

Contract Publication Series WV10-10

**ADDENDUM III TO THE PHASE I ARCHAEOLOGICAL SURVEY
OF THE BEECH RIDGE WIND ENERGY PROJECT &
ASSOCIATED TRANSMISSION SUPPORT LINE,
GREENBRIER AND NICHOLAS COUNTIES,
WEST VIRGINIA**

By

Jamie S. Meece, MA, RPA



CULTURAL RESOURCE ANALYSTS, INC.

**ADDENDUM III TO THE PHASE I ARCHAEOLOGICAL SURVEY
OF THE BEECH RIDGE WIND ENERGY PROJECT &
ASSOCIATED TRANSMISSION SUPPORT LINE, GREENBRIER
AND NICHOLAS COUNTIES, WEST VIRGINIA**

By

Jamie S. Meece, MA, RPA

Submitted to:

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Submitted by:

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CRA Project No. : W08P004

C. Michael Anslinger, RPA
Principal Investigator
March 31, 2010

MANAGEMENT SUMMARY

In 2008, Cultural Resource Analysts, Inc. conducted Phase I archaeological survey for the proposed Beech Ridge Wind Energy and associated Transmission Support Line project in Greenbrier and Nicholas counties, West Virginia. The survey was completed under contract with Potesta & Associates, Inc., on the behalf of Beech Ridge Energy LLC. Systematic survey resulted in the identification of six newly recorded archaeological sites (46Gb445-46Gb450). The West Virginia State Historic Preservation Office commented on the report in a letter dated March 9, 2009.

During the period April 6-8, 2009, Cultural Resource Analysts, Inc. completed systematic Phase I survey for an approximate 8.9-ha (22.1-ac) addendum tract selected as the new site for the construction laydown and batch plant located in Williamsburg District, Greenbrier County, West Virginia. Systematic survey resulted in the identification of one previously undocumented archaeological site (46Gb467).

In September 2009, Beech Ridge Energy LLC notified Cultural Resource Analysts, Inc. that they required Phase I survey of an additional tract for the location of a newly proposed Operations and Maintenance Facility, not examined during prior 2008 and 2009 investigations. The newly proposed Operations and Maintenance Facility tract incorporates approximately 0.92 ha (2.26 ac) of ridgetop saddle located between Beech Knob and Little Beech Knob in Williamsburg District, Greenbrier County, West Virginia. Phase I survey of the tract was completed during the period September 29-30, 2009.

For the current survey approximately 1.5 ha (3.7 ac) were examined, which consisted of seven new turbines sites (F-1, F-2, G-13, G-14, G-16, G-17 and H-10) and associated access roads. Due to recent logging at most sites, survey was completed primarily by pedestrian survey. Systematic survey failed to discover evidence of archaeological sites. It is the recommendation of Cultural Resource Analysts that *no additional archaeological survey* is warranted for the current project area, which is part of the larger Beech Ridge Wind Energy Project. However, should human remains or intact cultural features be discovered during project constructions, work in the area of discovery should cease and the West Virginia Division of Culture and History and the West Virginia Public Service Commission contacted.

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I. INTRODUCTION AND BACKGROUND

Between August 25 and September 26, 2008, personnel from Cultural Resource Analyst Inc. (CRA) conducted Phase I archaeological survey on approximately 69.9 ha (172.6 ac) of land for the proposed Beech Ridge Wind Energy project and associated Transmission Support Line (Beech Ridge Wind Energy Facility) located in Greenbrier and Nicholas counties, West Virginia (Meece and Smith 2008). The survey was completed under contract with Potesta & Associates, Inc. (Potesta) to aid Beech Ridge Energy LLC (Beech Ridge) achieve compliance. The Beech Ridge Wind Energy Facility is located in north central Greenbrier County and southeast Nicholas County, West Virginia (Figure 1), and includes the development of a wind turbine power-generating facility, new access roads, upgrading existing access roads, an operations and maintenance facility, a transmission line, and a substation.

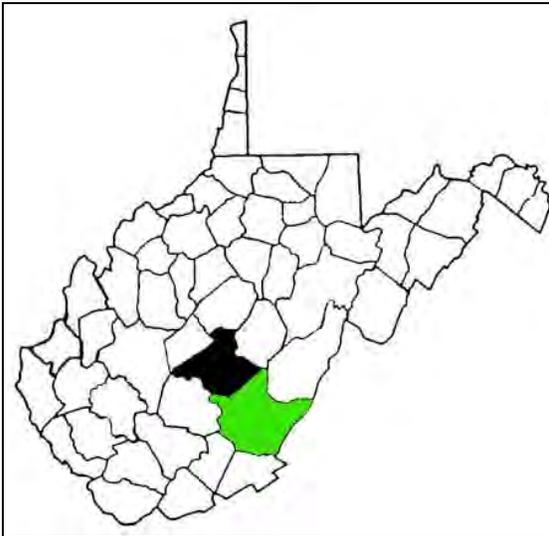


Figure 1. Locations of Greenbrier (green) and Nicholas (black) counties, West Virginia.

