BEECH RIDGE ENERGY WIND PROJECT Habitat Conservation Plan FINAL ENVIRONMENTAL IMPACT STATEMENT

Appendix N: West Virginia Public Service Commission's Siting Certificate for Beech Ridge Energy II,

LLC (Phase II)

PUBLIC SERVICE COMMISSION OF WEST VIRGINIA CHARLESTON

CASE NO. 12-1196-E-CS

BEECH RIDGE ENERGY II LLC, Rockville, Maryland 20850

Commission Order Granting a Siting Certificate for a Wholesale Electric Generating Facility in Greenbrier County

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I. <u>COMMISSION ORDER</u>

This Order addresses the application filed by Beech Ridge Energy II LLC (BRE II or Applicant) for a siting certificate for a wind turbine facility located in Greenbrier County, as is more fully described in this decision. Previously, we have recognized that given the current political, statutory and regulatory climate regarding carbon-based generation, the need for alternative sources of fuel for the generation of electric energy and the reported number of wind turbine projects that are investigating locations in West Virginia, wind power cases (and possibly cases involving other alternative or renewable sources of generation) by exempt wholesale generators will likely come before the Commission on an increasingly frequent basis. The Commission reviews these wind turbine proceedings in detail, not only because of the alternative energy that they promise, but just as importantly because of the public reaction to wind turbines.

As further discussed below, some opposing views were presented to the Commission to consider in this proceeding. Local support for this project, though, far outnumbered the contrary viewpoints. For instance, at a public hearing in Rainelle, West Virginia, no one spoke in opposition to the proposed BRE II project. Nor did any one speak in opposition to the project at the evidentiary hearing. In terms of correspondence received by the Commission, thirty-eight letters were filed in support of the project and seven letters were filed in opposition to the project. Our task, however, is not to count votes; rather, our charge is to apply the facts as developed in an extensive proceeding before the Commission against the statutory and regulatory framework that has been established for testing whether any given project should be certificated.

It is under that framework, and based upon a thorough review of the evidence, that the Commission will grant a siting certificate to BRE II, subject to the terms and conditions set forth in this Order. We also reaffirm our approval of the Memorandum Agreement dated February 13, 2006, between Beech Ridge Energy LLC (BRE) and West Virginia State Building and Construction Trades Council, AFL-CIO (Building Trades), which BRE II and Building Trades represented and agreed will cover the BRE II Project.

II. PROJECT DESCRIPTION¹

On August 24, 2012, BRE II filed an application for a siting certificate (Application), pursuant to W. Va. Code § 24-2-1 lc, to authorize the construction and

¹ The Table of Contents and headings are provided purely as a convenience to the reader. Material or discussion under one heading may also relate to material or discussion under another heading. In all events, the substantive content of the Commission Order, and not the wording or placement of any heading, controls.

² BRE II's Application consisted of one large volume, including an Appendix, multiple exhibits, tables, figures and other documents, and was filed in accordance with the Commission <u>Rules</u> <u>Governing Siting Certificates for Exempt Wholesale Generators (Siting Rules)</u>, 150 C.S.R. § 30-

operation of an electric wholesale generating facility (Facility or Project) in Greenbrier County, West Virginia. Upon its completion, the Facility will be used to generate electricity for sale in the competitive wholesale market in West Virginia and other locations. The BRE II Facility will be adjacent to a BRE wind facility now in operation.

BRE II is owned by Invenergy Wind Development North America LLC.³ BRE II proposed to construct an approximate 53.46, but not to exceed 85.5, megawatt (MW)⁴ wind turbine electric generating facility consisting of up to thirty-three wind turbines, each with a rated capacity of 1.62, but not to exceed 2.5, MW, and certain ancillary facilities on a tract located in Greenbrier County about two miles northwest of Duo, two miles east of Quinwood, seven miles north of Rupert, twenty miles northwest of Lewisburg, five miles southeast of Leivasy and seven miles southwest of Richwood. BRE II designated thirty-three primary sites and fourteen alternate sites to provide flexibility in selecting final locations. The turbines will generally be placed along Beech Ridge, Clear Creek Mountain, Pollock Mountain, Huggins Ridge and Blue Ridge on land owned by MeadWestvaco Corporation (MeadWestvaco). Application Form 2, at 2; Application at 4. BRE II advised the Commission on January 10, 2013, that it no longer proposed to use turbine sites 2, 3 and alternate 3. BRE II Hearing Ex. 2.

BRE II will construct an energy collection system to deliver the power generated by its turbines to the BRE substation. The existing 138 kV transmission line from the BRE substation to the interconnection at the Grassy Falls substation of Monongahela Power Company, a FirstEnergy company (MonPower), near Nettie in Nicholas County is sufficiently sized to carry the energy produced by BRE II's Facility together with the energy produced from BRE, thus no new transmission line is necessary. BRE II, PJM Interconnection, L.L.C. ⁵ and MonPower have executed an Interconnection Service Agreement that will allow BRE II to interconnect to the transmission system at the Grassy Falls substation. The electricity generated by both projects, *i.e.* BRE and BRE II, will not exceed the 186-MW interconnect that was approved by the Commission in the BRE proceeding, Case Number 05-1590-E-CS. Application Form 2; Application at 4; Appendix at 3, 10-11, and 17.

^{1 &}lt;u>et seq</u>. BRE II filed corrections to portions of the Appendix on February 27, 2013, and all references in this Order are to the corrected Appendix.

³ Invenergy Wind Development North America LLC also owns BRE, which obtained a siting certificate for a 186 megawatt wind-powered generating facility from the Commission in Case_Number 05-1590-E-CS. BRE has constructed a 100.5 megawatt facility.

⁴ A megawatt is enough electricity to power 800-1,000 homes.

⁵ PJM Interconnection, L.L.C., is a regional transmission organization. It coordinates the movement of electricity through all or parts of Delaware, Illinois, Indiana, Kentucky, Maryland, Michigan, New Jersey, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia and the District of Columbia; operates a wholesale electricity market; and manages a long-term regional electric transmission planning process to maintain the reliability of the power supply system.

The BRE II turbines will have a maximum height of 497 feet, or 151.4 meters. BRE II expects to use a General Electric 1.6-100 wind turbine (G.E. 1.6), with a four-piece tower that measures 315 feet, or 96 meters, and a rotor diameter of 328 feet, or 100 meters. The final choice of turbine model will be based on turbine efficiency, availability and pricing, as well as the ability to change the cut-in speeds. Appendix at 3.

BRE II selected this site because of its wind energy development potential including terrain, geography and above ground wind speeds, its substantial distance from environmentally or culturally sensitive areas, its location near major electricity transmission facilities, the availability of privately-owned land with concurrent land uses that are compatible with wind power development, and the absence of known critical habitat for any threatened or endangered species. Being directly adjacent to the BRE wind farm allows the use of existing infrastructure such as the BRE transmission line, substation and operation and maintenance (O&M) Facility. Appendix at 2.

BRE II asserted that the Facility is not a utility providing service to the public, and there will be no impact to West Virginia ratepayers. BRE II further asserted that it will be the entity responsible for the construction and operation of the Facility and will operate the Facility as an exempt wholesale generator as defined under Section 3(a) of the federal Public Utility Holding Company Act of 1935. Application Form 2, at 2.

BRE II estimated that the construction cost of its Facility would be approximately \$115 million. BRE II stated that Project funding will be a combination of permanent non-recourse Project debt and equity. No public funds will be used, and there are no agreements with public entities regarding the Project. Appendix at 47-49.

Upon completion of the Facility, BRE and BRE II together will be one of the county's top property taxpayers, generating an annual average of approximately \$600,000 in tax revenue for Greenbrier County and its schools for twenty years. The two projects will also pay approximately \$200,000 annually in taxes to the State of West Virginia. KEPD at 20; Appendix at 51.

III. PROCEDURAL HISTORY

Under the requirements of <u>W. Va. Code</u> § 24-2-1 lc(b), the Commission must issue its final order in this proceeding by June 20, 2013. Because June 20, 2013, is a legal holiday, the deadline to issue a decision in this matter is June 21, 2013, per W. Va. <u>Code</u> § 2-2-l(d).

Initial Public Notice and Comment Letters

BRE II published the Notice of Filing of its Application on September 4, 2012, in *The West Virginia Daily News* (Greenbrier County) and *The Charleston Gazette* (Kanawha County) and on September 6, 2012, in *The Nicholas Chronicle* (Nicholas County). Affidavits of Publication (filed Sept. 21, 2012).

The Commission received thirty-eight written comments in support of the Project, including letters from the Town of Rainelle, the Town of Rupert and the Greenbrier County Commission. Seven letters were filed with comments in opposition to the Project. <u>See</u> case file generally.

Request for Waiver of Filing Requirements; Intervention

On December 21, 2012, the Commission granted BRE II's request for a waiver of certain certificate application filing requirements. Because the Commission's jurisdiction, particularly as it relates to rates, by law is limited regarding the Project, the Commission did not require BRE II to file information that relates to the traditional public utility model under which the Commission examines extensive financial information to establish rates for service based on the cost to the utility to provide that service. Comm'n Order at 6 (Dec. 21, 2012).

Additionally, BRE II sought a waiver of the 1) <u>Siting Rule</u> 3.1.g.2 requirement to submit an aerial photograph no more than a year old and 2) <u>Siting Rule</u> 3.1.d requirement to submit all interconnection studies undertaken on behalf of the Project. Because the aerial photograph submitted with the Application continued to accurately represent the area's surface features and no interconnection study was required for the Project, the Commission granted BRE II's waiver requests. <u>Id</u>.

Also on December 21, 2012, the Commission granted the Building Trades petition to intervene, as well as the Mountain Communities for Responsible Energy motion to withdraw both its petition to intervene and its reply to BRE II's response to the petition to intervene. Id.

Motion for Protective Treatment

Siting Rule 3.1.1.2 requires applicants to file certain financial statements for each year of the start-up phase and for the first five years of operation, and these financial statements must disclose all assumptions. On August 24, 2012, BRE II filed the required financial data under seal. BRE II filed its Motion for Protective Order on August 30, 2012, arguing that the financial information provided under seal was confidential and proprietary. Oh October 31, 2012, BRE II filed its First Amendment to Motion for Protective Order, requesting the Commission accord permanent protective treatment to BRE II's Confidential Response to the Staffs First Set of Data Requests to BRE II. The Commission granted BRE II's motion for protective treatment, as amended. Comm'n Order at 6 (Dec. 21, 2012).

View by the Commission; Public Comment Hearing

On January 10, 2013, the Commission conducted a View of the project area with representatives of Commission Staff, Building Trades and BRE II. The View began at 11:30 a.m. at Rupert City Hall and lasted until mid-afternoon, with stops at each of these Viewpoints:

- 1. Duo
- 2. BRE Operations and Maintenance Building (off Route 1)
- 3. A location where Bob and Diane Lively's vacation residence and Bill and Terri Shifflett's property could be seen
- 4. Turbine site 8
- 5. Turbine site J-07, from which a panoramic view of much of the proposed BRE II Project could be seen
- 6. Substation on the BRE Project that also will be the BRE II Project substation location
- 7. Turbine site 20
- 8. Turbine site 23
- 9. Return to Rupert by the road that will provide construction access for the proposed BRE II Facility

At each Viewpoint, the parties were told in which direction they were looking (i.e., toward Quinwood, toward Duo, etc.) and where turbines would be located. The Commission and Staff asked clarifying questions about the Viewpoints, but none of the questions addressed the merits of the Project. A court reporter 'Yas not present, and the Commission traveled in a separate vehicle from the parties.

After the View, the Commission conducted a public comment hearing at 7 p.m. January 10, 2013, in Rainelle, West Virginia. Three individuals spoke in favor of the Project. No one spoke in opposition to the Facility.

BRE II published notice of the public comment hearing on December 27, 2012, in *The West Virginia Daily News* (Greenbrier County) and *The Nicholas Chronicle* (Nicholas County) and on December 28, 2012, in *The Charleston Gazette* (Kanawha County). Affidavits of Publication (filed Jan. 7 and 9, 2013).

Pre-filed Testimony

On December 20, 2012, BRE II prefiled the Direct Testimony of the following witnesses:

- 1. James D. Barnes noise (Applicant Ex. JDB-D);
- 2. John Guariglia viewshed analysis (Applicant Ex. JG-D);
- 3. David Mark Kiser -traffic study (Applicant Ex. DMK-D);
- 4. Laidley Eli McCoy hydrology (Applicant Ex. LEM-D);

- 5. Patrick W. O'Bannon, Ph.D. archaeological and cultural issues (Applicant Ex. PWO-D); and
- 6. David P. Young, Jr. avian and bat studies (Applicant Ex. DPY-D).

On December 27, 2012, BRE II prefiled the Direct Testimony of Kevin E. Parzyck (Applicant Ex. KEP-D), who sponsored the Application.

