Draft Environmental Impact Statement
For Proposed Issuance of an Incidental Take Permit
For the Beech Ridge Energy Wind Project Habitat Conservation Plan,
Greenbrier and Nicholas Counties, West Virginia

DEIS #12-38

August 2012

US Fish and Wildlife Service
West Virginia Field Office
694 Beverly Pike
Elkins, WV 26241

DRAFT ENVIRONMENTAL IMPACT STATEMENT

For Proposed Issuance of an Incidental Take Permit
For the Beech Ridge Energy Wind Project Habitat Conservation Plan

Greenbrier and Nicholas Counties, West Virginia

Comment Due Date: October 23, 2012

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Report E-3. Avian Phase I Assessment of Bird Populations on the MeadWestvaco Wind Power Project in Greenbrier County, West Virginia: Spring and Fall 2005 (Canterbury 2006)

Report E-4. Avian Fatal Flaw Analysis for Mead Westvaco Wind Farm Area, Greenbrier County, West Virginia (Curry and Kerlinger 2004)

Report E-5. Spring Osprey Surveys for the Beech Ridge Wind Energy Center, Greenbrier and Nicholas Counties, West Virginia, March 2011 – May 2011 (Young et al. 2012a)

Report E-6. Avian Migration Studies for the Beech Ridge Wind Energy Project Expansion Area, Greenbrier and Nicholas Counties, West Virginia, March-May and September-November 2011. (Young et al. 2012c)

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Report K-3. Final report reconnaissance-level architectural survey for the proposed expansion/modification of the Beech Ridge Wind Energy Facility, Greenbrier and Nicholas Counties, West Virginia (Gray & Pape 2011)

Report K-4. Final report assessment of effects for the proposed expansion/modification of the Beech Ridge Wind Energy Facility, Greenbrier and Nicholas Counties, West Virginia (Gray & Pape 2012)

Report K-5. Desktop analysis and archaeological reconnaissance survey for the proposed expansion / modification of the Beech Ridge Wind Energy Facility, Greenbrier County, West Virginia (CRA 2011)

Memorandum of Agreement: West Virginia Division of Culture and History and Beech Ridge Energy, LLC.

Appendix L: Documentation relating to Beech Ridge Energy's request for modification to stipulation for operational adjustments for 67-turbine Project, including U.S. Fish and Wildlife Service response letter and Court's Approval.

Appendix M: Breeding Bird Survey abundance trends for 10 bird species of concern at various geographic scales and time frames.

ACRONYMS AND ABBREVIATIONS

ACHP	Advisory Council on Historic Preservation
ADT	average daily traffic
agl	above ground level
amsl	above mean sea level
APE	Area of Potential Effect
APLIC	Avian Power Line Interactive Committee
APP	Avian Protection Plan
BBS	Breeding Bird Survey
BGEPA	Bald and Golden Eagle Protection Act
BMP	best management practice
BRE or the Applicant	Beech Ridge Energy LLC
BWEC	Bat and Wind Energy Cooperative
C	Celsius
CAA	Clean Air Act
CEQ	Council for Environmental Quality
CFR	Code of Federal Regulations
CRA	Cultural Resource Analysts, Inc.
CRP	Conservation Reserve Program
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
dBC	C-weighted sound level
DEIS	Draft Environmental Impact Statement
DOI	Department of Interior
EIA	Energy Information Administrative
EIS	Environmental Impact Statement
EMF	electromagnetic fields
ESA	Endangered Species Act
F	Fahrenheit
FAA	Federal Aviation Administration
FAC	Federal Advisory Committee
FEMA	Federal Emergency Management Agency
FIRM	Federal Insurance Rate Map
FPPA	Farmland Protection Policy Act
ft	feet
ft^2	fquare feet
ft^3	vubic feet
GE	General Electric
GHz	gigahertz
GIS	Geographic Information Systems
GPP	Groundwater Protection Plan
gW	gigawatt
HCP	Habitat Conservation Plan
Hz	hertz
ICNIRP	International Commission on Non-Ionizing Radiation Protection
ITP	Incidental Take Permit
kV	kilovolt
kW	kilowatt
Ldn	day-night sound level
Leq	equivalent sound level
LWEG	Land-Based Wind Energy Guidelines
m	meter