The 2008 survey resulted in the identification of six newly recorded archaeological sites (46Gb445-46Gb450) (Meece and Smith 2008). Site 46Gb445 is a potential stone mound. Site 46Gb446 is a multicomponent artifact scatter containing

prehistoric lithic debris and historic-period refuse. Sites 46Gb447 and 46Gb448 are possible historic-period gravesites. Sites 46Gb449 and 46Gb450 are prehistoric lithic scatters of unknown cultural and temporal affiliation.

A technical report detailing information generated by the survey was submitted on January 28, 2009 (Meece and Smith 2008). In response, the West Virginia State Historic Preservation Office (WVSHPO) issued a comment letter dated March 9, 2009, stating that the report satisfactorily addressed their concerns regarding the presence of intact archaeological resources within the area proposed for the construction of the Beech Ridge Wind Energy Facility (Appendix A).

In early April 2009, CRA was notified by Beech Ridge that Phase I survey was required for the location of a proposed construction laydown and batch plant not examined during the 2008 survey. Phase I survey of the 8.9-ha (22.1-ac) tract selected for the proposed laydown and batch plant was examined by CRA during the period April 6-8, 2009. Systematic survey resulted in the identification of one previously undocumented archaeological site (46Gb467), defined as a prehistoric lithic scatter of unknown cultural and temporal affiliation. A technical report detailing information generated by the survey was submitted on April 13, 2009 (Meece 2009). In response, the WVSHPO issued a comment letter dated April 17, 2009, stating that the report satisfactorily addressed their concerns regarding the potential of the project to affect historic properties, and indicated that no further consultation was required regarding 46Gb467 (Appendix A).

In September 2009, Beech Ridge notified CRA that they required Phase I survey of an additional tract for the location of a newly proposed Operations and Maintenance (O&M) Facility not examined during prior 2008 and 2009 investigations. The tract for this facility incorporated approximately 0.92 ha (2.26 ac) of ridgetop saddle located between Beech Knob and Little Beech Knob.

Phase I survey for the proposed O&M Facility was conducted on September 29-30, 2009 (Baker 2009). The purpose of the survey was to examine the tract for any archaeological sites that might be present. Project boundaries were defined by Beech Ridge personnel prior to the start of survey. A single previously undocumented archaeological site was discovered by the survey. Site 46Gb468 was identified as a multicomponent, low-density artifact scatter containing mixed deposits of prehistoric lithic materials and historic/modern domestic materials within disturbed contexts. Evidence of cultural features and/or midden was not discovered. It was the recommendation of CRA that the site was *not eligible* to the National Register of Historic Places (NRHP). The WVSHPO concurred with this recommendation (Appendix A).

In March 2010, CRA was again contacted by Beech Ridge to conduct a Phase I survey for seven additional turbine sites and associated access road locations, the results of which are reported herein. The turbine sites are identified as F-1, F-2, G-13, G-14, G-16, G-17, and H-10 (Figure 2). CRA completed the survey for these locations on March 18, 19, and 22, 2010. Fieldwork was conducted by the author, with assistance from Jason Baker, and Paul Paternostro. Michael Anslinger served as project manager.

II. PURPOSE AND SCOPE

For the purpose of this project, a *Phase I Archaeological survey* is defined as a reconnaissance-based survey designed to document and evaluate archaeological sites. An *archaeological site* is defined as any belowground remains and/or aboveground ruins of a district, site, building, structure, or object 50 years of age or older. A *historic property* is defined as any archaeological site listed in or determined eligible to the NRHP. An *effect* is defined as any activity that alters a characteristic of a historic property qualifying it for inclusion in, or eligibility to, the NRHP.

The 1.5-ha (3.7-ac) project area is considered the direct Area of Potential Effects

(direct APE) as defined by 36 CFR 800.16 (d). CRA understands that the identification of the indirect APE and indirect effects to historic properties from the Beech Ridge Wind Energy Facility have previously been addressed. Therefore, the sole purpose of this report is to address direct effects to archaeological sites located within the footprint of the seven turbine pads and their associated access roads.

The Beech Ridge Wind Energy Facility is subject to review by the West Virginia Public Service Commission (WVPSC). To meet WVPSC conditions, the project requires consultation with the WVSHPO concerning effects to historic properties.

Consultation between Beech Ridge and the WVSHPO lead to the execution of a Memorandum of Agreement (MOA), which included programmatic language requiring archaeological work prior to the initiation of construction activities (Appendix B). The results of the archaeological investigation reported herein were prepared to meet the requirements of Stipulation B.1 of the MOA. As required by Stipulation B.1.a of the MOA, a Scope of Work (SOW) for conducting Phase I archaeological survey for the Beech Ridge Wind Energy Facility was developed in consultation with the WVSHPO (see Meece and Smith 2008). The tasks completed to address the SOW for the current project followed the same guidelines and conditions developed for the original survey.