On January 14, 2013, Building Trades prefiled the Direct Testimony of its witnesses:

- 1. Mike Matthews local worker impact and Memorandum Agreement (Building Trades Ex. 1 (Matthews Direct)); and
- 2. Michael Jin project's economic impacts (IMPLAN study) (Building Trades Ex. 2 (Jin Direct)).

On January 22, 2013, the Staff prefiled the Direct Testimony of its witnesses:

- 1. Wayne Perdue engineering review (Staff Ex. 1 (Perdue Direct)); and
- 2. Dixie Kellmeyer- financial review (Staff Ex. 2 (Kellmeyer Direct)).

On February 11, 2013, BRE II prefiled Rebuttal Testimony by Mr. Parzyck (Applicant Ex. KEP-R) to respond to some conditions proposed by the Staff and provide certain clarifications.

Joint Stipulation

On February 27, 2013, BRE II, Staff and Building Trades filed a Joint Stipulation and Agreement for Settlement in which they recommended the Commission grant BRE II a siting certificate, subject to certain conditions. Joint Ex. 1-8 (Tr. at 12, Feb. 28, 2013). They recommended the text for the proposed conditions and asked the Commission to approve the February 13, 2006 Memorandum Agreement between BRE and Building Trades, which BRE II and Building Trades agreed will cover the Project. <u>Id</u>. at 3-7.

Evidentiary Hearing

BRE II published notice of the evidentiary hearing that would begin on February 28, 2013, in *The West Virginia Daily News* (Greenbrier County) and in *The Charleston Gazette* (Kanawha County) on February 11, 2013, and in *The Nicholas Chronicle* (Nicholas County) on February 14, 2013. Affidavits of Publication (filed Feb. 21, 2013).

The evidentiary hearing was concluded in one day. The parties elected not to file briefs and agreed to file a proposed Order. Tr. at 60-62 (Feb. 28, 2013). The proposed Order was filed for the Commission to consider on May 30, 2013.

In this case, the Commission has reviewed twelve prefiled direct and rebuttal testimonies with exhibits, consisting of more than 114 pages of record evidence, and

conducted a View of the project area. The Commission also conducted a public hearing that resulted in a sixteen-page transcript and an evidentiary hearing that resulted in a sixty-two page transcript and 1053 pages of exhibits. References to the prefiled direct and rebuttal testimonies are cited to the page number of those testimonies and the exhibit identification that appears in the evidentiary transcript.

IV. <u>DISCUSSION OF ISSUES AND EVIDENCE</u>

A. Statutory and Regulatory Tests

W. Va. Code§ 24-2-llc(c) states:

In deciding whether to issue, refuse to issue, or issue in part or refuse to issue in part a siting certificate, the commission shall appraise and balance the interests of the public, the general interests of the state and local economy, and the interests of the applicant. The commission may issue a siting certificate only if it determines that the terms and conditions of any public funding or any agreement relating to the abatement of property taxes do not offend the public interest, and the construction of the facility or material modification of the facility will result in a substantial positive impact on the local economy and local employment. The commission shall issue an order that includes appropriate findings of fact and conclusions of law that address each factor specified in this subsection. All material terms, conditions and limitations applicable to the construction and operation of the proposed facility or material modification of the facility shall be specifically set forth in the commission order.

The Commission views the statute as setting forth a two-part balancing test that we more fully explain on page 114 of our August 27, 2004 Order that partially and conditionally approved a coal-fired electric wholesale generation facility in <u>Longview Power LLC</u>, Case Number 03-1860-E-CS:

In Part One of the analysis, the Commission performs its duty to appraise and balance: (a) an applicant's interest to construct an electric wholesale generating facility; (b) the State's and region's need for new electrical generating plants; and (c) the economic gain to the State and the local economy, against: (i) community residents' interest in living separate and apart from such facility; (ii) a community's interest that a facility's negative impacts be as minimally disruptive to existing property uses as is reasonably possible; and (iii) the social and environmental impacts of the proposed facility on the local vicinity, the surrounding region, and the State.

The Commission performs Part Two of its analysis only if it determines in Part One that, taken as a whole, positive impacts relating to the various interests outweigh the negative impacts on the various interests. (See *West Virginia Code* § 24-2-1 lc(c)) In Part Two the Commission decides whether a project's public funding, if any, and property tax abatement, if any, offends the public interest. (West Virginia Code§ 24-2-1 lc(c)).

See also Longview Power, LLC, Case Nos. 03-1860-E-CS & 05-1467-E-CN (Comm'n Order at 102, June 26, 2006) (granting final approval of electric wholesale generating facility and transmission line, with conditions); Beech Ridge Energy, LLC, Case No. 05-1590-E-CS (Comm'n Order at 75, Aug. 28, 2006) (granting approval of electric wholesale generating facility and transmission line, with conditions).

Within the second half of Part One, the Commission considers issues such as the project's impacts on viewshed, wildlife, ambient sound levels and water resources. <u>AES Laurel Mountain LLC</u>, Case No. 08-0109-E-CS (Comm'n Order at 9, Nov. 26, 2008) (<u>Laurel Mountain</u> Siting Order); <u>AES New Creek LLC</u>, Case No. 08-2105-E-CS (Comm'n Order at 9, Sept. 30, 2009) (New Creek Siting Order).

B. The Application of Part One of the Balancing Test

1. The Interests of BRE II to Construct the Project

The Commission observes that this case is, in part, a by-product of litigation filed in the United States District Court of Maryland, styled <u>Animal Welfare Institute</u>, et al. v. <u>Beech Ridge Energy LLC</u>, et al., Case Number 09-1519 (RWT) (D. Md.) (Federal Litigation). In that regard, some explanation is required concerning the history of BRE and BRE II.

On November 1, 2005, BRE applied to the Commission for a siting certificate for a 186 MW wind-powered generating facility consisting of 124 wind turbine generators of 1.5 MW each and a 138 kV transmission line to connect the generating facility to the Grassy Falls substation (the BRE Project). See Beech Ridge Energy LLC, Case No. 05-1590-E-CS.

On August 28, 2006, the Commission granted the siting certificate with conditions, and on August 11, 2007, the Commission denied reconsideration of its Order. The case was appealed twice to the Supreme Court of Appeals of West Virginia, where the Commission Orders were affirmed. BRE satisfied the conditions in the Commission's Orders and began construction of wind turbines in the summer of 2009 Ultimately sixty-seven wind turbines representing 100.5 MW were completed and placed into service. Application at 3.

In the Federal Litigation, Project opponents sought to enjoin construction of the BRE Project, alleging that it would "take" listed Indiana bats in violation of Section 9 of the Endangered Species Act (ESA). In early 2010, the federal District Court approved a settlement that prohibited construction beyond sixty-seven wind turbines until BRE had

secured an Incidental Take Permit (ITP) under Section 10 of the ESA from the United States Fish and Wildlife Service (USFWS). Beech Ridge began the process of securing the ITP in January 2010 and stated that it anticipates that a final ITP will be issued in the second quarter of 2013. <u>Id</u>. Ultimately, thirty-three additional wind turbines were allowed to be constructed, provided they were generally on the western side of the original BRE footprint or on additional land to the west of the original footprint. BRE II will build these additional wind turbines. <u>Id</u>. at 3-4.

The tract chosen for the BRE II Facility consists of western portions of the original BRE footprint and land immediately west of the original footprint. The land is owned by MeadWestvaco. <u>Id</u>. at 4. The ITP will include the BRE II Project area. <u>Id</u>. at 3-4.

This history shows that BRE and BRE II have been working since at least 2005 to bring the entire Project to fruition, subject to the ITP and other conditions. BRE II has submitted a comprehensive Application for the thirty-three additional turbines that included technical reports and other scientific reports on traffic, hydrology, viewshed, architectural resources, noise, and avian and bat studies, as well as correspondence with the West Virginia State Historic Preservation Office (SHPO). See generally Application, Appendix and Exs. A-P. BRE II is working with SHPO and the USFWS to finalize a Memorandum of Agreement concerning the effects, if any, on matters of historical significance. Furthermore, BRE II has committed to work with Commission Staff, USFWS and the West Virginia Division of Natural Resources to further study the impact of the Project on bats and birds. Joint Ex. 1 at 6.

The BRE Project has been in operation, subject to certain conditions, since 2010. In that time, BRE has contributed positively to the Greenbrier County economy, and no complaints have been filed with the Commission concerning the operation and maintenance of the BRE Project.

Accordingly, based on the evidence, the Commission concludes that BRE II has demonstrated a sufficient interest in constructing the Project. BRE II has a legitimate business purpose in undertaking the Project, and BRE II retained various technical experts and developed detailed information in support of its Application. It has expended substantial time, and economic resources to apply for a siting certificate, to pursue various other permits and to obtain the real property interests necessary for the Project. Moreover, the Commission observes that the BRE Project has been operating for several years without complaint. Finally, BRE II has committed to working in conjunction with the Commission and other state and federal agencies. All of these facts show that BRE II

has a serious and sincere interest in constructing the Project.

2. The Need for Generating Plants in the State and Region

BRE II asserted that it will provide needed capacity and energy to the electric power system to serve load and maintain overall system reliability. BRE II also asserted that the Project will add generation from a renewable resource. Appendix at 7.

(a) Generation Fueled by Renewable Resources

The Commission has previously noted that the Energy Policy Act of 2005, P.L. 109-58, among other things, amended certain sections of the United States Code to encourage the use and development of renewable energy resources. <u>Laurel Mountain</u> Siting Order at 10 & 62 (citing Title II, P.L. 109-58); <u>New Creek</u> Siting Order at 10-11. Beyond the Energy Policy Act of 2005, we also stated:

In our estimation, it is reasonable to expect that federal environmental regulations will be enacted to control and monitor greenhouse gases, including carbon emissions, but there is not yet agreement about how the federal government will address those emissions. Until that policy has been enacted, the Commission cannot begin to estimate whether retrofitting will continue to contribute to added capacity. Instead, the primary benefit of retrofitting could be to allow existing plants to remain productive. It simply is too early to tell.

Again, while the current downturn in economic activity and the dismal performance of the financial markets indicate some difficult "sledding" ahead for the state and nation over the near term, the long term need for "renewable resources" fired generation, both to meet the need for new generation and to ease some of the concerns about carbon-based generation pending further technological developments, is clear.

<u>Laurel Mountain</u> Siting Order at 11-12.

In June 2009, the West Virginia Legislature passed the Alternative and Renewable Energy Portfolio Act (Energy Portfolio Act). W. Va. Code § 24-2F-1 et seq. In it, the West Virginia Legislature declared that "[t]he development of a robust and diverse portfolio of electric-generating capacity is needed for West Virginia to continue its success in attracting new businesses and jobs. This portfolio must include the use of alternative and renewable energy resources at new and existing facilities." Id. § 24-2F-2(4). The Legislature also stated that "[it] is in the public interest for the state to encourage the construction of alternative and renewable energy resource facilities that increase the capacity to provide for current and anticipated electric energy demand at a reasonable price." Id. § 24-2F-2(7). Under the Energy Portfolio Act, the definition of "renewable energy resource" includes wind power. Id. § 24-2F-3(13)(C).

Each electric utility doing business in West Virginia will receive credits for, among other things, using alternative and renewable energy resources and is required to meet certain alternative and renewable energy portfolio standards. W. Va. Code § 24-2F-5(a). For the period beginning January 1, 2015, and ending December 31, 2019, an electric utility must own credits in an amount equal to at least ten percent of the electric energy sold by the electric utility to retail customers in this state in the preceding calendar year. Id. § 24-2F-

5(d)(l). That amount increases to fifteen percent on January 1, 2020, and twenty-five percent on January 1, 2025. <u>Id.</u> §§ 24-2F-5(c), (d)(2).

The Energy Portfolio Act became effective in West Virginia on July 1, 2009, and was amended in November 2009. Thus, although wind power is not mandated for electric generation in West Virginia, it is one of the resources that electric utilities may use to satisfy the alternative and renewable energy portfolio standard. Given this authority, it is reasonable to encourage the development of diversified sources of fuel to generate electricity and to include renewable energy resources such as wind among those diversified sources.

(b) Capacity to Meet the Needs of the Region

In the area served by the PJM regional transmission organization (RTO), weather-normalized summer peak for 2011 was 151,995 MW. The projection for the 2012 summer peak was 153,782 MW, an increase of 1,787 MW or 1.2 percent, from the 2011 normalized peak.⁶ Summer peak load growth for the PJM RTO was projected to average 1.4 percent per year over the next ten years, and 1.3 percent over the next fifteen years. The PJM RTO summer peak was forecasted to be 176,420 MW in 2022, a ten-year increase of 22,638 MW, and to reach 185,294 MW in 2027, a fifteen-year increase of 31,512 MW. Annualized ten-year growth rates for individual zones ranged from 0.9 percent to 1.9 percent. Appendix at 7.

