Point Seven West of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 02' 52.63" W84° 38' 15.67"

VHF High Band Channels 7-13

TV Broadcast

Highest Recorded Video Signal:

MHz Level (dBm)
None noted

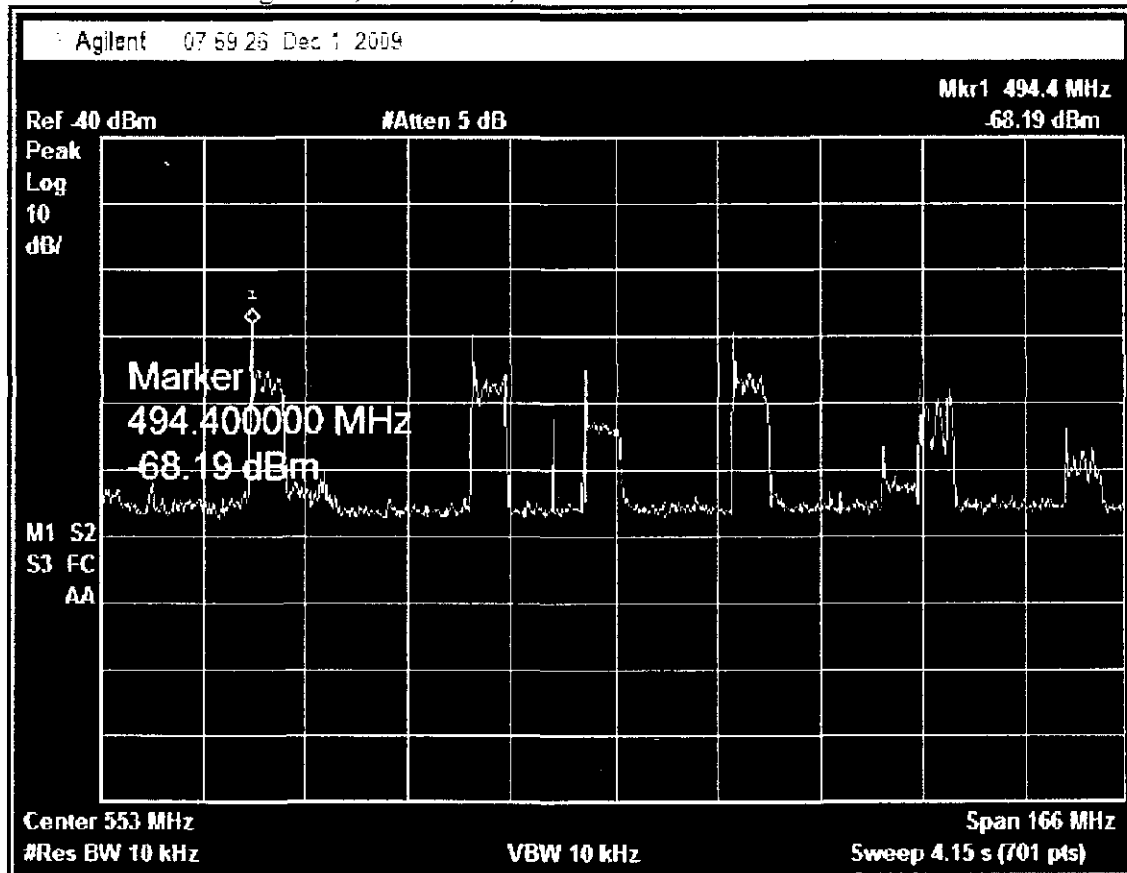
Azimuth: 0-360°

Figure 3.7-4 Spectrum Photographs

Test Point Seven West of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 02' 52.63" W84° 38' 15.67"

UHF Band Channels 14-41

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
494.4	-68.19

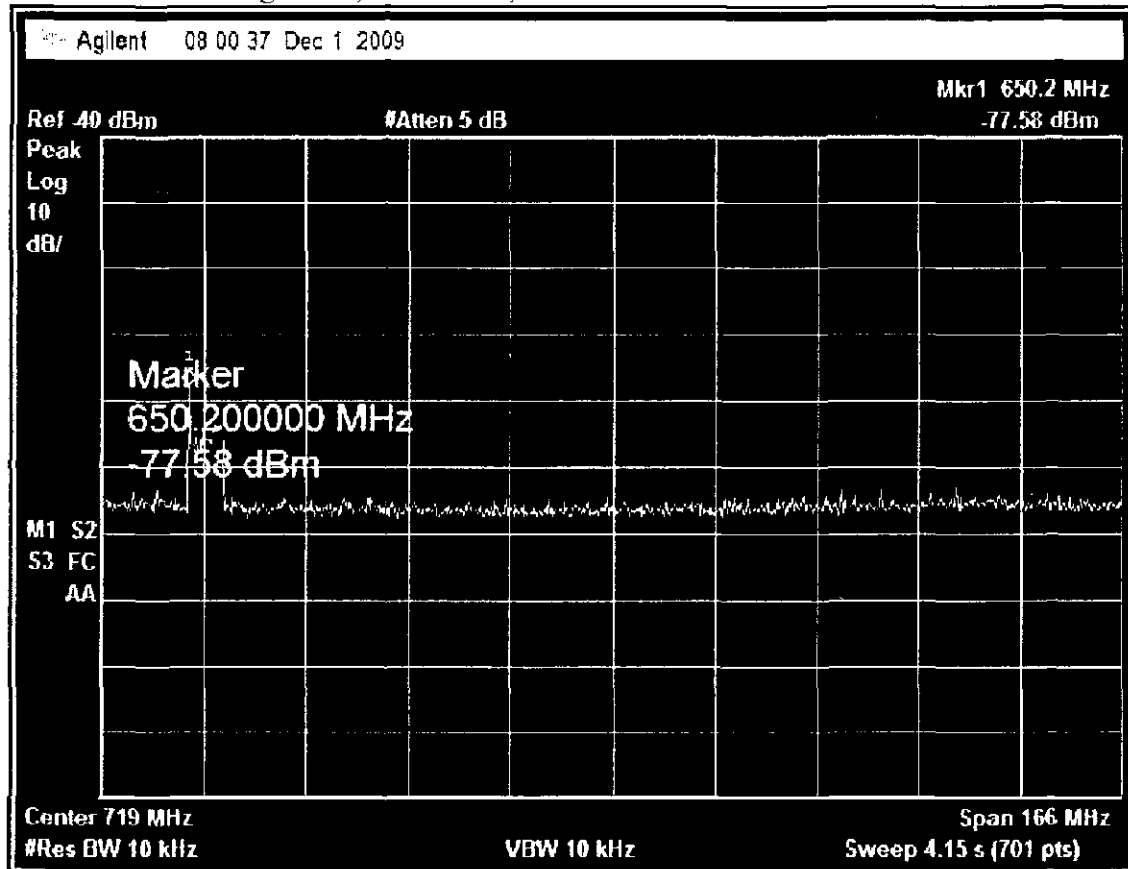
Azimuth: 0-360°

Figure 3.7-5 Spectrum Photographs

Test Point Seven West of Prairie Creek

TV Broadcast

Dog Creek, Blue Creek, and Prairie Creek Wind Farms



Date: 12/01/2009

Antenna Polarization: Horizontal

Antenna Centerline: 6 Feet

Coordinates: N41° 02' 52.63" W84° 38' 15.67"

UHF Band Channels 42-69

TV Broadcast

Highest Recorded Video Signal:

MHz	Level (dBm)
650.3	-77.58

Azimuth: 0-360°

Figure 3.7-6 Spectrum Photographs