III. PROJECT AREA DESCRIPTION

The current project area consists of approximately 1.5 ha (3.7 ac) situated in upland settings. Turbine Sites F-1 and F-2 are located atop Rockcamp Ridge, Turbine Sites G-13, G-14, and G-16 are located on a north-trending ridge spur of Beech Ridge, Turbine Site G-17 is located a short distance southwest of Jacob Knob, and Turbine Site H-10 is located farther west atop Smokehouse Ridge (Figure 2). Turbine Sites G-13, G-14, and G-16 are located in Williamsburg District, Greenbrier County, West Virginia. Turbine

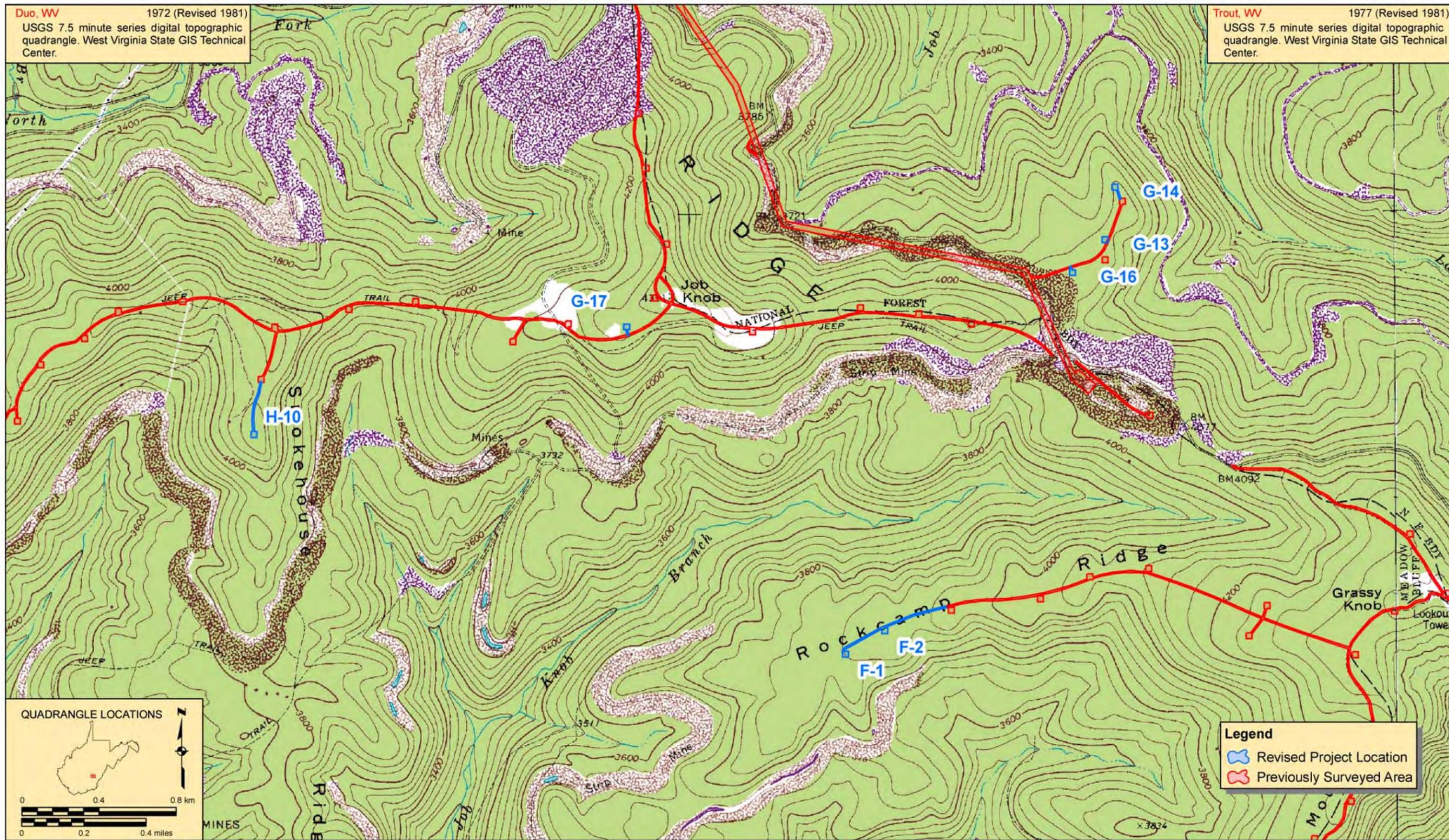


Figure 2. Overview showing surveyed area and newly revised turbine locations.

Sites F-1, F-2, G-17, and H-10 are located in Meadow Bluff District, Greenbrier County, West Virginia. Elevations range from approximately 1,196.4 m (3,925 ft) to 1,310.6 m (4,300 ft) above mean sea level (msl). Vegetation at the seven locations consists of hardwood forests, although a majority of the locations had been logged prior to the survey.

Project Soils

The general soils map of Greenbrier County indicates that the project area is located within the Dekalb-Galpin-Laidig soil association and the Dekalb-Gilpin-Laidig-Cookport soil association. Soils in the Dekalb-Gilpin-Laidig association are moderately deep to deep, well-drained, dominantly very steep and very stony soils along high mountains (Gorman et al. 1972). Soils in the Dekalb-Gilpin-Laidig-Cookport association are moderately deep-to-deep, well-drained to moderately well-drained, very steep to gently sloping, very stony soils along high mountains (Gorman et al. 1972).