The winter peak load for the PJM RTO was projected to average 1.2 percent per year over the next ten-year period and 1.1 percent over the next fifteen years. The PJM RTO winter peak load in 2021-2022 was projected to be 144,836 MW, a ten-year increase of 15,996 MW, and to reach 150,901 MW in 2026-2027, a fifteen-year increase of 22,061 MW., Annualized ten-year growth rates for individual zones ranged from 0.6 percent to 1.6 percent. <u>Id</u>. at 7-8.

After November 2011, PJM received notification from several generation owners, per Article V of the PJM Tariff, of their intent to deactivate a number of generation facilities totaling more than 13,000 MW of generation. Of these retirements, 593 MW are located in West Virginia. Baseline reliability criteria violations have been identified as a result of the generation deactivations. To attempt to address reliability concerns arising from these plant retirements, the PJM Interconnection Board approved nearly \$2 billion in electric transmission upgrades. The North American Electric Reliability Corporation 2011 Long-Term Reliability Assessment Report states that assuming existing and planned resources are in-service, PJM will meet its reserve margin requirements in 2020, but is projected to be deficient in 2021. This assumes that 40,000 MW of generation capacity within PJM's queue will come online during this period. The report also references 3,600 MW of generator retirements that were identified at the time of the report, but PJM received notification of requests for retirement of more than 13,000 MW of generation after the report was finalized. Id. at 8.

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⁶ The BRE II Application was filed in August 2012, when the actual peak usage was not yet known. Therefore, the Application used projections for the 2012 summer peak.

PJM has performed an analysis for generation scenarios to meet renewable portfolio standards (RPS) within the PJM footprint, which provided installed capacity nameplates (maximum output for facility or energy source) necessary to meet state targets. In 2021, 32,000 MW of wind will be required to satisfy the targets for renewable portfolio standards in the PJM footprint, and in 2026, 41,000 MW of wind will be required. PJM also provided the installed capacity need in the corresponding forward years. After subtracting both wind and solar capacity, there are still 6,000 MW and 13,296 MW of additional capacity (non-renewable source) needed in 2021 and 2026, respectively. Id.

The PJM projected load increases, announced generation retirements and renewable portfolio standards demonstrate a need for new resources both in West Virginia and in the PJM footprint. The Commission concludes that BRE II will help meet this need by providing capacity energy to the electric power system, helping to economically serve load and maintain overall system reliability. BRE II will add an additional amount of energy from a renewable source that will help increase general marketplace competition. <u>Id</u>. at 7, 9.

In addition, the Commission notes that PJM must secure committed capacity that considerably exceeds any particular summer expected peak. <u>Laurel Mountain</u> Siting Order at 12. In previous wind siting cases, the Commission, in reviewing need, has recognized more than the highest annual hourly peak demand in assessing whether there is need for a generating facility. <u>Laurel Mountain</u> Siting Order at 12; <u>New Creek</u> Siting Order at 12. In <u>Beech Ridge</u>, the Commission recognized the fact that wind turbine generators can power thousands of homes, even at their lowest productivity, and the output of wind projects will assist in meeting the peak summertime demands. <u>Beech Ridge</u>, Case No. 05-1590-E-CS (Comm'n Order at 76, Aug. 28, 2006) (Concl. of Law 15).

Finally, we also note that this State is part of a regional integrated electricity grid. Beech Ridge, Case No. 05-1590-E-CS (Comm'n Order at 76, Aug. 28, 2006) (Canel. of Law 14): "[I]t is not in the public interest for this Commission to isolate West Virginia from the region. The power grid is interconnected, and to safeguard the availability of productive, well-maintained resources to our State's residents, West Virginia must participate in the interconnected electric system."

In sum, we believe that it is in the public interest to develop diversified sources of fuel to generate electricity, including renewables such as wind; additional generation capacity is needed to meet PJM's projected load forecast; it is in the public interest for West Virginia to participate in the interconnected electric system; and the Project will generate enough electricity to power thousands of homes at its lowest level of productivity, and its output is well-suited to deliver electricity in the winter, when heating demand peaks, and may assist in meeting the peak summertime demands. For all of these reasons, the Commission concludes that BRE II has demonstrated sufficient need for this Project.

3. The Economic Gain to the State and Local Economy

(a) The impact on local commercial business, including tourism, is expected to be positive.

BRE II estimates that the Project will create about one hundred fifty temporary jobs during the six-to-nine month construction phase. Upon completion, two to three employees will be added to the current operating staff at BRE's O&M facility, and these jobs will have full benefits and a starting annual salary of around \$35,000. There are no minimum wage positions associated with the Project during either the construction or operation phases. These jobs will require extensive training. For this reason, BRE II prefers to hire local workers for permanent positions, so that the investment it makes in training pays off with a stable workforce that is committed to living in the area long term. Applicant KEP-D at 20; Appendix at 51. Upon completion of the Facility, BRE and BRE II will be one of the top property taxpayers in Greenbrier County, generating an annual average of approximately \$600,000 in tax revenue for Greenbrier County and its schools for twenty years. The two Projects will also pay about \$200,000 annually in taxes to the State of West Virginia. <u>Id</u>.

Wind projects have proven to be compatible with hunting, fishing and recreation. Other than temporary inconveniences during construction, the BRE II Project will not adversely affect the public's ability to access any land that is currently available for hunting, fishing or recreation. The BRE II Facility will reinforce West Virginia's position as a national energy leader and enable the State to benefit from the growing trend of neighboring states requiring utilities to purchase minimum levels of power from renewable resources. Appendix at 51.

In her testimony, Staff witness Kellmeyer summarized the assertions relating to economic impacts by BRE II and Building Trades:

Beech Ridge II . . . did not use a particular model to derive the estimated effects of the project. Beech Ridge II asserts that Beech Ridge II's sister subsidiary was constructed in 2009-2010 and has been in operation since 2010 and that this project [BRE II] is located directly adjacent to the previously constructed wind farm. Beech Ridge II asserts that the economic model for this project is essentially the same. Beech Ridge II asserts that the prior project has proven successful financially. Also the West Virginia State Building and Construction [Trades] Council, AFL-CIO has submitted an economic impact study prepared by Michael Jin using the IMPLAN model. Mr. Jin concluded that the construction of the project will have a positive impact on the state and local economies.

Staff Ex. 2 at 3-4 (Kellmeyer Direct). Ms. Kellmeyer recommended that if the siting certificate is granted, BRE II should have a decommissioning fund in place. Id. at 4.

Building Trades witness Matthews testified that the size of the Project and the amount of construction employment needed will have a very positive impact on the local economy and local employment. Building Trades Ex. 1 at 3 (Matthews Direct).

Building Trades witness Jin has testified before the Commission several times regarding the probable economic impact of various construction projects. Building Trades Ex. 2 at 1 (Jin Direct). Mr. Jin completed an IMPLAN Economic Simulation Study that indicated that if the Project needs \$115 million and 150 craft workers on a full-time equivalent annualized basis as BRE II has estimated, the Project will generate an additional \$29 million in sales and 164 to 229 jobs for the local economy. Mr. Jin concluded that construction of the Project would result in a substantial positive impact on the local economy and local employment, as well as the state economy, in the form of a substantial increase in sales, taxes, business activities and jobs. <u>Id</u>. at 6.

The Commission has reviewed this testimony, including Mr. Jin's report, "The Estimated Economic Impact of Proposed Beech Ridge Project on West Virginia," and agrees that the BRE II Project will have a positive impact on the local and state economies, as well as local employment.

(b) The Project will not significantly affect area property values.

Based on a review of the published literature on the impact of wind turbines on property values, BRE II expects that the Project will have no significant negative impact on area property values. In 2006, Goldman and Associates, Inc. (Goldman) conducted a study and testified that property values in Greenbrier County are not impacted by wind facilities. Beech Ridge. Case No. 05-1590-E-CS (Comm'n Order at 51, 78, Aug. 28, 2006). Goldman assessed property values and interviewed local realty specialists and community members to determine impacts of the development and operation of the Backbone Mountain Wind Farm on property values in Tucker County. Results of his study suggest that no evidence of property value diminution could be attributed to the wind facility and in general there was a positive to neutral response to the wind facility. More recent studies support that conclusion.

Further, construction of this Project is bolstered by the Alternative and Renewable Energy Portfolio Standard adopted in West Virginia. W. Va. Code§§ 24-2F-1 et .llih

(c) The project will not significantly affect local infrastructure.

BRE II does not anticipate negative impacts to the local infrastructure because of either the Facility's construction or operation. Appendix at 44. The Project will not require any new transmission lines or upgrades, water supply, or sewer or septic supply. Appendix at 14, 27, Ex. G at 2-3. The only public-related infrastructure to be affected are the state and county roads that will be used to deliver Project components during construction, but such impacts will be limited in nature and duration. There also could be traffic delays during component transport, but these will be mitigated by transporting the

components when traffic patterns are at lower rates, such as by avoiding school related traffic and business commutes. Appendix Ex. 0 at 1-3.

In addition, BRE II will work with the West Virginia Division of Transportation to execute a Road Use Agreement regarding roadway impacts, upgrades and transportation related issues. Appendix at 48.

Based on the record before us, it is reasonable for the Commission to conclude that there will be a significant economic gain to both the state and local economies and that construction of the Facility will result in a substantial positive impact on the local economy and local employment. We also conclude that the Project will not significantly affect area property values or the local infrastructure. The Commission notes that the evidence regarding economic impact provided from the IMPLAN model shows that the Project will support up to 229 jobs, including more than 150 construction jobs working directly on the Project. The modeling also predicted significant economic gain during the construction. It is reasonable, therefore, for the Commission to conclude that there will be a significant gain to both the state and local economies. The Project will create significant local construction jobs and two to three permanent jobs thereafter and will provide significant tax revenues for state and local governments and public education.

4. (i) Community Residents' Interest in Living Separate from the Project; (ii) The Project's Negative Impacts be Minimally Disruptive to Existing, Uses; and (iii) The Project's Social and Environmental Impacts

Parties in siting certificate cases often differ on whether aspects of the Project involving viewshed, noise, avian and bat species, and water result in negative social and environmental impacts, and if so, whether those impacts are minimally disruptive to the local residents and will allow those residents to live separate and apart from the Project impacts. While the Commission weighs each of the three considerations listed above when assessing the community concerns, an overall analysis is more helpful, and is reflective of the approach by the Commission in prior siting certificate Orders. The Commission analysis, therefore, will be presented in a comprehensive fashion.

(a) Viewshed

BRE II proposes to build thirty-three turbines that will be 497 feet, or 151.4 meters, high from ground to rotor tip at the 12:00 position along Beech Ridge, Clear Creek Mountain, Pollock Mountain, Huggins Ridge and Blue Ridge. Application at 4; Appendix L 2i, 35; Application Form 2 at 2, Appendix am-.BRE II presented rony-seven turbme sites for Commission consideration, with the understanding that only thirty-three would be constructed. Subsequently, BRE II removed three of the potential turbine sites to ameliorate concerns of others. As the Commission previously noted, it is virtually impossible to hide wind turbines and "to some degree visual impact of wind turbines is a subject of personal opinion; in other words 'beauty' truly is in the eye of the beholder and seems to be (again understandably) a function of proximity to and to some extent an economic interest in the project." Laurel Mountain Siting Order at 17. Through its analysis, BRE II concluded that

there will be no unreasonable interference with existing scenic or aesthetic uses, nor will there be an undue adverse effect on the scenic character of the land within the viewshed of the Project.

The BRE II Project is located on a seventy thousand-acre tract owned entirely by MeadWestvaco. BRE II filed a visual resource assessment (VRA), consisting of a narrative evaluation, composite viewshed maps and photo simulations. Appendix Ex. M. The VRA considered all forty-seven potential locations and illustrated the potential visual impact of BRE II at five and twenty miles around the Facility boundary. It also assessed the cumulative effect of both the BRE and BRE II Projects. The VRA concluded that the overall visibility of BRE II wind turbines would be minor and visual impacts could be significantly reduced depending on the turbine height and locations selected.

Siting Rule 3.1 .m.3 requires BRE II to provide the expected visual impacts at one mile and five miles during construction and operation, and BRE II concluded that there is very little potential visibility during construction or operation within either the one-mile or five-mile radius viewsheds. While potential visibility exists, BRE II asserted it is mainly along elevated ridges with a direct line of sight to the Project. Appendix at 59-60, Ex. M.

Within a radius of twenty miles, there are a few small pockets of potential visibility, again mainly along elevated ridge lines. Approximately 97 percent of the surrounding area would not have any visibility of the Project, according to the VRA. Eight simulations were conducted for the BRE II Project, and at five of them some view of the BRE Project already exists. Appendix at 60, Ex. M.

The BRE II Facility was planned with generous setbacks to mitigate view of the wind turbines. The Project will be visible to very few residences within one mile of a turbine location, and this one-mile distance is five times greater than most setbacks throughout the country. The great majority of residences will be more than one mile away from a turbine location. Appendix at 60.