m^2	square meter
mi^2	square mile
m/s	seters per second
MBTA	Migratory Bird Treaty Act
MET	meteorological
MHz	megahertz
mi	mile
MOA	Memorandum of Agreement
mph	miles per hour
MW	megawatt
MWh	megawatt hours
NAAQS	National Ambient Air Quality Standards
NEPA	National Environmental Policy Act
NHL	National Historic Landmark
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NOI	Notice of Intent
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSPS	New Source Performance Standards
NWNHP	Nongame Wildlife and Natural Heritage Program
NWP	Nationwide Permit
O&M	Operations and Maintenance
OSHA	Occupational Safety and Health Administration
PIF	Partners in Flight
ppm	parts per million
RMAMP	Research, Monitoring, and Adaptive Management Plan
ROW	right-of-way
rpm	rotations per minute
SCADA	Supervisory Control and Data Acquisitions
SHPO	State Historic Preservation Office
SPCCP	Spill Prevention, Control, and Countermeasure Plan
SWPPP	Stormwater Pollution Prevention Plan
TAC	Technical Advisory Committee
the Service	U.S. Fish and Wildlife Service
USACE	U.S. Army Corps of Engineers
USC	U.S. Code
USDA-NRCS	U.S. Department of Agriculture Natural Resources Conservation Service
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forestry Service
USGS	U.S. Geological Survey
V	volt
VRA	Visual Resource Assessment
WNS	White Nose Syndrome
WPCA	Water Pollution Control Act
WVDCH	West Virginia Division of Culture and History
WVDEP	West Virginia Department of Environmental Protection
WVDNR	West Virginia Division of Natural Resources
WVDOT	West Virginia Department of Transportation
WVNHP	West Virginia Natural Heritage Program
WVOWR	West Virginia Office of Water Resources
WVPSC	West Virginia Public Service Commission

CONTENT AND FORMAT OF DEIS

This Draft Environmental Impact Statement (DEIS) follows the most recent Council of Environmental Quality (CEQ) regulations and guidance, as well as the Department of the Interior's (DOI) regulations for implementing the National Environmental Policy Act (NEPA) [1] and provides the following.

Executive Summary: Provides a brief summary of 1) the proposed action and alternatives, 2) the environmental consequences associated with the proposed action and alternatives, and 3) the significance of levels of impacts upon implementation of mitigation measures.

Chapter 1 Introduction: Provides 1) an introduction to the Beech Ridge Energy Project's existing Phase I and proposed Phase II components, 2) a brief introduction to the proposed Project's potential effects to listed species, 3) the regulatory and legal framework for the NEPA process, and 4) a summary of the public scoping process and comments received.

Chapter 2 Purpose and Need: Presents the purpose and need for the permit and Project.

Chapter 3 Alternatives Analysis: Presents details of 4 alternatives: the proposed action, a No-Action alternative, and two action alternatives, one in which the Habitat Conservation Plan (HCP) and Incidental take permit (ITP) addresses additional species to be included on the permit (covered species) and mitigation, and one in which the ITP and HCP are implemented for only the existing Phase I Project.

Chapter 4 Affected Environment: Describes 2 baseline conditions, that of the covered lands before the Phase I was constructed and that of the current condition with Phase I in place and operating. Chapter 4 is organized by resource, and the 2 baseline conditions are discussed in relevance to each resource. Resources are categorized under the following topic headings: Geology and Soils; Noise; Climate and Air Quality; Water Resources; Vegetation; Wildlife and Fisheries; Rare, Threatened, and Endangered Species; Socioeconomics; Land Use and Recreation; Visual Resources; Cultural Resources; Communications; Transportation; and Safety and Security.

Chapter 5 Environmental Consequences: Describes impacts of the Proposed Action and alternatives to the resources described in Chapter 4. For each resource section, there is a separate subsection on impact criteria; direct and indirect effects presented by alternative; and mitigation. The cumulative effects analysis is provided in a separate section and addresses each resource.

Chapter 6 Consultation & Coordination: Provides an overview of agency and tribal consultation activities and public outreach activities that have occurred to date and that are anticipated in the future. This chapter includes documentation for all other federal, state, and local permitting associated with the Project.

Chapter 7 References: Provides a comprehensive list of all documentation, technical, legal, and otherwise, used and cited in preparation of the DEIS.

Chapter 8 Preparers: Provides a list of individuals involved in the preparation of the DEIS, their organizations, and role in preparing the DEIS.

[1] CEQ and DOI regulations can be found at 40 Code of Federal Regulations (CFR) Part 1500, and 43 CFR Part 46, respectively.