Specific soils in the project area consist of Dekalb very stony loam, 5 to 25 percent slopes (DeC), Dekalb-Cookport loams, 3 to 12 percent slopes (DoB), and Dekalb-Gilpin very stony complex, 5 to 40 percent slopes (DsC) (Gorman et al. 1972: Soil Maps 19 and 20). Dekalb very stony loam, 5 to 25 percent slopes (DeC) is described as moderately deep, gently sloping to very steep, well-drained soil located mostly on mountain ridges and the upper part of the slopes (Gorman et al. 1972:15-16). Dekalb-Cookport loams, 3 to 12 percent slopes (DoB) is described as moderately deep, gently sloping to very steep, well-drained soil located mostly on broad ridges but also on benches (Gorman et al. 1972:16). Dekalb-Gilpin very stony complex, 40 to 65 percent slopes (DsC), is described as moderately deep, gently sloping to very steep, well-drained soil located mostly on rolling exposed ridgetops in the rough mountainous areas in the northwestern part of Greenbrier County (Gorman et al. 1972:17).

IV. METHODS

Methods used to complete the survey and report followed guidelines developed by the WVSHPO (Trader 2001).

Field Methods

Identification of Project Boundaries

Field personnel used Garmin GPSMap 60CSx Chartplotting receivers, henceforth referred to as units, to verify locations in the field. Project boundaries, as mapped by Beech Ridge were first plotted onto the USGS 7.5-minute Duo quadrangle using the track function in *Maptech Terrain Navigator* software. Maps for use with the units were downloaded from the Garmin MapSource Eastern United States Topographic Maps CD-Rom. The datum used by both packages of software was set to NAD 1983. The georeferenced tracks created in *Maptech Terrain Navigator* were loaded directly onto the units and appeared as an overlay on the Duo quadrangle. The units were then used in the field to verify crew location in relation to project area boundaries.

Pedestrian Survey

The entire 1.5-ha (3.7-ac) tract was examined systematically by walkover survey. Due to favorable conditions, survey transects were spaced at 15-m (49-ft) intervals. The purpose of the survey was to identify surface sites (e.g., mounds, foundations, cemeteries) that might be present.

Shovel Probing

The subsurface of the entire 1.5-ha (3.7-ac) tract was sampled through the excavation of shovel test probes (STPs) when accessible. To the extent possible, STPs were placed on grid at 15-m (49-ft) intervals. Excavated soil was sifted through 0.64-cm (0.25-in) mesh hardware cloth. STPs measured approximately 50 cm (20 in) in diameter and were excavated into culturally sterile subsoil. A representative sample of soil profiles was documented, with information for soil horizons, texture,

structure, Munsell color, and the presence or absence of natural or cultural inclusions recorded. All STPs were backfilled.

Documentation

All aspects of the field investigation were documented through the completion of notes, standardized forms developed by CRA, and digital color photography. All data recovered from the Phase I investigation were collected and returned to CRA's West Virginia office for analysis.

V. RESULTS

The majority of the turbine sites and associated access roads had been logged prior to the survey. Of the seven turbine sites and associated access roads, five (G-13, G-14, G-16, G-17, and H-10) were pedestrian surveyed (Figures 3-11). In addition, the access road

associated with Turbine Sites F-1 and F-2 had been disturbed by logging roads prior to the survey (Figures 12-13).

During the survey, Turbine Pad F-2 was actively being logged (Figure 14). Due to the damage of the logging, the area was subject to pedestrian survey. A few small areas had not been cut yet; these areas were subject to shovel testing. The typical soil profile for the turbine site, as recorded in STP 1, is described as: 0 to 20 cm, A horizon, dark brown (10YR3/3) loam; medium granular structure; friable, 20 percent sandstone fragments and stones, many roots, clear, irregular boundary; 20 to 40 cm, B horizon, brownish-yellow (10YR6/6) channery sandy loam; weak fine and medium subangular blocky structure; friable, 20 percent sandstone fragments, roots common, clear, irregular boundary (Figure 15).



Figure 3. Turbine Site G-13, looking east.



Figure 4. Turbine Site G-13 access road, looking north.



Figure 5. Turbine Site G-14, looking north.



Figure 6. Turbine Site G-14 access road, looking south.



Figure 7. Turbine Site G-16, looking north.



Figure 8. Turbine Site G-16 access road, looking east.



Figure 9. Turbine Site G-17 and associated access road, looking west.



Figure 10. Turbine Site H-10, looking south.



Figure 11. Turbine Site H-10 access road, looking north.



Figure 12. Turbine Site F-2 access road, looking west.



Figure 13. Turbine Site F-1 access road, looking east.



Figure 14. Turbine Site F-2, looking north.



Figure 15. Typical soil profile for Turbine Site F-2.

Although the majority of the access road leading from Turbine Site F-2 to F-1 had been disturbed from the construction of a logging road, Turbine Site F-1 had not been logged (Figure 16). The entire pad was subject shovel testing. However, the area was extremely wet and the STPs filled with water during excavation. The typical soil profile for the turbine site, as recorded in STP 1, which is very similar to the soil profile recorded for Turbine Site F-2, is described as: 0 to 20 cm, A horizon, dark brown (10YR3/3) loam; medium granular structure, friable; 20 percent sandstone fragments and stones, many roots, clear, irregular boundary; 20 to 40 cm, B horizon; brownish-yellow (10YR6/8) channery sandy loam; weak, fine and medium

subangular blocky structure, friable 20 percent sandstone fragments, roots common, clear, irregular boundary (Figure 17).