In the architectural survey, BRE II identified the Urim Church and an adjacent graveyard as a resource that may be culturally significant. Appendix at 65. The VRA viewshed reports indicated that the church and graveyard will not have a view of any of the turbines. Appendix Ex. P-5. The coal camp of Duo was also noted as a cultural resource where effects of the BRE II Project are likely. Duo is within the viewshed of the existing BRE Project. Appendix at 65.

The Federal Aviation Administration (FAA) requires lighting on some of the turbine towers. Additionally, the substation control building, storage yards and individual turbine entrances may be lit temporarily when employees are working after dark. Otherwise, BRE II will not use outdoor lighting. Applicant KEP-D at 16.

Based upon our own View, the Commission observes that the area is relatively sparsely populated, and timbering and mining operations are conducted across the MeadWestvaco tract. Based upon the data provided in the VRA, the Commission concludes

that the thirty-three BRE II turbines will not substantially increase the number of turbines that are visible in the area.

Although some turbines will be visible from various locations, after reviewing the evidence and conducting the View, the Commission concludes that there will be no unreasonable interference with existing scenic or aesthetic uses, and there will also be no undue adverse effect on the scenic character of the land within the viewshed of the Project. We, therefore, conclude that the impact of the presence of the Project and view of the Project or its turbines will be minimally disruptive to the community and that the cumulative visual impact upon managed lands and historic and cultural sites is neither unreasonable nor burdensome.

(b) Sound

Noise, like view, is another elusive and to some extent subjective factor in our deliberative process. Numerous factors affect the sound levels from wind turbine projects, including the type of turbine, weather, ground cover, distance, ambient noise, leaf and foliage cover, elevation, wind direction, the state of technology as applied to wind turbines, and the detection of sound from wind turbine projects.

While there has been progress in controlling the sound from turbines, we indicated the complexity of our task in considering sound analysis in a previous siting certificate order:

Wind turbines obviously make noise. The question presented in this case, like prior cases before the Commission, is determining the expected degree of noise impact upon nearby residents and whether that impact is acceptable. We are required at this stage of the proceeding in these wind turbine certification applications to assess the noise impact from a wind turbine Project that is not yet certificated, let alone constructed or operating, in an industry with rapidly changing technology, upon certain possible "receptors," receiving the noise in varying circumstances (wind, weather, foliage cover, ground cover and so forth) at multiple distances from the wind turbines within the Project area.

<u>Laurel Mountain</u> Siting Order at 22.

The BRE II sound study was prepared by Acentech, Incorporated (Acentech) and evaluated all forty-seven potential locations, even though only thirty-three turbines will be constructed. Appendix Ex. N; Applicant Ex. JDB-D. Further, the study assumed that the community is always downwind of the Project equipment. Appendix Ex. N.

The wind turbine generators themselves will have several noise control treatments: noise insulation of the gearbox and generator, reduced-noise gearbox, reduced-noise nacelle, vibration isolation mounts and quieted-design rotator blades. Appendix Ex. N at 2, 6. In addition, BRE II will use high efficiency, reduced-noise transformers. <u>Id.</u> at 6.

Acentech identified existing land uses and ambient day-night sound levels (Ldn) in communities within about two miles of the proposed Facility. Appendix Ex. N at 3. The Acentech report considered construction noise associated with blasting, earth moving, pile driving, erection, traffic, and equipment installation at the nearest property boundary and within one mile and five miles of the Facility. Appendix Ex. N at 2. Acentech also predicted operational noise and identified land uses and types of structures (residential, commercial, or industrial) within one mile of the Facility and described equipment and procedures to mitigate potential noise. Appendix Ex. N at 5-7. The Commission will examine pre-construction, construction, and operational sounds in tum.

1. Pre-construction Sound Levels

Acentech selected four monitoring locations for the ambient survey. The acoustic environment and nearby land uses were observed at these locations from February 4 to February 15, 2011, and they were judged to be representative of noise sensitive receptors, such as residences and churches, in the community bordering the BRE II site. The data indicate that the long-term Ldn sound levels range from 47 dBa to 50 dBa, with an average value of 48 dBa and a standard deviation of 1 dBa across the four locations. The measured Ldn values, sound source types and land uses are relatively uniform across the study area and the ambient sound level contours are judged to be generally flat within this area. Ex. N at 3-4.

2. Construction Sound Levels

Initial construction activities will include road building, as well as clearing, excavation, foundation and backfill work at the turbine locations and the substation. Concrete will be made in a temporary on-site batch plant using trucked-in materials. These activities will be followed by the erection of the towers and installation of the wind turbine generators; trenching and installation of the electrical collection system; and installation of substation equipment. Before commercial operation, all of the equipment will be tested. Ex.Nat 4.

Most of the construction activities will occur during the day, and at times those activities will be audible to nearby residents. Any evening or nighttime construction will be limited to relatively quiet activities and be less noticeable than in daytime. <u>Id</u>.

These measures will be used during the construction phase of the Project:

- Effective exhaust mufflers in proper working condition will be installed on all engine power construction equipment at the site. Mufflers found to be defective will be replaced promptly.
- Contractors will be required to comply with federal limits on truck noise.
- Construction contractors will be required to ensure that their employee and delivery vehicles are driven responsibly.

- Nighttime construction work that does occur will generally be limited to relatively
 quiet activities, such as welding and installing equipment, cabling, and
 instrumentation.
- If blasting is required, it will be conducted in accordance with standard industrial practices and include those requirements established by the Commission.

The construction activity will be temporary, vary hour-to-hour and day-to-day, occur mostly in the daytime, and produce sounds that are already familiar to the community. With two trucks, one bulldozer, and one excavator operating at a turbine location, for example, the calculated equivalent sound level during the workday is 53 dBA at 1,640 feet and 44 dBA at 3,330 feet. Acentech reported that this level of temporary sound would be similar to the noise produced during excavation, grading, and steel erection activities at mid-size building projects or by the current timber and mining activities in the region. Acentech concluded, therefore, that the overall construction noise impact on the community beyond 1,000 feet of the nearest turbine was not expected to be significant. Id. at 4-5.

3. Operational Sound Levels

The estimated values for the operational Ldn sound levels range at the community monitoring locations from 33 dBa to 47 dBa and at the residential structures within one mile of the Project from 38 dBa to 47 dBa, which are comparable to the pre-construction ambient Ldn values of 47 dBa to 50 dBa. The operational sound estimates assume maximum soulld output of all wind turbine generators at all forty-seven potential locations under conditions of maximum rated wind speed [11 m/s (24 mph) to cutout]. Under reduced wind speeds, the background sound associated with wind in trees and the turbine sound emissions would both be less. Appendix Ex.Nat 6.

The operational sound levels provided above are for outdoor locations. For indoor locations, these levels would be reduced by 12 dBa with the windows open and by 24 dBa or more with the windows closed. Although noise from the wind farm will be heard at times in the community at distances of 1,600 feet from the Project, ambient sounds will help mask the turbine sounds. Acentech's measurements and estimates indicate that thelongterm Ldn .sound levels of the wind farm will be similar or less than the existing ambient Ldn levels at that distance for both outdoor and indoor locations. At greater distances, the long-term Ldn sound levels of the wind farm are estimated to significantly less than the existing Ldn levels. Id. at 6-7.

Acentech also considered the combined effects of the two wind farm projects on community sound levels. Duo is located between the facilities, with most residences being about two miles from the nearest BRE II turbines and about 3,600 feet from the nearest BRE turbines. The estimated Ldn sound levels at Duo residences from the BRE II turbines are modest and range from 31 to 34 dBa. The Ldn sound levels from wind operations for most of the locations are estimated to increase about 1 dBa with the

addition of the BRE II turbines as compared to the sound levels with only the BRE turbines. <u>Id.</u> at 7.

Having reviewed the sound evidence, the Commission concludes that the Project will not substantially increase ambient noise levels in the area. The Commission finds that the ambient sound levels will remain relatively similar and to the extent that construction or operation noise results in negative impacts, those negative impacts are expected to be as minimally disruptive to existing property uses as is reasonably possible, and are not unreasonable.

(c) Water Requirement

BRE II will not require any additional water to operate the Facility, other than an incremental increase at the O&M Facility where current water use is minimal and typically associated with the needs of its employees, sewer system, and cleaning of the O&M Facility and equipment. Appendix at 14.

BRE II will use existing on-site water resources for the construction phase. Water for the temporary concrete batch plant, up to 286,143 gallons, will come from the same well that served the concrete batch plant for the BRE turbines. Water for dust suppression activities will come from existing streams or ponds, the same as for construction of BRE project. Water use for dust suppression activities will be in the range of 1,800,000 to 2,700,000 gallons total, based on 15,000 gallons per day for twenty days a month during the six- to nine-month construction phase. <u>Id</u>.

The Commission concludes that BRE II has provided sufficient information about the Project water requirements, as required by <u>Siting Rule</u> 3.1.c.8.

(d) Avian and Bat Species

To provide a preliminary assessment of the overall risk to avian and bat populations because of the development of the BRE II Project, the Applicant submitted

- 1) Avian Migration Studies for March-May and September-November 2011⁷ dated July, 2012 (Young et al. 2012a), Appendix Ex. J, and
- 2) Avian and Bat Risk Assessment: Beech Ridge Wind Energy Project Ex:pansion Area, Greenbrier and Nicholas Counties, West Virginia, dated February, 2012 (Young et al 2012b), Appendix Ex. K.

These studies concluded that the Project area does not appear to contain unique situations or habitat features that would pose significant risk to avian and bat species. Appendix at 55.

The avian use surveys were conducted from April 8 to May 31 and September 12 to November 3, 2011. The raptor migration surveys were conducted from March 17 to May 31 and September 12 to November 29, 2011. Appendix Ex. J at 11.

Siting Rule 3.1.m.2.A.3 requires an avian and bat lighting study. BRE II reported that two summaries of the best available data regarding turbine lighting and correlation to avian and bat mortality concluded there was no difference between fatality rates at lit versus unlit turbines (Kerlinger 2004, Arnett et al. 2008), where turbines are lit with FAA-specified lighting and the associated towers are of modern (monopole without guy wires) design. Appendix at 55.

Three seasons of empirical data and study results from the Mt. Storm wind energy facility in Grant County, West Virginia, also are available (Young et al. 2009a, 2009b, 2010). For birds, the observed number of fatalities at turbines with FAA lights was slightly lower than unlit turbines in two of the three study seasons and slightly higher in the third season. The confidence intervals around the mean fatality rates for lit and unlit turbines, however, were nearly identical indicating that there was no significant difference between the means. For bats, observed fatalities were slightly lower at FAA lit turbines for all three study seasons, but again there was no difference between the average fatality rates for lit or unlit turbines. Appendix at 55-56.

Another, state facility, the Mountaineer wind project in Preston and Tucker Counties, West Virginia, was monitored in 2003 and 2004 (Kerns and Kerlinger 2004; Arnett et al. 2005). As with the Mt. Storm facility, these studies did not find a difference in bat mortality between FAA lit and unlit turbines. <u>Id</u>. at 56.

Similar results have been documented at the Klondike wind facility in Oregon (Johnson et al. 2003a), the Combine Hills project in Oregon (Young et al. 2006), Buffalo Ridge in Minnesota (Johnson et al. 2003b), the Summerview Wind Facility in Alberta, Canada (Brown and Hamilton 2006a), and the Maple Ridge wind farm in New York (Jain et al. 2007). The data from these widespread studies suggests that FAA lights on turbines do not increase the exposure or the risk that turbines pose to avian and bat species. Appendix at 55-56, Exs. L-1 through L-12.

In January 2010, BRE began working on a Habitat Conservation Plan (HCP) to obtain an Incidental Take Permit under the Endangered Species Act for the endangered Indiana bat and' Virginia big-eared bat. Since then, BRE and BRE II, their consultants and the USFWS have regularly interacted through conference calls, meetings, e-mails, and exchanges of draft documents for review and comment. In the Application, BRE II asserted that the ITP would cover the BRE and BRE II project sites. Application at 4; Appendix at 53; Appendix Ex. I.

To demonstrate compliance with the Migratory Bird Treaty Act and the Bald and Golden Eagle Protection Act and avoid and minimize impacts to birds, BRE is preparing an Avian Protection Plan (APP) that contains a commitment to implement monitoring and adaptive management in conformance with the USFWS's 2012 Land-Based Wind Energy Guidelines. BRE began developing the APP in 2010 and has discussed it with USFWS on numerous occasions. Appendix at 53. These activities with USFWS include the BRE II Project area. <u>Id</u>.

Based on the record, it is clear to us that BRE II is working actively and cooperating with USFWS to minimize and mitigate impact on endangered and other species. The scope of the work performed in this proceeding relating to avian and bird species is similar to that which has been deemed sufficient in previous cases. Accordingly, the Commission concludes that BRE II surveys were sufficient.

(e) Architectural and Archaeological Resources

BRE II completed an architectural review, assessment of effects and a desktop archaeology review for the geographic area where the Facility will be located. This study involved extensive coordination with SHPO and USFWS, and it identifies two potential locations of cultural resource where effects may be likely, the Mt. Urim Church with its associated cemetery and the coal camp of Duo. Appendix at 65.

When the siting certificate Application was filed, BRE II was working with USFWS and SHPO to draft a Memorandum of Agreement (MOA) for required mitigation impacts to cultural resources. Appendix Exs. P-1 to P-6. The MOA will be executed by both agencies and BRE II and is expected to be similar to the MOA developed for BRE. Appendix at 65.

There will be no impacts to recreation other than views of a limited number of turbines, as more particularly described in the VRA, so no mitigation relating to recreation is warranted. <u>Id</u>.

Contingent upon the execution of a Memorandum of Agreement with USFWS and SHPO, we conclude that the impact of the presence of the Project and view of the Project or its turbines upon architectural, archaeological and recreational resources will be minimally disruptive to the community and that the cumulative impact upon managed lands and historic and cultural sites is neither unreasonable nor burdensome.

(f) Traffic

Potesta and Associates, Inc. (Potesta) prepared a traffic study that assesses the volume of pre-construction, construction and post-construction traffic for public roads near the Facility using average daily traffic (ADT) information from the West Virginia Division of Highways. Appendix Ex. 0.

Access to the Project will be from Exit 156 of Interstate 64, continuing along U.S. Route 60 to Rupert, then along County Route 1 (Anjean Road) to the construction staging area along Beech Ridge Road. Once unloaded, the trucks will return to U.S. Route 60 using the same route. BRE II will make every effort to avoid U.S. Route 60 during high traffic time, such as school and work commuting hours. <u>Id</u>. at 2.

County Route 1 leading to the construction staging area and County Route 1/1 (Fenwick Road), which will carry some traffic within the Project area, will be the most

affected roads because of supplies being delivered, construction personnel traveling to and from the staging area, and construction-related traffic between wind turbine locations. ADT values will largely be unaffected other than on County Routes 1 and 1/1. <u>Id.</u> at 2-3. During the construction phase, about 3,500 trucks of various sizes will deliver equipment and supplies, and some fifty construction personnel vehicles will travel to and from the site each day. <u>Id.</u>

Potesta concluded that the ADT value for the twenty-four-week construction period will increase by about 191 ADT from 1,700 to 1,891 along County Route 1 between Rupert and Clearco, but that increase will be mitigated by the relatively short construction duration. Further mitigation will be realized by Division of Highways requirements, such as for oversized loads. Appendix Ex. 0 at 3.

After construction is complete, additional traffic associated with the BRE II Project will be limited to ten operational and maintenance vehicles entering and exiting the site that will raise the ADT value along County Route 1 by 20 and have little to no influence on County Route 1/1. <u>Id.</u>

The Commission is satisfied that the BRE II Project will not cause any substantial problems with respect to existing traffic patterns. Indeed, after completion of the Project, the ADT for the affected areas will only show a slight increase in traffic. Accordingly, the Commission finds that the Project will not have a significant or substantial impact on traffic in and around the Project area.

5. The Joint Stipulation and Project Conditions

Staff witness Kellmeyer recommended that the Commission grant BRE II a siting certificate, conditioned upon the establishment of a decommissioning fund. Staff Ex. 2 at 4-5 (Kellmeyer Direct). Staff witness Perdue recommended that the Commission grant a siting certificate with several pre-construction, construction and operational conditions that are commonly required for wind farm projects. Staff Ex. 1 at 5-11 (Perdue Direct). Mr. Perdue also asked the Commission to require tower setbacks from residences, roads and power lines equal to at least 1.5 times the total combined height of the tower, turbine and maximum blade height. <u>Id</u>. at 10.

BRE II witness Parzyck requested that "roads" in the Staff-proposed setback be clarified. Applicant KEP-R at 2. He testified that the area surrounding the Project site includes paved roads regularly travelled by the public, as well as lrn2:2:ing roads laid out while active logging occurs, but that fall into disuse as logging moves elsewhere. There are also private, unpaved passages that could generally be called a road. BRE II asked that any setback requirement apply to "paved roads regularly travelled by the general public." <u>Id</u>.

BRE II, Staff and Building Trades entered into settlement discussions and have reached an agreement that they recommend the Commission adopt. Joint Ex. 1. They ask that the siting certificate requested by BRE II, as modified on January 10, 2013, be granted subject to these conditions:

PRE-CONSTRUCTION CONDITIONS:

- (a) Prior to commencing construction, BRE II must file a verified statement indicating that all pre-construction conditions and requirements of the certificate have been met.
- (b) BRE II must not dispose of excavated rock and/or any bedding material during or following construction of the facility by spreading the material on agricultural land.
- (c) BRE II must dispose of all contaminated soil and construction debris in approved landfills in accordance with appropriate environmental regulations.
- (d) BRE II must design and install any needed fire protection systems in accordance with the national Fire Protection Association or other accepted standards.
- (e) BRE II must coordinate with appropriate fire safety and emergency personnel during the pre-construction stage of the project to promote efficient and timely emergency preparedness and response.
- (t) The siting certificate shall become invalid if BRE II has not commenced a continuous course of construction within five years of the date the final certificate is granted or has not completed construction by the tenth year without petitioning the Commission for approval to expand these time frames.
- (g) BRE II must file evidence that it has obtained any necessary environmental permits and/or certifications prior to commencing construction (including any letters from United States Fish and Wildlife Service; West Virginia Division of Natural Resources; West Virginia Division of Culture and History, State Historic Preservation Office; and any local governmental agency requiring permits for construction/operation of the project) indicating either that BRE II does not need to take further action or outlining what action BRE II needs to take to be in compliance with that agency's rules or laws prior to any gradin2:. soil excavation and/or habitat removal or causing a similar action by others.
- (h) BRE II must file a copy of the Wetlands Survey and Delineation, evidence of approval and/or acceptance of the wetlands delineation, final endangered species study with any required mitigation plans, and historical/archeological significance study with any required mitigation plans prior to commencing construction.

- (i) BRE II must comply with the Endangered Species Act (16 U.S.C. § 1531 et seq.), the Migratory Bird Treaty Act (16 U.S.C. § 701 et seq.), and, if applicable, the National Environmental Policy Act of 1969 (42 U.S.C. § 4321 et seq.) in both the construction and operation of the project. If any authorized governmental agency or court with competent jurisdiction finds that BRE II is not complying with any one of the above three acts in either the construction or the operation of the project, then BRE II must notify the Commission in writing in this case of any such finding within ten days of any such finding being made. Furthermore, the Commission may seek any legal remedies it has authority to seek, including injunctive relief, to address any such findings.
- (j) BRE II must construct and maintain a fence around the substation, and lock all turbine tower doors unless access is needed for maintenance purposes.

GENERAL CONSTRUCTION AND OPERATIONAL CONDITIONS:

- (a) During construction, BRE II shall:
- 1) Require contractors to use standard noise buffers on all construction equipment and trucks;
- 2) Require contractors to use pile driving equipment which have the least noise impact;
- 3) Perform construction activities mostly during the daylight hours;
- 4) Avoid noise impacts at certain noise sensitive locations, such as a church, during the weekend church activities and services and during other normally scheduled church weekday activities;
- 5) Limit any dynamiting to daylight hours and follow all State and Federal rules, regulations and/or laws.
- (b) BRE II must coordinate with appropriate fire safety and emergency personnel during all other stages of the project, including Construction and Operations, to promote efficient and timely emergency preparedness and response.

- (c) If BRE II seeks to transfer its certificate, BRE II is required pursuant to Siting Rule 7.1 to notify the Commission in writing of the identity of the transferee and submit an affidavit from the transferee attesting to the transferee's willingness to abide by the terms of a siting certificate, as issued. This condition applies at any time not just in the operational stage.
- (d) BRE II will consult with the representatives of Commission Staff, the USFWS, and the WVDNR (collectively the Technical Advisory Committee) on the scope, development, and implementation of post-construction studies to commence within a reasonable time, and in any event no later than one year following the commercial operations date of the project. BRE II shall consult with the Technical Advisory Committee on the following:
 - a) Three years of post-construction bat mortality and adaptive management studies, after operations commence, to assess
 - 1) The project's impact, if any, upon bat life
 - 2) The potential for adaptive management techniques to mitigate such impacts
 - 3) The expected costs over a range of mitigation effectiveness levels.
 - b) Three years of post-construction bird studies, after operations commence, to assess the impact, if any, on birds.
 - c) BRE II will file copies of each Study with the Commission and provide copies to each member of the Technical Advisory Committee within 30 days of its completion.

If the project causes significant levels of bat or bird mortality and adaptive management techniques are proven effective and economically feasible, BRE II and its successors will make a good faith effort to work with the Commission to apply parameters to implement facility-wide adaptive management strategies on an on-going basis. BRE II shall update the Commission in writing twice a year on the studies being conducted. The update shall be directed to the attention of the Commission's Executive Secretary. Unless BRE II obtains Commission consent for other deadlines, the updates shall be filed on or before January 30 and July 31 each year.

BRE II shall provide a copy of such report to the members of the Technical Advisory Committee.

- (e) BRE II will minimize the visibility of the project by only using project lighting in the presence of the project's personnel and any other persons authorized to be in the area except that BRE II may use project lighting as required by the Federal Aviation Administration and any applicable fire or safety code, regulation, or accepted good utility practice.
- (f) Tower setbacks from residences, paved roads regularly travelled by the general public, and power lines will be imposed to equal at least 1.5 times the total combined height of the tower, turbine and maximum blade height.
- (g) The Commission directs BRE II to operate the project within the representations and parameters established in the application and studies included in the Application. If the project does not operate within those representations and parameters, the Commission may reopen the certificate for further investigation upon receipt of a complaint, the request of Staff, or on its own motion.

PRE-OPERATION CONDITION:

(a) BRE II must have a decommissioning fund in place prior to commencement of operation. The fund will cover dismantling of the turbines and towers, as well as land reclamation. The fund should be an escrow account, or a bond or a surety that is held by an independent party, such as the County Commission. This fund shall not be a part of BRE II's assets. BRE II must hire an expert to assess, from time to time, the size of the fund that would be needed, taking into consideration resale or salvage value. BRE II must obtain the Commission's approval of the evaluative expert, as well as Commission approval of the periodic reports. The Commission reserves the right to also hire its own evaluative expert to evaluate any of the periodic reports.

Joint Ex. 1 at 4-7.

Upon review of the Joint Stipulation, the Commission finds that many of the proposed conditions are typical in wind farm Orders, and we recognize that BRE II has agreed to comply with all of the conditions in Joint Exhibit Number 1. We note, however, that some routine conditions were not included and two new conditions were proposed. We will address the routine conditions that were not included, the newly-proposed conditions, and a condition that should be modified for this Project.

Under the heading, Pre-Operative Condition, the parties recommend that BRE II have a decommissioning fund in place prior to commencement of operation to cover

dismantling of the turbines and towers, as well as land reclamation. Consistent with the decommissioning fund required for the BRE wind farm, they recommend that the fund be an escrow account, bond or surety held by an independent party; that BRE II hire an expert to assess, from time to time, the size of the fund needed; and that BRE II obtain the Commission's approval of the evaluative expert and the periodic reports. Joint Ex. I at 7.

Few wind farm siting certificates had been considered when the Commission took up the BRE application. At that time, Staff recommended the decommissioning fund, and BRE requested several modifications to the Staff proposal. The Commission accepted the Staff condition and BRE's proposed modifications. <u>Beech Ridge Energy LLC</u>, No. 05-1590-E-CS (Comm'n Order at 87, Aug. 28, 2006).

Since then, the Commission has imposed different decommissioning requirements, and we will update the decommissioning condition that the parties proposed for BRE II. The Commission now regularly sets a time frame to make required additions to the fund and to update the experts report, and we will include such provisions for BRE II. Our approval of the selection of an evaluative expert and of the experts reports is cumbersome and, upon reflection, does not add materially to the protections that we envisioned this condition to provide. Instead, the Commission will require a copy of the experts report to be made available for public inspection by filing a copy of the report in this proceeding.

BRE and BRE II are both required to have the decommissioning fund in place prior to commencement of operation, and Staff proposes that the condition be lodged under a new, third heading: Pre-Operative Condition. The conditions appear under headings as a matter of convenience, but the headings are not substantive in nature. Thus, it is not necessary to add a third category of conditions. It is sufficient to lodge the BRE II decommissioning requirement in the same place that decommissioning appeared in the BRE Order.

For convenience, the modifications to the decommissioning condition are shown with strike-throughs and underscoring:

BRE II must have a decommissioning fund in place prior to commencement of operation. The fund will cover dismantling of the turbines and towers, as well as land reclamation. The fund should be an escrow account, or a bond or a surety that is held by an independent party, such as the County Commission. This fund shall not be a part of BRE II's assets. BRE II must hire an expert to assess, from time to time, but no less frequently than every five years, the size of the fund that would be needed, taking into consideration resale or salvage value. BRE II shall file a copy of that report with the Commission as a closed entry in Case Number 12contribution 1196-E-CS. When report requires a any to the decommissioning fund, BRE II will make that contribution to the escrow account, or increase the amount of the bond or surety within ninety days of receipt of the report. BRE II must obtain the Commission's approval of the

evaluative expert, as-well as Commission approval of the periodic reports. The Commission reserves the right to also hire its own evaluative expert to evaluate any of the periodic reports.