VI. CONCLUSIONS AND RECOMMENDATIONS

Systematic survey of the seven turbines (F-1, F-2, G-13, G-14, G-16, G-17, and H-10) and associated access roads consisted of approximately 1.5 ha (3.7 ac) of discontinuous tracts. Due to recent logging at most sites survey was completed primarily by pedestrian survey. Systematic survey failed to discover evidence of archaeological sites.



Figure 16. Turbine Site F-1, looking east.



Figure 17. Typical soil profile for Turbine Site F-1.

Based on these conclusions, the following recommendations are made:

1. **No additional archaeological investigations** are warranted for the proposed turbine sites F-1, F-2, G-13, G-14, G-16, G-17 and H-10, and their associated access roads, and
2. Should evidence of intact archaeological deposits or human burials be identified during construction or project activities, work in the area of discovery should cease, and the WVPSC and the WVSHPO should be notified immediately of the discovery.

REFERENCES

- Baker, Jason A.
2009 *Addendum II to the Phase I Archaeological Survey of the Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia*. Contract Publication Series WV09-60 Cultural Resource Analysts, Inc., Hurricane, West Virginia.
- Gorman, J. L., L. S. Newman, W. W. Beverage, and W. F. Hatfield
1972 *Soil Survey of Greenbrier County, West Virginia*. U.S. Department of Agriculture, Soil Conservation Service.

Meece, Jamie S.

2009 *Addendum to the Phase I Archaeological Survey of the Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia*. Contract Publication Series WV09-15 Cultural Resource Analysts, Inc., Hurricane, West Virginia.

Meece, Jamie S., and Aaron O. Smith

2008 *Phase I Archaeological Survey of the Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia*. Contract Publication Series WV08-70 Cultural Resource Analysts, Inc., Hurricane, West Virginia.

Trader, Patrick D.

2001 *Guidelines for Phase I Surveys, Phase II Testing, Phase III Mitigation and Cultural Resource Reports*. Ms on file at Division of Culture and History, Charleston, WV.

APPENDIX A

WVSHPO CORRESPONDENCE



WEST VIRGINIA
DIVISION OF
CULTURE & HISTORY

The Cultural Center
1900 Kanawha Blvd., E.
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EEC/AA Employer

March 9, 2009

Mr. Erik Duncan
Beech Ridge Energy, LLC
Invenergy, LLC
7564 Standish Place
Suite 123
Rockville, MD 20855

RE: Beech Ridge Wind Energy Facility
Phase I Archaeological Survey
FR#: 06-147-GB-25

Dear Mr. Duncan:

We have reviewed the report titled *Phase I Archaeological Survey of the Beech Ridge Wind Energy Project and Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia*, which was submitted for the above referenced project. The following comments are offered under West Virginia Code 29-1-8.

The report satisfactorily addresses our concerns regarding the presence of intact archaeological resources within the area proposed for construction of the above referenced project. According to the report, 4 new archaeological sites, 46Gb445, 46Gb446, 46Gb449 and 46Gb450, and two possible historic period grave sites, 46Gb447 and 46Gb448, were identified during the survey. Portions of the project area where sites were identified are the access roads for Turbines D-4 and C-6, Turbines C-3, E-24/E-25 and J-10 and the proposed location of the operation and maintenance facility.

Archaeological Resources:

Sites 46Gb449 and 46Gb450 consist of low density lithic scatters from an unknown prehistoric period. It is our understanding that all artifacts were recovered from the soil O/A Horizons and that no evidence was observed suggesting the presence of cultural features, midden or stratified deposits. We concur that these sites are not likely to produce significant information and as such, are not eligible for inclusion in the National Register of Historic Places. No further work is necessary for these resources.

Site 46Gb446 is a multicomponent site consisting of an intermixed scatter of historic and prehistoric period artifacts along an existing access road in the vicinity of Turbine C-6. Project plans propose to upgrade this access road. It is our understanding that the prehistoric component of the site produced an ephemeral scatter of non-diagnostic lithic debris and that the historic component consists of an ephemeral scatter of domestic and architectural debris. Because diagnostic materials, subsurface cultural features or midden and stratified deposits were not identified at 46Gb446, we concur that the portion of the site within the project area (or direct APE) lacks research potential and is not eligible for inclusion in the National Register of Historic Places.

Site 46Gb446 also contains a series of stone piles and section of a stone wall. Because there was an historic era farm at this location, the stone piles have been interpreted to be the result of field clearing activities. Shovel probes in the vicinity of the stone piles did not result in the recovery of cultural materials. However, the stone piles themselves were not investigated. Consequently, their cultural association is tentative and their historic significance is unknown. It is our understanding that the stone piles and stone wall are located outside the direct APE and will not be impacted by the proposed turbine construction or access road upgrade. Provided that they are avoided by proposed construction activities, it is our opinion that this project will have no effect to this part of 46Gb446. Please notify this office if 46Gb446 cannot be avoided.

Mr. Duncan
FR# 06-147-GB-25
March 9, 2009
Page 2

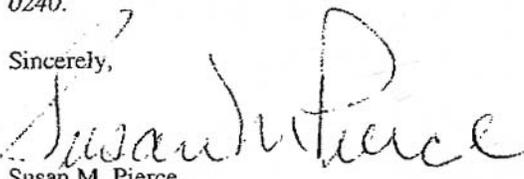
Site 46Gb445 consists of a stone mound that was identified along the proposed route of the access road for proposed Turbine D-1. Although no artifacts were recovered from shovel probes excavated in the vicinity of the stone mound, its size and shape are similar to others that have been determined to be prehistoric burial mounds. As a result, we concur with the recommendation that 46Gb445 be avoided by the proposed project and strongly advise that alternatives be considered. If it cannot be avoided, Federally recognized Native American Tribes will need to be notified and invited to participate in consultation. We also concur that Phase II investigations will need to occur to determine the eligibility of this resource. Provided that this resource is avoided by proposed construction activities, it is our opinion that this project will have no effect to 46Gb445. Please notify this office if 46Gb445 cannot be avoided.

Cemetery Resources:

It is our understanding that two possible grave sites, 46Gb447 and 46Gb448, were identified within the proposed project area. Grave 46Gb447 was identified at the proposed location of Turbine C-3, while grave 46Gb448 was found along the proposed access road between the proposed locations of Turbines E-24 and E-25. Both possible graves are marked by upright, uncarved fragments of sandstone. In addition, pedestrian investigation of the area surrounding each possible grave failed to discover evidence of other graves or markers, fencing, ornamental plantings or other cultural features typically associated with cemeteries. Currently, very little is known about the possible graves. As a result, the report recommends that they be avoided by the proposed project or undergo Phase II National Register assessment. While we concur that 46Gb447 and 46Gb448 should be avoided by construction activities associated with this project, it is our opinion that they do not meet the criteria to consider them eligible for listing in the National Register of Historic Places.

We appreciate the opportunity to be of service. *If you have questions regarding our comments or the Section 106 process, please contact Lora A. Lamurre, Senior Archaeologist at (304) 558-0240.*

Sincerely,



Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LAL



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April 17, 2009

Mr. Eric Duncan
Beech Ridge Energy, LLC
Invenergy, LLC
7564 Standish Place
Suite 123
Rockville, MD

RE: Addendum to the Phase I Archaeological Report
Beech Ridge Energy, LLC
FR#: 06-147-GB-27

Dear Mr. Duncan:

We have reviewed the report titled *Addendum to the Phase I Archaeological Survey of the Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia* for the above referenced project. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

It is our understanding that Beech Ridge Energy intends to place a construction layout and batch plant within a 22.1 acre area northeast of Tipple, in the Williamsburg District, Greenbrier County, WV. The report satisfactorily addresses the direct effects to archaeological resources located within the footprint of the proposed construction area and satisfies the requirements set forth in the *WV Guidelines for Phase I, II and III Archaeological Investigations and Technical Reports*.

One archaeological site was identified during the phase I survey. 46GB467 is a low density prehistoric lithic scatter of unknown cultural and temporal affiliation located on a slightly sloping ridgetop along Beech Ridge. Artifact bearing deposits are shallow and lack stratification. The artifact assemblage consists of lithic debitage of unknown age and likely represents a small short-term camp site. The site was not considered eligible for inclusion in the National Register of Historic Places and no further work was recommended. We concur with this determination. No further consultation is required regarding 46GB467.

We appreciate the opportunity to be of service. If you have any questions regarding our comments or the Section 106 process, please contact Kristin D. Scarr, Archeologist, at (304) 558-0240.

Sincerely,

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/KDS

cc: Ms. Darla Spencer, RPA ; CRAI, Hurricane, WV



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Mr. Eric Duncan
Beech Ridge Energy, LLC
Invenergy, LLC
7564 Standish Place
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Rockville, MD

RE: Addendum II to the Phase I Archaeological Report
Beech Ridge Energy, LLC
FR#: 06-147-GB-29

Dear Mr. Duncan:

We have reviewed the report titled *Addendum II to the Phase I Archaeological Survey of the Beech Ridge Wind Energy Project & Associated Transmission Support Line, Greenbrier and Nicholas Counties, West Virginia* for the above referenced project. As required by Section 106 of the National Historic Preservation Act of 1966, as amended, and its implementing regulations, 36 CFR 800: "Protection of Historic Properties," we submit our comments.

It is our understanding that Beech Ridge Energy requires an additional 2.26-acre tract of land for the construction of its newly proposed Operations and Maintenance Facility in Williamsburg District, Greenbrier County, WV. The report satisfactorily addresses the direct effects to archaeological resources located within the footprint of the proposed construction area and satisfies the requirements set forth in the *WV Guidelines for Phase I, II and III Archaeological Investigations and Technical Reports*.

According to the report, one archaeological site was identified during the phase I survey. Site 46GB468 is a low density multicomponent artifact scatter containing mixed deposits of prehistoric lithic materials and historic period/modern materials. Artifact bearing deposits are shallow and heavily disturbed. In addition, it is our understanding that no evidence for stratification or cultural deposits was discovered. The report recommends that 46Gb468 be considered not eligible for inclusion in the National Register of Historic Places and no further work be conducted. We concur with this determination. No further consultation is required regarding this portion of the proposed project.

We appreciate the opportunity to be of service. If you have any questions regarding our comments or the Section 106 process, please contact Lora A. Lamarre, Senior Archeologist, at (304) 558-0240.

Sincerely,

A handwritten signature in cursive script that reads "Susan M. Pierce".