Siting certificate orders typically require that evidence of exempt wholesale generator (EWG) status be filed with the Commission, but such a condition does not appear in Joint Exhibit 1. Upon review, we note there is some conflict in the record regarding EWG status. BRE II witness Parcyzk testified that prior to commencing construction BRE II would file documentation with the Federal Energy Regulatory Commission to become an EWG, and BRE II would obtain EWG status prior to commencing commercial operation. Applicant KEP-D at 17. Staff testified, though, that BRE II is not required to obtain EWG certification because BRE was required to obtain EWG status to operate the BRE Project. Staff Ex. 1 at 4 (Perdue Direct).

The evidence reflects that BRE and BRE II are separate legal entities, and BRE and BRE II will hold separate siting certificates for the adjacent wind projects. BRE II has requested authority from the Commission to construct and operate its own Project, and Mr. Parcyzk testified that BRE II will obtain its own EWG status. Application at 2; Applicant KEP-D at 17.

We disagree with Staff. Under the terms that BRE II has requested its siting certificate, which include BRE II's operation of the Project, BRE II cannot rely on the EWG status of an affiliated, but separate entity, BRE. The Commission will condition the siting certificate granted to BRE II today upon BRE II obtaining and filing evidence of its own EWG status prior to commencing commercial operations.

In the three most recent siting certificates that were granted, the Commission required immediate corrective steps in the unlikely event that blasting associated with wind farm construction negatively affected the groundwater aquifer, but such a condition was not proposed by the parties to this case. Pinnacle Wind Force, LLC, Case No. 09-0360-E-CS (Comm'n Order at 60, Jan. 11, 2010); AES New Creek LLC, Case No. 08-2105-E-CS (Comm'n Order at 30, Sept. 30, 2009); AES Laurel Mountain LLC, Case No. 08-0109-E-CS (Comm'n Order at 73, Nov. 26, 2008). In the New Creek Siting Order we wrote, "This Commission imposed this condition in the AES Laurel Mountain proceeding, and there is no reason to depart from that approach for the AES New Creek Project." New Creek Siting Order at 30. In Pinnacle, the Commission again noted that the condition had been previously applied and there was no reason to depart from that approach. Pinnacle, Case No. 09-0360-E-CS (Comm'n Order at 41, Jan. 11, 2010). We will apply the same condition to the BRE II siting certificate.

Siting certificate orders typically require that copies of interconnection agreements be filed with the Commission prior to commencing operations. Again, we note that there is some conflict in the record. BRE II states that an interconnection agreement exists between BRE II, PJM and Monongahela Power Company to allow BRE II to interconnect to the transmission system at the Grassy Falls substation. Notice of Filing at 2 (Aug. 24,

2012); Proposed Order at 2 (May 30, 2013). The Commission has not been able to locate a copy of that interconnection agreement in the record of Case Number 12-1996-E-CS.

BRE II witness Parcyzk testified that there are several options to deliver the power generated by the BRE II turbines to the existing BRE substation. Applicant KEP-D at 6. Staff witness Perdue testified that BRE II need not obtain an interconnection agreement because the interconnection agreement requirement was satisfied prior to BRE beginning commercial operations of the existing wind farm. Staff Ex. 1 at 4 (Perdue Direct).

Again, we emphasize that BRE and BRE II are separate legal entities. The Commission is satisfied that the interconnection agreement submitted in Case Number 05-1590-E-CS contemplated the delivery of 186 MW, and the BRE and BRE II generation combined will not exceed that limit. We do not need another copy of the contract that allows BRE to deliver output to MonPower's Grassy Falls substation.

BRE II needs, though, to file with the Commission whatever contract authorizes the delivery of BRE H's generation output to a third-party substation. If the BRE II output will be delivered to a substation owned by BRE, which is a separate legal entity, then the contract that provides permission to BRE II to make that delivery should be filed. If the BRE II generation will be delivered to the MonPower substation, then the contract that allows delivery to MonPower's facility should be filed. Stated another way, BRE II needs to file whatever contract(s) allows its generation to be delivered to the equipment of a third party. The Commission will condition the siting certificate granted today to BRE II upon BRE II filing such a contract prior to commencing commercial operations.

The parties have agreed to include two new conditions in the BRE II siting certificate Order: 1) one requires tower setbacks from residences, paved roads and power lines, and 2) the other requires the Commission to direct BRE II to operate the Project within the representations and parameters established in the Application and studies included with the Application. Joint Ex. 1 at 7. Staff proposed both of these conditions. Mr. Perdue testified that the latter condition had been previously adopted and he referred to the BRE, Laurel Mountain, New Creek and NedPower proceedings. Staff Ex. 1 at 10-11 (Perdue Direct). Upon review, we do not find the latter condition to have been adopted by the Commission in any of the four cases that Mr. Perdue named.

It is reasonable to approve the commitments in the Joint Stipulation, which represent compromise and negotiation among BRE II, Staff and Building Trades. In this particular proceeding, the Commission will accept these provisions and allow the parties

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⁸ Mr. Perdue's testimony referred to "NedPower Mount Storm, LLC (Case No. 05-1590-E-CS), AES Laurel Mountain (Case No. 08-0109-E-CS) and AES New Creek - Proposed Final Order (Case No. 08-2105-E-CS)." The case number provided for <u>NedPower</u> is actually the case number of the <u>BRE</u> proceeding. Reading Mr. Perdue's testimony in the light most favorable, the Commission reviewed the siting certificate Orders in the four possible cases -- <u>BRE</u>, <u>NedPower</u>, <u>Laurel Mountain</u> and <u>New Creek</u>.

the benefit of the bargain that they struck. In doing so, though, we make clear that approval of the two new conditions as part of the proposed settlement of this case may not be interpreted as Commission acceptance of these two items as typical conditions for other wind farm projects. In future cases, parties are free to advocate for or against either condition.

6. Continuation of Memorandum Agreement with Building Trades

BRE II, Staff and Building Trades also agree that the Commission should approve the Memorandum Agreement dated February 13, 2006, between BRE and Building Trades to also qover the BRE II Project. They agree that the Commission should make clear that the Commission anticipates that all representations and commitments made by the parties shall be kept and that Commission approval of the Memorandum Agreement does not mean that the Commission is the proper forum to resolve any disputes that may arise from operating under the Memorandum Agreement. Joint Ex. 1 at 3-4.

The Commission has in previous siting cases approved the Memorandum Agreement and ordered that "all representations and commitments made by the parties therein be kept by the parties." Mount Storm Wind Force, LLC, Case No. 01-1664-E-CN (Comm'n Order at 31, Aug. 29, 2002). We see no reason to depart from this approach. We do note, as we have in the past, that approval of the Memorandum Agreement by the Commission does not mean the Commission is the proper forum to resolve any disputes that may arise from operating under the Agreement.

C. Application of Part Two of the Balancing Test

As is explained in Part One above, the Commission concludes that taken as a whole, the positive impacts relating to the various interests outweigh the negative impacts on the various interests in this matter. See W. Va. Code § 24-2-llc(c). In Part Two of the balancing test, the Commission decides whether a project's public funding, if any, and property tax abatement, if any, offends the public interest.

BRE II provided documentation and testimony that no public funding or property tax abatement is involved with this Project. Appendix at 48-49, Applicant KEP-D at 19. Staff witness Kellmeyer recited this position in her testimony. Staff Ex. 2 at 2 (Kellmeyer Direct). Because there is neither public funding nor property tax abatement with the BRE II Project, no further analysis is needed. Based on the record, the Commission concludes that BRE II should be issued a siting certificate for this *Proj d* subject to the conditions discussed in this Order.

FINDINGS OF FACT

1. BRE II, a Delaware limited liability company, is licensed to **do** business in the State of West Virginia. BRE II is owned by Invenergy Wind Development North America LLC. Application at 2, Ex. A.

- 2. On August 24, 2012, BRE II filed an Application for a siting certificate pursuant to W. Va. Code § 24-2-1 lc and the Commission's Siting Rules, to authorize the construction and operation of a \$115 million electric wholesale generating facility in Greenbrier County, West Virginia. As part of the Application, BRE II filed several maps pursuant to the Siting Rules, including a Project Location Map, a One-Mile Radius Map, a Five-Mile Radius Map and a Pre-construction Map providing the locations of the proposed turbines. Appendix Exs. B, D-F.
- 3. BRE II proposes to construct an approximate 53.46 MW, but not to exceed 85.5 MW wind turbine electric generating facility consisting of up to thirty-three wind turbines, each with a rated capacity of 1.62 MW, but not to exceed 2.5 MW, and certain ancillary facilities on a tract of land that is adjacent to the western border of the BRE wind project. Application Form 2 at 2.
- 4. BRE II initially designated thirty-three primary sites and fourteen alternate sites to provide maximum flexibility in selecting final locations. Application at 4; Application Form 2 at 2; Appendix at 19.
- 5. On January 10, 2013, BRE II withdrew consideration of proposed turbine sites 2 and 3 and alternate site 3. BRE II Hearing Ex. 2.
- 6. All of the studies that BRE II submitted with its Application were conducted as if all forty-seven turbines were built and operating. Application at 4; Application Form 2 at 2; Appendix at 19.
- 7. The turbines will be placed along Beech Ridge, Clear Creek Mountain, Pollock Mountain, Huggins Ridge and Blue Ridge on land owned by MeadWestvaco. Application at 4; Application Form 2 at 2; Appendix at 19.
- 8. BRE II will construct an energy collection system to deliver the power generated by the BRE II turbines to the existing BRE substation. App. at 17.
- 9. The 138 kV transmission line from the BRE substation to the interconnection at the Grassy Falls substation of MonPower is sufficiently sized to carry the energy produced by BRE II's Project together with the energy produced from BRE. Application at 4; Appendix at 3.
- 10 The total generation of both projects, BRE and BRE II, will not exceed 186 MW. App. at 10.
- 11. The turbines will have a maximum height of 497 feet or 151.4 meters. BRE II anticipates it will utilize a GE 1.6 wind turbine, which has a four-piece tower that measures 315 feet, or 96 meters, and a rotor-diameter of 32S-feet or tO() meters. The particular turbine model selected will be based on turbine efficiency, availability and pricing, as well as the ability to change the cut-in speeds. App. at 3.

- 12. BRE II will file for Exempt Wholesale Generator status with FERC and intends to operate as an Exempt Wholesale Generator. Rates charged for the Projects electricity will be subject to regulation by FERC. BRE II intends to file a market-based schedule with FERC for negotiated rates. Application at 2; Applicant KEP-D at 17; Notice of Filing at 2.
- 13. Project funding will be a combination of permanent non-recourse Project debt and equity. No public funds will be used, and there are no agreements with public entities regarding the Project. Appendix at 47-49.
- 14. Upon completion, the Project will be used by BRE II to generate electricity exclusively for wholesale sales in the competitive market. No West Virginia utility ratepayer will bear any financial risk associated with the Project. Notice of Filing at 2.
- 15. BRE II published the Notice of Filing of its Application on September 4, 2012, in *The West Virginia Daily News* (Greenbrier County) and *The Charleston Gazette* (Kanawha County) and on September 6, 2012, in *The Nicholas Chronicle* (Nicholas County). Affidavits of Publication (filed Sept. 21, 2012).
- 16. On January 10, 2013, the Commission conducted a View of the Project area with representatives of Commission Staff, Building Trades and BRE II and visited nine viewpoints.
- 17. The Commission conducted a public hearing on January 10, 2013, in Rainelle, West Virginia. No person or group spoke against the Project. Three persons spoke in support of the Project. Tr. at 1-16 (Jan. 10, 2013).
- 18. The Commission received thirty-eight written comments in support of the Project, including letters from the Town of Rainelle, the Town of Rupert and the Greenbrier County Commission. The Commission received seven comment letters in opposition to the Project. <u>See</u> Case File, <u>generally.</u>
- 19. On February 27, 2013, BRE II, Staff and Building Trades filed a Joint Stipulation and Agreement for Settlement, in which they recommended the Commission grant BRE II a siting certificate subject to certain conditions. Joint Ex. 1 (Tr. at 12, Feb. 28, 2013).
- 20. BRE II, Staff and Building Trades also recommended that the Commission approve the Memorandum Agreement dated February 13, 2006, between BRE and Building Trades to cover the BRE II Project. <u>Id</u>.
 - 21. On February 28, 2013, the Commission conducted an evidentiary hearing.
- 22. BRE II published notice of the public and evidentiary hearings as the Commission required. Affidavits of Publication (filed Jan. 7 and 9, 2013); Affidavits of Publication (filed Feb. 21, 2013).