Susan M. Pierce
Deputy State Historic Preservation Officer

SMP/LAL

cc: Ms. Darla Spencer, CRAI, Hurricane, WV

APPENDIX B

MOA FOR BEECH RIDGE WIND ENERGY FACILITY

MEMORANDUM OF AGREEMENT

Whereas, Beech Ridge Energy LLC (Beech Ridge) has determined that the proposed Beech Ridge Wind Energy Wholesale Electric Generating Facility and Related Transmission Support Line (Beech Ridge Wind Energy Facility), located in Greenbrier County may potentially have an effect on historic resources and;

Whereas after public notice and public hearings affording the public reasonable opportunity to participate in the review process, the West Virginia Public Service Commission (PSC) issued an order dated August 28, 2006 granting Beech Ridge Energy LLC a Siting Certificate to construct and operate the Beech Ridge Wind Energy Facility and;

Whereas the Certificate contains a condition that Beech Ridge shall receive all necessary agency approvals including that of the West Virginia Division of Culture and History - State Historic Preservation Office (WVSHPO) and;

Whereas Beech Ridge has consulted with the WVSHPO pursuant to 82 CSR 2 Standards and Procedures for Administering State Historic Preservation Programs implementing West Virginia Code 29-1-8(a) including identification of historic resources listed in or eligible for the National Register of Historic Places and assessment of possible effects to these resources and;

Whereas, Beech Ridge has conducted a survey of above ground historic resources located within the defined Area of Potential Effect and received concurrence from the WVSHPO regarding their eligibility according to the Criteria of Evaluation for listing in the National Register of Historic Places and;

Whereas, Beech Ridge has agreed to complete stipulations regarding the identification, evaluation of eligibility and assessment of effects regarding archaeological resources as elaborated below and;

Whereas, it is agreed that the potential adverse effects to above ground historic resources cannot be reasonably eliminated due to the nature of the Project and the necessary wind turbine height; and

Beech Ridge has identified and analyzed the potential alteration of the view shed and subsequent impact to the historic resources in the report entitled, "Assessment of Effects for the Proposed Beech Ridge Energy Facility," dated February 15, 2008, prepared by BHE Environmental, Inc., for the WVSHPO;

Now therefore, Beech Ridge and the WVSHPO agree that the following will be implemented to address the PSC Certificate condition and the potential effect of the Project on historic resources:

STIPULATIONS

A. Mitigation of Visual Effects to Above Ground Historic Resources

1. Beech Ridge will provide up to six copies of the completed survey, entitled "Architectural Investigations for the Proposed Beech Ridge Energy Facility," dated March 16, 2007, in hard-copy format and in electronic format on compact disk (CD) for deposit in the Greenbrier County Public Library, Greenbrier Historical Society (GHS), Williamsburg District Historical Foundation (WHF) in Greenbrier County, the Summersville and Richwood public libraries in Nicholas County, and the Nicholas County Historical & Genealogical Society.

2. Beech Ridge will provide one-time monetary funding of up to \$10,000 or in-kind service of equivalent value for future assistance in historic preservation-related activities conducted for or by the WVSHPO and/or WHF that fall within the defined WVSHPO historic preservation program activities. Proposed activities shall focus upon the communities visually impacted by the Beech Ridge Energy Facility. This funding will be available at any time for a period of two years following notification by Beech Ridge to the WVSHPO of initiation of construction at the Beech Ridge site. An approved scope of work by the WVSHPO will be submitted to Beech Ridge.

3. Upon notification by WVSHPO, but no earlier than the initiation of construction of the Beech Ridge Wind Energy Facility, Beech Ridge shall provide said funding or in-kind services to WVSHPO and/or WHF for the approved historic preservation activities.

4. After fulfillment of the conditions described above or the expiration of the two year period following initiation of construction without a request from WVSHPO or WHF for funding, Beech Ridge

will have satisfied its mitigation requirements for this specific stipulation.

B. Identification and Mitigation Efforts for Archaeological Resources

1. Prior to the initiation of any construction activities that could potentially disturb or damage archaeological resources, Beech Ridge shall carry out archaeological investigations in accordance with *WVSHPO Guidelines for Phase I, II, and III Archeological Investigations and Technical Reports*, published in 2001 and in accordance with the methodology set forth in this Memorandum of Agreement. Beech Ridge shall ensure that all scopes of work for archaeological identification and evaluation include a plan for the treatment of human remains and funerary objects that might be encountered.

- a) Phase I Archaeological Survey. Beech Ridge shall ensure that a Phase I Scope of Work will be developed in consultation with WVSHPO. Phase I work will be designed to provide information regarding the significance of all identified archaeological sites as “site is not eligible” or “eligibility of site is indeterminable” to the National Register of Historic Places (NRHP). This work will be done in consultation with WVSHPO and all deliverables will be submitted for WVSHPO review and comment.
 - 1) If Beech Ridge and the WVSHPO agree that a “site is not eligible” for the NRHP, then no further investigations of that site will be conducted.
 - 2) If Beech Ridge and the WVSHPO agree that a site with indeterminable eligibility can and will be avoided by the Beech Ridge Wind Energy Facility, which would be the preferred option, then no further investigation of that site will be conducted, unless avoidance no longer becomes feasible.
- b) Phase II Archaeological Testing. If all parties agree that the “eligibility of a site is indeterminable” and avoidance is not feasible, Beech Ridge shall ensure that a Phase II Research Design will be developed in consultation with the WVSHPO. This document will be consistent with WVSHPO guidelines. Phase II work will be designed to provide information regarding the significance of an archaeological site as “site is not eligible” or

“site is eligible” to the NRHP. This work will be done in consultation with WVSHPO and all deliverables will be submitted for WVSHPO review and comment.

1. If Beech Ridge and WVSHPO agree that a “site is not eligible” for the NRHP, then no further investigations of that site will be conducted.
 2. If Beech Ridge and WVSHPO cannot agree regarding eligibility, all appropriate information regarding the site will be submitted by Beech Ridge to the Keeper of the National Register, National Park Service, for review. The Keeper’s determination of eligibility will be final.
 3. If Beech Ridge and WVSHPO agree that an eligible site can and will be avoided by the Beech Ridge Wind Energy Facility, which would be the preferred option, then no further investigation of that site will be conducted, unless avoidance no longer becomes feasible.
- c) Application of Criteria of Adverse Effects. If parties agree that the “site is eligible” and avoidance is not a feasible alternative, then Beech Ridge will consult with WVSHPO to apply the criteria of adverse effects. This work will be completed in consultation with WVSHPO guidelines and all deliverables will be submitted for WVSHPO review and comment.
1. If following the application of the criteria of adverse effects, parties agree that the Beech Ridge Wind Energy Facility will have “no effect” or “no adverse effect” on an eligible site, then no further investigations of that site will be conducted.
 2. If parties agree that the Beech Ridge Wind Energy Facility will have an “adverse effect” on an eligible site, but the project is subsequently redesigned to avoid adverse effects, then the finding would be changed to “no effect”. Beech Ridge shall provide written documentation demonstrating avoidance for WVSHPO concurrence.
 3. If continued design of the project determines that avoidance is no longer feasible, the effect will be reassessed.

d) Phase III Archaeological Data Recovery. If all parties agree that the Beech Ridge Wind Energy Facility will have an “adverse effect “ on an eligible site and avoidance is not a feasible option, then Beech Ridge will consult with WVSHPO to identify measures to minimize and mitigate the adverse effect to the site. Beech Ridge shall ensure that a Data Recovery Plan will be developed in consultation with WVSHPO. The plan will be consistent with WVSHPO guidelines. The Phase III work will be designed to recover, interpret, and disseminate significant data for any eligible site. This work will be completed in consultation with WVSHPO guidelines and all deliverables will be submitted for WVSHPO review and comment.

1. Following WVSHPO review and approval of Phase III deliverables, no further investigations of that site will be conducted, unless an unanticipated post-review discovery is made.

e) Post-review discoveries.

In the event of any unanticipated discoveries of archaeological sites, unmarked cemeteries, or human remains and associated funerary objects during the implementation of the Beech Ridge Wind Energy Facility, all activities will be suspended in the area of discovery. Beech Ridge will contact WVSHPO within 48 hours of the discovery. In consultation with WVSHPO, Beech Ridge shall ensure that, if necessary, a qualified archaeologist will visit and assess the discovery within 72 hours of the initial WVSHPO notification. Through consultation, Beech Ridge and WVSHPO shall agree upon the appropriate treatment of the discovery prior to resumption of construction activities in the area of discovery. If human remains are determined to be of Native American origin, WVSHPO, in consultation with Beech Ridge, shall comply with W. Va. Code §29-1-8a. Beech Ridge affirms that all human remains will be avoided by direct construction impacts where feasible.

3. Dispute Resolution

During the execution of the stipulations as outlined above, should Beech Ridge and the WVSHPO be unable to reach a mutually satisfactory decision, except as noted, the WVSHPO will provide written comments to Beech Ridge. Beech Ridge shall respond to WVSHPO comments. This exchange of correspondence shall demonstrate that Beech Ridge has afforded the WVSHPO an opportunity to comment and considered potential effects to historic resources. All stipulations not subject to the dispute shall remain in force.

4. Reporting

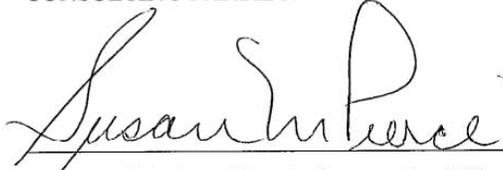
Should there be an interruption of activity associated with the project for any significant length of time, Beech Ridge will provide at the minimum every six months a project status letter regarding the completion of work associated with the above stipulations.

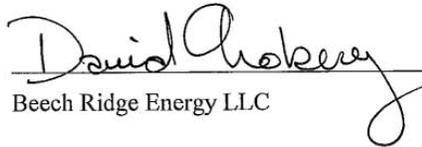
5. Amendment

Beech Ridge and the WVSHPO may request an amendment to this agreement and consult with the other party prior to execution.

Execution of this Memorandum of Agreement by the Consulting Parties evidences that Beech Ridge has afforded the WVSHPO an opportunity to comment on the Project and its effects on historic properties and that Beech Ridge has addressed the Siting Certificate's condition of coordination with the WVSHPO in this regard.

CONSULTING PARTIES:


West Virginia State Historic Preservation Office Date 7/31/08


Beech Ridge Energy LLC Date 8/4/08

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