- 23. The BRE I Project will provide needed energy and capacity to the electric power system, help to serve load and maintain overall system reliability, and provide generation from a renewable resource. Appendix at 7, 9.
- 24. In the area served by the PJM regional transmission organization, summer peak load was projected to increase by an average 1.4 percent per year over the next ten years and 1.3 percent over the next fifteen years. The PJM RTO summer peak was forecasted to be 176,420 MW in 2022, a ten-year increase of 22,638 MW, and to reach 185,294 MW in 2027, a fifteen-year increase of 31,512 MW. Appendix at 7.
- 25. The winter peak load for the PJM RTO was projected to average 1.2 percent per year over the next ten-year period and 1.1 percent over the next fifteen years. The PJM RTO winter peak load in 2021-2022 was projected to be 144,836 MW, a ten-year increase of 15,996 MW, and to reach 150,901 MW in 2026-2027, a fifteen-year increase of 22,061 MW. <u>Id</u>. at 7-8.
- 26. PJM has received notification from several generation owners of their intent to deactivate a number of generators totaling more than 13,000 MW of generation. Of these retirements, 593 MW are located in West Virginia. <u>Id</u>. at 8.
- 27. To meet renewable portfolio standards (RPS) within the PJM footprint, in 2021 32,000 MW of wind will be required and in 2026 41,000 MW of wind will be required. <u>Id.</u>
- 28. The Project will create approximately one hundred fifty temporary jobs during the six-to-nine month construction phase. Upon completion, the Project will add two to three employees at a starting annual salary of about \$35,000 to the current operating staff at BRE's O&M facility. KEP-D at 20; Appendix at 51.
- 29. Upon completion of the BRE II Project, BRE and BRE II together will be one of the top property taxpayers in Greenbrier County, generating an annual average of approximately \$600,000.00 in tax revenue for Greenbrier County and its schools for twenty years. The two projects will also pay approximately \$200,000.00 annually in taxes to the State of West Virginia. <u>Id.</u>
- 30. Staff witness Kellmeyer recommended having a decommissioning fund in place if a siting certificate is granted. Staff Ex. 2 at 3-4 (Kellmeyer Direct).
- 31. Building Trades witness Matthews testified that the size of the Project and the amount of construction employment needed will have a very positive impact on the local economy and local employment. Building Trades Ex. 1 at 3 (Matthews Direct).
- 32. Building Trades witness Jin completed an IMPLAN Economic Simulation Study that indicated that the BRE II Project will generate an additional \$29 million in sales and 164 to 229 jobs for the local economy. Building Trades Ex. 2 at 1-6.

- 33. There may be traffic delays on state and county roads during component delivery and transport, but these will be limited in nature and duration and will be mitigated by transporting the components when traffic patterns are at lower rates, by avoiding school related traffic and business commutes. Appendix, Ex. 0 at 1-3.
- 34. Within a radius of twenty miles, there are a few small pockets of potential visibility of the Facility, mainly along elevated ridge lines. Approximately 97 percent of the surrounding radius area will not have any visibility of the Project. Appendix at 60, Ex.M.
- 35. Eight simulations were conducted for the BRE II Project, five of which presented conditions that already have some view of the BRE Project. Six of the eight simulations indicate potential visibility from locations greater than five miles away. Appendix at 60, Ex. M.
- 36. The BRE II Facility was planned with generous setbacks to mitigate view of the wind turbines. The Project will be visible to very few residences within one mile of a turbine location, and this one-mile distance is five times greater than most setbacks throughout the country. The great majority of residences will be more than one mile away from a turbine location. Appendix at 60.
- 37. The area in which these turbines will be constructed is relatively sparsely populated, and timbering and mining operations are conducted across the MeadWestvaco tract.
- 38. The Federal Aviation Administration (FAA) will require lighting on some of the permanent wind monitoring towers. Additionally the substation control building, any storage yards, and individual turbine entrances may be lit temporarily as required to protect worker safety during those times when employees are working after dark. Otherwise, BRE II will not use outdoor lighting. KEP-D at 16.
- 39. Acentech selected four monitoring locations representative of noise sensitive receptors, such as residences and churches, in the community bordering the BRE II site for the pre-construction ambient survey. The acoustic environment and nearby land uses were observed at these locations from February 4 to February 15, 2011. Ex.Nat 3-4.
- 4U. Ine 10ng-term Ldn sound levels range from 47 dBa to 50 dBa, with an average value of 48 dBa and a standard deviation of 1 dBa across the four preconstruction locations. The measured Ldn values, sound source types and land uses are relatively uniform across the study area and the ambient sound level contours are generally flat within this- area. Appendix Ex. N; Applicant-Ex. JDff-B (Barnes Direct).
- 41. The construction activity will be temporary, vary hour-to-hour and day-to-day, occur mostly in the daytime, and produce sounds that are already familiar to the

community. With two trucks, one dozer, and one excavator operating at a turbine location, for example, the calculated equivalent sound level during the workday is 53 dBA at 1,640 feet and 44 dBA at 3,330 feet. Appendix Ex.Nat 4-5.

- 42. This level of temporary sound is similar to the noise produced during excavation, grading, and steel erection activities at mid-size building projects or by the current timber and mining activities in the region. <u>Id.</u>
- 43. During operations, the estimated values for the wind farm Ldn sound levels range at the community monitoring locations from 33 dBa to 47 dBa and at residential structures within one mile of the Project from 38 dBa to 47 dBa, which were comparable to the measured range of pre-construction ambient Ldn values of 47 dBa to 50 dBa. <u>Id.</u> at 6.
- 44. For indoor locations, these levels would be reduced by 12 dBa with the windows open and by 24 dBa or more with the windows closed. <u>Id</u>.
- 45. The sound studies assume maximum sound output of forty-seven wind turbine generators occurs under conditions of maximum rated wind speed [11 m/s (24 mph) to cutout] and the community is always downwind. <u>Id</u>.
- 46. The Project will be heard at times in the community at distances of 1600 feet from the Facility, however, ambient sounds will provide useful masking of the turbine sound and Acentech's measurements and estimates indicate that the long-term Ldn sound levels of the Facility will be similar or less than the existing ambient Ldn levels at that distance for both outdoor and indoor locations. <u>Id.</u> at 6-7.
- 47. The Town of Duo is located between the BRE and BRE II project. Most residences in Duo are about two miles from the nearest BRE II turbines and about 3,600 feet from the nearest BRE existing turbines. The estimated Ldn sound levels at these residences due to the proposed new turbines are modest and range from 31 to 34 dBa. The Ldn sound levels from wind operations for most of the locations are estimated to increase about 1 dBa, as compared to current levels. <u>Id.</u> at 7.
- 48. BRE II will not require any additional water for the operation of the Facility other than an incremental increase of the current use at the BRE O&M Facility. Appendix at 14.
- 49. Water for the temporary concrete batch plant, up to 286,143 gallons, will come from the same well that served the concrete batch plant for the BRE turbines. <u>Id.</u>
- 50. Water for dust suppression activities will come from existing streams or ponds, the same as for construction of BRE project Water u e for <u>dust suppress10h</u> activities will be in the range of 1,800,000 to 2,700,000 gallons total, based on 15,000 gallons per day for twenty days a month during the six- to nine-month construction phase. <u>Id</u>.

- 51. BRE began working on a Habitat Conservation Plan to obtain an Incidental Take Permit under the Endangered Species Act for the endangered Indiana bat and Virginia big-eared bat in January 2010. Since then, BRE and BRE II, their consultants, and the USFWS have regularly interacted through conference calls, meetings, e-mails, and exchanges of draft documents for review and comment. The ITP will cover the area of both the BRE and BRE II projects. Application at 4; Appendix at 53; Appendix Ex. I.
- 52. BRE is also preparing an Avian Protection Plan that contains a commitment to implement monitoring and adaptive management in conformance with the USFWS's 2012 Land-Based Wind Energy Guidelines. BRE began developing the APP in 2010 and has discussed it with USFWS on numerous occasions. These activities with USFWS also include the BRE II Project area. <u>Id.</u>
 - 53. With its siting certificate Application, BRE II submitted
 - a) Avian Migration Studies for March-May and September-November 2011 dated July, 2012 (Young et al. 2012a), Appendix Ex. J, and
 - b) Avian and Bat Risk Assessment: Beech Ridge Wind Energy Project Expansion Area, Greenbrier and Nicholas Counties, West Virginia, dated February, 2012 (Young et al 2012b), Appendix Ex. K.
- 54. These studies concluded that the Project area does not appear to contain unique situations or habitat features that would pose significant risk to avian or bat species. Appendix at 55.
- 55. BRE II completed an architectural review, assessment of effects and a desktop archaeology review for the geographic area where the Facility will be located, which identified two potential locations of cultural resource where effects may be likely, the Mt. Urim Church and associated cemetery, and the coal camp of Duo. Duo currently is within the viewshed of the existing BRE Project. Appendix at 65.
- 56. BRE II is working with both USFWS and SHPO to draft a Memorandum of Agreement for required mitigation impacts to cultural resources. <u>Id.</u> & Exs. P-1 to P-6. It will be executed by both agencies and BRE II and is expected to be similar to the Memorandum of Agreement developed for BRE. Appendix at 65.
- 57. County Route 1 leading to the construction staging area and County Route 1/1 (Fenwick Road), which will carry some traffic within the Project area, will be the most affected roads because of supplies being delivered, construction personnel traveling to and from the staging area, and construction-related traffic between wind turbine locations. Average daily traffic (ADT) values will largely be unaffected other than on Ceunty-Routes I and 1/1. Appendix Ex. Oat2;;-3. -

- 58. During the construction phase, about 3,500 trucks of various sizes will deliver equipment and supplies, and some fifty construction personnel vehicles will travel to and from the site each day. <u>Id</u>.
- 59. The ADT value for the twenty-four-week construction period will increase by about 191 ADT from 1,700 to 1,891 along County Route 1 between Rupert and Clearco, but that increase will be mitigated by the relatively short construction duration. Further mitigation will be realized by Division of Highways requirements, such as for oversized loads. Appendix Ex. 0 at 3.
- 60. After construction is complete, additional traffic associated with the BRE II Project will be limited to ten operational and maintenance vehicles entering and exiting the site that will raise the ADT value along County Route 1 by 20 and have little to no influence on County Route 1/1. <u>Id</u>.

CONCLUSIONS OF LAW

- 1. This proceeding is governed by <u>W. Va. Code</u> § 24-2-1 lc(c), which the Commission has applied in its review of other siting certificate applications. In determining whether to issue a siting certificate under this statute, the Commission applies a two-part balancing test. As Part One of the balancing test, the Commission appraises and balances the interests of the public, state and local economy, and the applicant. <u>W. Va. Code</u> § 24-2-1 lc(c).
- 2. The Commission has previously held that m applying Part One, the Commission should appraise and balance:
 - (a) an applicant's interest to construct an electric wholesale generating project;
 - (b) the State's and regions need for new electrical generating plants; and
 - (c) the economic gain to the State and the local economy,

against:

- (i) community residents' interest in living separate and apart from such project;
- (ii) a community's interest that a project's negative impacts be as minimally disruptive to existing property users as is reasonably possible; and
- IIII) me social anct environmental impacts of the proposed project on the local vicinity, the surrounding region, and the State.

<u>Liberty Gap Wind Force, LLC,</u> Case No. 05-1740-E-CS (Comm'n Order at 39-40, June 22, 2-Q0-'7). With rns-peet to- prongs- {i)-, {ii}-, and tiii1, the- Commission -considers issue-s such as a Projects impacts on existing cultural features of a community, viewshed, noise, non-listed and endangered bats. <u>Id</u>.

- 3. If the Commission determines under Part One that, taken as a whole, positive impacts relating to the various interests outweigh the negative impacts on the various interests, then in Part Two the Commission must determine whether "the terms and conditions of any public funding or agreement relating to the abatement of property taxes do not offend the public interest, and the construction of the facility ... will result in a substantial positive impact on the local economy and local employment." W. Va. Code§ 24-2-1 lc(c).
- 4. The Project will provide wholesale electric service, and there will be no direct financial impact to West Virginia retail ratepayers.
- 5. BRE II filed a complete Application that satisfied the requirements of the Siting Rules of the Commission.
- 6. 'BRE II demonstrated a sufficient interest in constructing the Project. First, BRE II has demonstrated that it has a legitimate business purpose in undertaking the Project and BRE II retained various technical experts and developed detailed information in support of its Application. Second, it has expended substantial time and economic resources to apply for a siting certificate, to pursue various other required permits, and to obtain the leases necessary to construct and operate the Project. Third, BRE II has committed to coordinating its activities with the Commission and other state and federal agencies. Finally, the BRE Project has been in service since 2010, and the Commission has received no complaints concerning its operation.
- 7. The Energy Policy Act of 2005, P.L. 109-58, among other things, amended certain sections of the United States Code to encourage the use and development of renewable energy resources. See Title II, P.L. 109-58.
- 8. In the Energy Portfolio Act, the West Virginia Legislature declared that "[t]he development of a robust and diverse portfolio of electric-generating capacity is needed for West Virginia to continue its success in attracting new businesses and jobs. This portfolio must include the use of alternative and renewable energy resources at new and existing facilities." W. Va. Code 24-2F-2(4).
- 9. It is not in the public interest for this Commission to isolate West Virginia from the region. The power grid is interconnected, and to safeguard the availability of productive, well-maintained resources to our State's residents, West Virginia must participate in the interconnected electric system.
- 10. Need for this Project has been established because it is in the public interest to develop diversified sources of fuel to generate electricity, including renewables such as wind; additional generation capacity is needed to meet PJM's projected load forecast; it is in the pub-lie interest for West V-irginia- to participate- irr the-interconstructel electric system; and the Project will provide power to thousands of homes at its lowest level of productivity, and its output is well-suited to deliver electricity in the winter, when heating demand peaks, and may assist in meeting the peak summertime demands.

- 11. There will be a significant economic gain to both the state and local economy from the Project and construction of the Facility will result in a substantial positive impact on the local economy and local employment. The Project is expected to generate up to \$29 million dollars in state and local economic activity and between 164 and 229 local construction jobs, and two to three permanent jobs thereafter. The Project will also include significant tax revenues for local government and public education.
- 12. Based on all of the evidence and after conducting a View of the Project area, the Commission is of the opinion that the Project is largely isolated from the community and limited to private property owned by MeadWestvaco.
- 13. The viewshed of a wind turbine project is the most subjective issue in a siting certificate application. There is no "bright line" test for viewshed. In this situation, while individual turbine units will be visible from various locations (as demonstrated from the View and the photo simulation evidence presented), the Commission concludes that the impact of the presence of the Project and view of the Project or its turbines will be minimally disruptive to the community.
- 14. Noise, like view, is another elusive and to some extent subjective factor in the deliberative process of the Commission. Numerous factors affect the noise levels from wind turbine projects, including the type of turbine, weather, ground cover, distance, ambient noise, leaf and foliage cover, elevation, wind direction, and the state of technology as applied to wind turbines and the detection of sound from wind turbine projects.
- 15. The BRE II noise study complied with Commission requirements, accurately portrayed ambient sound levels that are typical for a rural community, and employed a variety of conservative assumptions to allow the Commission to assess the "worst case" scenario for the Project's sound impacts. Based upon the totality of the evidence presented to us, the Commission concludes that the Project will emit some noise, but the operational sound levels are expected to be similar to existing ambient sound levels and noise impacts are not expected to be objectionable because of the Project. The Commission also concludes that, to the extent that operational noise results in negative impacts, those negative impacts are expected to be as minimally disruptive to existing property uses as is reasonably possible.
- 16. The evidence submitted by BRE II concerning threatened and endangered species is credible as the studies undertaken were complete, reasonable and conducted in consultation and cooperation with the USFWS and WVDNR. No threatened and endangered species were detected through the mist-netting surveys. Moreover, BRE II is working with USFWS to obtain an Incidental Take Permit and associated Habitat Conservation Plan and-will construct and operate the-BRE <u>II-Projectin-accord</u> With the requirements of each, which will minimize the effect on endangered species in the Project Area, if any.

- 17. Based upon our review of a significant amount of information concerning cultural and historical resources near the Project site, we conclude that BRE II is continuing to satisfy its obligations relating to consultation with SHPO and the USFWS to finalize a Memorandum of Agreement concerning the effects, if any, on matters of cultural and historical significance, and will be executing a Memorandum of Agreement upon completion of the consultation.
- 18. As modified by this Order, the Joint Stipulation 1s reasonable m this proceeding and will be adopted.
- 19. Taken as a whole, the positive impacts of the Project relating to the various interests outweigh the negative impacts on the various interests in this matter. See \underline{W} . Va. Code 24-2-1 lc.
- 20. Because there is neither public funding nor property tax abatement associated with the Project, analysis under Part Two is not needed at this time.
- 21. Based on the entire record and the analysis contained in this Order, the Commission concludes that BRE II should be issued a siting certificate for this Project with the conditions adopted in this decision.

ORDER

IT IS THEREFORE ORDERED that BRE II is granted a siting certificate, pursuant to <u>W. Va. Code</u> § 24-2-llc, for the construction and operation of an approximate 53.46 MW, but not to exceed 85.5 MW electric wholesale generating facility consisting of up to thirty-three wind turbines, each with a rated capacity of 1.62 MW, but not to exceed 2.5 MW, and associated ancillary facilities in Greenbrier County as fully described in the Application, as amended, and discussed in this Order, subject to the following conditions:

PRE-CONSTRUCTION CONDITIONS

- 1) Prior to commencing construction, BRE II must file a verified statement indicating that all pre-construction conditions and requirements of the certificate have been met.
- 2) BRE II must not dispose of excavated rock and/or any bedding material during or following construction of the facility by spreading the material on agricultural land.
- 3) BRE II <u>must dispose of all contaminated</u> soil and construction debris in approved landfills in accordance with appropriate environmental regulations.

- 4) BRE II must design and install any needed fire protection systems in accordance with the national Fire Protection Association or other accepted standards.
- 5) BRE II must coordinate with appropriate fire safety and emergency personnel during the pre-construction stage of the project to promote efficient and timely emergency preparedness and response.
- 6) The siting certificate shall become invalid if BRE II has not commenced a continuous course of construction within 5 years of the date the final certificate is granted or has not completed construction by the tenth year without petitioning the Commission for approval to expand these time frames.
- 7) BRE II must file evidence that it has obtained any necessary environmental permits and/or certifications prior to commencing construction (including any letters from US Fish and Wildlife, WVDNR, W. Va. Division of Culture and History, West Virginia State Historic Preservation Office, and any local governmental agency requiring permits for construction/operation of the project) indicating either that BRE II does not need to take further action or outlining what action BRE II needs to take to be in compliance with that agency's rules or laws prior to any grading, soil excavation, and/or habitat removal or causing a similar action by others.
- 8) BRE II must file a copy of the Wetlands Survey and Delineation, evidence of approval and/or acceptance of the wetlands delineation, final endangered species study with any required mitigation plans, and historical/archeological significance study with any required mitigation plans prior to commencing construction.
- 9) BRE II must comply with the Endangered Species Act (16 USC § 1531 et seq.), the Migratory Bird Treaty Act (16 USC § 701 et seq.), and, if applicable, the National Environmental Policy Act of 1969 (42 USC § 4321 et seq.) in both the construction and operation of the project. Should any authorized governmental agency or court with competent jurisdiction find that BRE II is not complying with any one of the above three acts in either the construction or the operation of the project, then Beech Ridge must notify the Commission in writing in this case of any such finding within ten days of any such finding being made. Furthermore, the Commission may seek any legal remedies it has authority to seek, including injunctive relief, to address any such findings.
- 10) BRE II must construct and maintain a fence around the substation, and lock all turbine tower doors unless access is needed for maintenance purposes.

BRE II must have a decommissioning fund in place prior to 11) commencement of operation. The fund will cover dismantling of the turbines and towers, as well as land reclamation. The fund should be an escrow account, or a bond or a surety that is held by an independent party, such as the County Commission. This fund shall not be a part of BRE II's assets. BRE II must hire an expert to assess, from time to time, but no less frequently than every five years, the size of the fund that would be needed, taking into consideration resale or salvage value. BRE II shall file a copy of that report with the Commission as a closed entry in Case Number 12-When any report requires a contribution decommissioning fund, BRE II will make that contribution to the escrow account, or increase the amount of the bond or surety within ninety days of receipt of the report. The Commission reserves the right to also hire its own evaluative expert to evaluate any of the periodic reports.

GENERAL CONSTRUCTION AND OPERATIONAL CONDITIONS:

- 1) During construction, BRE II shall:
 - a) Require contractors to use standard noise buffers on all construction equipment and trucks;
 - b) Require contractors to use pile driving equipment which have the least noise impact;
 - c) Perform construction activities mostly during the daylight hours;
 - d) Avoid noise impacts at certain noise sensitive locations, such as a church, during the weekend church activities and services and during other normally scheduled church weekday activities;
 - e) Limit any dynamiting to daylight hours and follow all State and Federal rules, regulations and/or laws.
- 2) BRE II must coordinate with appropriate fire safety and emergency personnel during all other stages of the project, including Construction and Operations, to promote efficient and timely emergency preparedness and response.
- 3) BRE II shall file evidence of its EWG status from FERC prior to commencing commercial operations.

- 4) If BRE II seeks to transfer its certificate, BRE II is required pursuant to Siting Rule 7.1 to notify the Commission in writing of the identity of the transferee and submit an affidavit from the transferee attesting to the transferee's willingness to abide by the terms of a siting certificate, as issued. This condition applies at any time not just in the operational stage.
- 5) BRE II will consult with the representatives of Commission Staff, the USFWS, and the WVDNR (collectively the Technical Advisory Committee) on the scope, development, and implementation of post-construction studies to commence within a reasonable time, and in any event no later than one year following the commercial operations date of the project. BRE II shall consult with the Technical Advisory Committee on the following:
 - a) Three years of post-construction bat mortality and adaptive management studies, after operations commence, to assess
 - (1) The project's impact, if any, upon bat life
 - (2) The potential for adaptive management techniques to mitigate such impacts
 - (3) The expected costs over a range of mitigation effectiveness levels.
 - b) Three years of post-construction avian bird studies, after operations commence, to assess the impact, if any, on birds.
 - c) BRE II will file copies of each Study with the Commission and provide copies to each member of the Technical Advisory Committee within thirty days of its completion.

If the project causes significant levels of avian or bat species mortality and adaptive management techniques are proven effective and economically reas lble, 1::H{.l::, 11 and its successors will make a good faith effort to work with the Commission to apply parameters to implement facility-wide adaptive management strategies on an on-going basis. BRE II shall update the Commission in writing twice a year on the studies being conducted. I'-The- update shall be directed to -the attention of-the-Commission's-Executive Secretary as a closed entry to this case. Unless BRE II obtains Commission consent for other deadlines, the updates shall be filed on or before January

30 and July 31 each year. BRE II shall provide a copy of such report to the members of the Technical Advisory Committee.

- 6) BRE II will minimize the visibility of the project by only using project lighting in the presence of the project's personnel and any other persons authorized to be in the area except that BRE II may use project lighting as required by the Federal Aviation Administration and any applicable fire or safety code, regulation, or accepted good utility practice.
- 7) In the unlikely event that the blasting associated with the construction activities negatively affects the groundwater aquifer around the BRE II Project, BRE II shall take immediate steps to resolve such negative effects.
- 8) Before commencing commercial operations, BRE II shall file a copy of the contract(s) under which BRE II's generation may be delivered to equipment owned by a third party.
- 7) Tower setbacks from residences, paved roads regularly travelled by the general public, and power lines will be imposed to equal at least 1.5 times the total combined height of the tower, turbine and maximum blade height.
- 8) The Commission directs BRE II to operate the project within the representations and parameters established in the application and studies included in the Application. If the project does not operate within those representations and parameters, the Commission may reopen the certificate for further investigation upon receipt of a complaint, the request of Staff, or on its own motion.

IT IS FURTHER ORDERED that, pursuant to <u>W. Va. Code</u> § 24-2-llc(h), all of the terms and conditions of this Order apply to any subsequent owners or operators of the BRE II Project.

IT IS FURTHER ORDERED that the Memorandum Agreement dated February 13, 2006, between Beech Ridge Energy LLC and Building Trades is approved in relation to the BRE II Project. The Commission anticipates that all representations and commitments made by the parties therein will be kept by the parties. Approval of the Memorandum Agreement by the CommIssI0n does not mean the Commission is the proper forum to resolve any disputes that may arise under the Agreement.

IT IS FURTHER ORDERED that BRE II shall file with the Commission a copy of the-Incidental Take Permit, as a closed-entry-in-this proceeding, within ten days- of-receipt -of that permit from the U.S. Fish & Wildlife Service.

IT IS FURTHER ORDERED that BRE II shall construct and operate the BRE II Project in accord with the requirements of its Habitat Conservation Plan and Incidental Take Permit.

IT IS FURTHER ORDERED that if BRE II receives any public funding for this Project, BRE II shall advise the Commission and petition to reopen this proceeding within 30 days so that the Commission can perform the analysis required by <u>W. Va. Code</u> § 24-2-1 lc(c).

IT IS FURTHER ORDERED that upon entry hereof, this case shall be removed from the Commission's open docket.

IT IS FURTHER ORDERED that the Executive Secretary of the Commission serve a copy of this order by electronic service on all parties of record who have filed an eservice agreement, by United States First Class Mail on all parties of record who have not filed an eservice agreement, and on Staff by hand delivery.

A True Copy, Tester

Sandra Squire

Sandra Squire

Executive Secretary

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